STRONGER TOGETHER

That's our motto at VIS Hydraulics.
It means serving our customers and partners by being loyal, respectful, and unassuming. Customer commitment, Responsive Customer Service, No compromise on Quality, Positive Employees Workplace, Loyalty towards Suppliers, Focus on Lean Organization, and much more: this is what drives us in every day's challenge. We want you to see VIS not just as a supplier, but as your trustworthy ally; our commitment is to strive our best efforts to help you succeed; strategic to this is being able to provide effective and quick answers, to prevent issues, to quickly solve problems, to provide effective solutions, in short: to be supportive.
Being cost competitive in the marketplace is crucial today more than ever. Vis doesn't aim to be the cheapest valve manufacturer worldwide: we strongly believe in good value for money. It's not just about the selling price, it's about the overall package that Vis has to offer.
Making all of this possible is our daily job and challenge: it's about focusing on endless streamlining of our processes to minimize waste and optimize efficiency, engaging all of our associates to collect ideas and hints on how to improve our overall organization, developing new technologies to maintain a competitive edge with regards to our development and manufacturing capabilities.
Thanks to all of that, VIS aims to become a world class player and a fully qualified partner for all those organizations requiring cartridge valve technology as a core competence to succeed in their business.
We can't promise the perfect quality or no errors whatsoever. VIS is made of people, of great individuals with high moral integrity, highly developed skills and incredible expertise. But still people, human beings, and as such we all make mistakes. What we can promise instead is that we will make every error an opportunity to learn a new lesson, to share such a message across our entire organization and ensure we won't repeat the same mistake twice. VIS wouldn't be what it is today without the essential contribution of the lessons we learned during these past 10 years, ever since the company was established.
I can't wait to work with you, and being part of your success.

Recently, we achieved B Corp certification, a globally recognized distinction that attests to our commitment to responsible and sustainable business practices. This milestone validates the values that set us apart and also demonstrates that we are a company that cares not only about the quality of our products and services, but also about the impact we have on the world, our community and our employees. The B Corp certification is a seal of excellence that drives us to constantly improve, ensuring transparency, fairness, and respect for the environment in all our activities. For us, it's a commitment that goes far beyond words. It is a core value that is reflected in every VIS business decision.

Founder and CEO
Adamo Venturelli

Preface

PURCHASE ORDERS

All Purchase Orders need to be sent in a written form to one of the following recipients, specifying part number, quantity, and requested delivery date:
(Email) **sales@vishydraulics.com** (Fax) **+39.0536.401525** - Telephone orders will not be accepted. Orders need to report the agreed purchasing price and order multiple. Vis Hydraulics take the liberty to refuse an order in case price and/or multiple do not reflect what formerly agreed between the parties. A written order acknowledgement will be provided in return via email within 3 working days from the date of order receipt. In case, for any reason, the formerly acknowledged delivery date needs to be postponed, Vis Hydraulics will send a written document via email reporting the new delivery date. Order cancellation is allowed with minimum 4 weeks notice prior to the acknowledged delivery date. Delivery date change is allowed with minimum 2 weeks notice prior to the acknowledged delivery date.

Note: if not otherwise agreed between the parties, Vis Hydraulics may introduce any modification to their products without any preemptive notification to the Customers. In any case Vis Hydraulics commit to preserve the interchangeability of the products and their performances.

Vis Hydraulics guarantee the first buyer that the supplied products are free from defects and correctly functional under the foreseen conditions listed in the catalog, for a period of 2 years from the delivery. If, despite the inspections performed either during the manufacturing process and before shipment, any problem is detected within two years from the delivery by the first customer, Vis Hydraulics commit to repair or replace the defective product in the shortest time, under the condition that it is demonstrated that the defect occurred before the delivery. If the Customer hold as defective a Vis Hydraulics product, they shall submit their complaint to the vendor by a written report in which are described, besides the p/n and the delivery references, the claimed problem and the boundary conditions on which it happened. In order to better investigate the causes, VH may request the Customer to supply the evidence (e.g. faulty part) of the claimed defect. If not previously agreed between the parties, Vis Hydraulics will not pay or refund any other amount that the Customer may demand, at any title (e.g. loss of profit, repair costs, trip expenses) as consequence of the claimed problem.

QUALITY OF THE PRODUCTS

The Quality Management System of Vis Hydraulics is compliant to UNI EN ISO 9001 standard; this status is certified by a third party Organization, it also accredited in Italy. According to this QMS all the products included in this catalog are designed, checked during the manufacturing process and/or finally set and functionally tested before the delivery, in order to meet the reported specifications. However, if a faulty product is found and VH is recognized to be the cause of this lack, the Customer can request description of all corrective actions that the Vendor intend to put in place to avoid the repetition of the mistake.

USE LIMITATIONS

The Vis Hydraulics products have not been designed manufactured and tested to be safety devices. If, for any reason, the customer intends to use a VH product for a safety purpose or include it in a safety circuit or fixture, they are expressly requested to contact preemptively the VH Engineering Dept. to obtain all the necessary clarification to their application.

DECLARATION

Since the products listed in this catalog can be assembled in systems which may be subjected to the 2006/42/EC (EMD), in these cases the products themselves shall not to be operated, adjusted or disassembled prior than the complete machine is verified to be in compliance with that Directive.

FAQ'S

Here below is reported the position of Vis Hydraulics products respect to the main European Directives on which their sector may fall into:

- **2014/68/EU** on the approximation of the laws of the Member States concerning pressure equipment (PED).

This Directive applies to the design, manufacture and conformity assessment of pressure equipment and assemblies with a maximum allowable pressure PS greater than 0,5 bar. The VH products are Pressure Accessories designed for a fluid belonging to Group 2 (not flammable, toxic or oxidizing) and the ND of which is always below 200. With reference to the Table 9 they are subjected to the Article 3, paragraph 3 and therefore, even if falling in the field of application of the Directive, they have not to be marked CE. Furthermore Vis Hydraulics accomplish to this Directive:
supplying the customer with the drawings of their products that show the instructions for their installation and setting;
marking their products with the VH logo (whenever possible).

- **2000/53/EC On end-of life vehicles**

Even if the products manufactured and sold by Vis Hydraulics are not expressly intended to be used on vehicles, VH have analyzed them according Art. 4, § 2.(a) and the result is that Vis Hydraulics accomplish to this Directive because in their products:

- lead is present only in steel alloy in quantity not higher than 0.35% in weight;
- mercury is absent;
- cadmium is absent;
- hexavalent Chromium is expressly forbidden to be used in zinc plating treatment, as per VH specs sent to the suppliers of this surface treatment.

- **2011/65/EU (RoHS)**

Directive on the restriction of the use of certain hazardous substances in electrical or electronic equipment (recast). The only Electric or Electronic Equipment sold by Vis Hydraulics that could fall into the field of application of this Directive are the coils for pole tubes. The only substance that is contained in these articles is Lead as alloy element in the steel components of them. Since this substance is present in quantity not above 0.35%, it is described in Annex III, §6a and, therefore, falls into the exemption of the restriction according Art. 4, §1.

- **2014/30/EU**

The kind of product sold by Vis Hydraulics that could fall into the field of application of this Directive is the solenoid valves. But, since:

- it is incapable of generating or contributing to electromagnetic emissions which exceed a level allowing radio and telecommunication equipment and other equipment to operate as intended;marking their products with the VH logo (whenever possible).
- it will operate without unacceptable degradation in the presence of the electromagnetic disturbance normally consequent upon its intended use; according to Art. 2, § d, this directive shall not be applied.

- **2006/42/EC Directive on machinery, and amending Directive 95/16/EC (recast) (EMD).**

The Vis Hydraulics products that may fall in the field of application of this directive are:

- The mechanical valves used for the regulation or the limitation of the hydraulic fluid pressure: they are excluded because don't fall into the "machinery" definition of Art. 2 point a) or "partly completed machinery" of point g) because without an a priori definable function.
- The mechanical valves that limit or hinder the flow of the hydraulic fluid in order to avoid the fall of the load (Annex V, point 17 (f)): not produced by VH.
- The mechanical valves that regulate the flow of the hydraulic fluid: they are exclude because, in any case, not designed as component of machinery for the lifting and/or lowering persons as overspeed limitation devices (Annex V, point 17 (c)); VH will declare this condition in the catalog pages concerning these regulators and on his web site.
- The mechanical portion of the electric valves: for these parts is valid what stated at second point.

Preface

FAQ'S

• 2014/35/EU

Directive on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits. For the purposes of this Directive, 'electrical equipment' means any equipment designed for use with a voltage rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current, other than the equipment and phenomena listed in Annex II. (Art. 1). In the case of Vis Hydraulics, the equipment that could fall in to the field of this Directive are the coils for solenoid valves but none of their coils has the characteristics listed above. Therefore, they are excluded from the field of application of this Directive.

International Standards For Phytosanitary Measures No. 15 (ISPM 15)

This Directive is applied to the wooden packaging and its main purpose is to prevent the international transport and spread of disease and insects that could negatively affect plants or ecosystems. VH complies to this Directive using, for shipments abroad, packaging reporting a mark which proves the treatment of harmlessness.

• 1907/2006 (REACH)

Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). This Regulation should ensure a high level of protection of human health and the environment as well as the free movement of substances in preparations and in articles.

The products of Vis Hydraulics don't contain any substance included in the SVHC list. The Vis products are articles manufactured in Special and Automatic Steels, therefore some of their components may contain Lead and Chromium as alloy element in quantity above the 0.1% in weight (art. 7, § 2.b). However, since these substances are not intended to be released under normal or reasonably foreseeable conditions of use or disposal, according art. 7, § 3, no communication is necessary.

CONTRACTUAL CLAUSE 231

VIS HYDRAULICS S.R.L. declares that it has approved the Code of Ethics and the Organization, Management and Control Model pursuant to D. Lgs. no. 231/2001 and, therefore, the CLIENT Company, by accepting this Offer, undertakes to conform its conduct to the aforementioned regulations and the precepts of behavior set forth therein.

Pursuant to and for the purposes of Legislative Decree No. 231/2001, regarding the administrative liability of Entities for crimes, the CLIENT Company undertakes, in its relations with VIS HYDRAULICS S.R.L., including for its employees and collaborators, pursuant to and for the purposes of Article 1381 of the Italian Civil Code, to adhere strictly to the rules contained in the Code of Ethics and the Model general part of VIS HYDRAULICS S.R.L., which can be found on the company website of the Company and the regulatory requirements of D. Lgs. n. 231/2001, accepting in full all the terms and conditions that, herein, declares to know and approve.

In case of violation of the aforementioned Code of Ethics and of the principles contained in the Organization, Management and Control Model pursuant to D. Lgs. n. 231/2001 of VIS HYDRAULICS S.R.L. that is attributable to the responsibility of the CUSTOMER Company, VIS HYDRAULICS S.R.L. will have the right to withdraw from this contract and terminate it, by right and with immediate effect ex art. 1456 c.c, by simple written notice to be sent also by fax, without prejudice in any case to any other remedy provided by law, including the right to compensation for any damages suffered.

In the event of failure to comply with the contents referred to in the preceding points, the consequences of liability for non-performance attributable to the CUSTOMER Company and therefore the right of VIS HYDRAULICS S.R.L. to act to obtain compensation for damages suffered, in accordance with the law, remain in any case firm and unprejudiced.

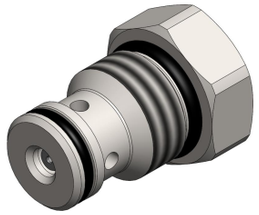
VIS HYDRAULICS

Certified B Corporation

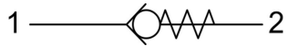
CVS4.S10 VALVE SERIES

Hybrid SAE Cartridge - 350 bar

Direct acting - Poppet type



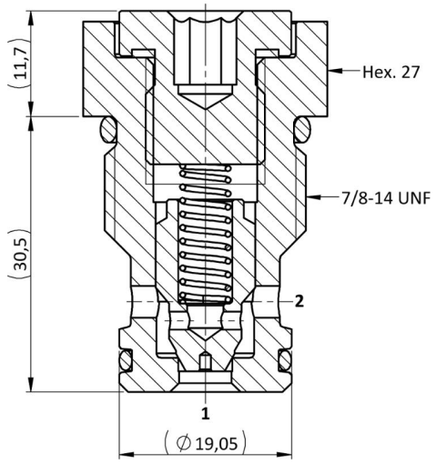
HYDRAULIC SYMBOL



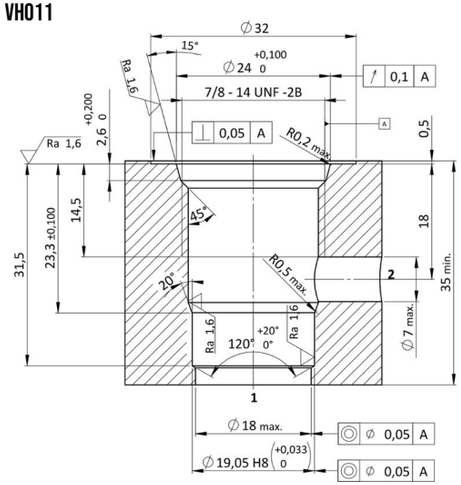
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type check valve. The CVS4.S10 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

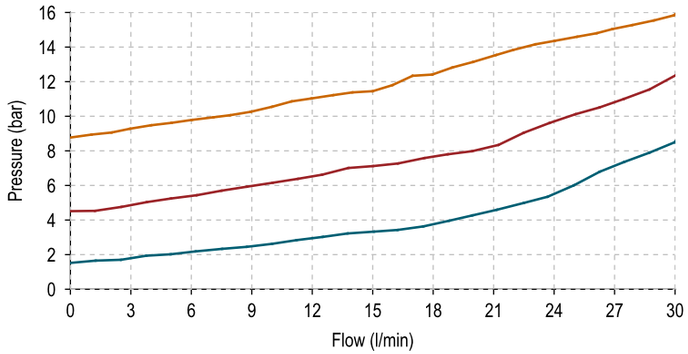
CROSS SECTION



CAVITY VH011



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B
- Spring G

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	80-85 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.033 (standard sealing NBR-BUNA-N)
WEIGHT	0,110 kg

ORDERING CODE

C	V	S	4	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø19,05 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

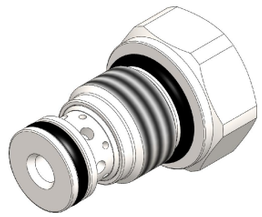
Spring model code	Cracking pressure (bar)
N	1,5
B	4,5
G	8,5

Specifications may change without notice.

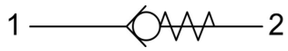
CVC0.S06 VALVE SERIES

SAE06 Cartridge - 420 bar

Direct acting - Poppet type



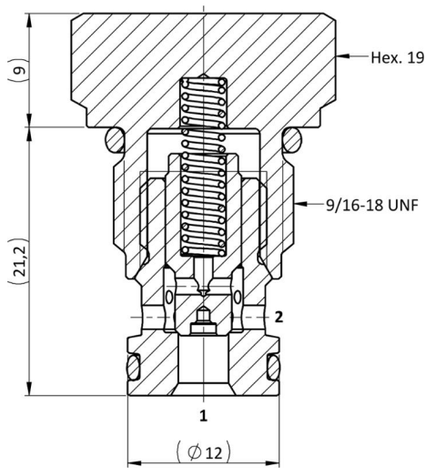
HYDRAULIC SYMBOL



DESCRIPTION

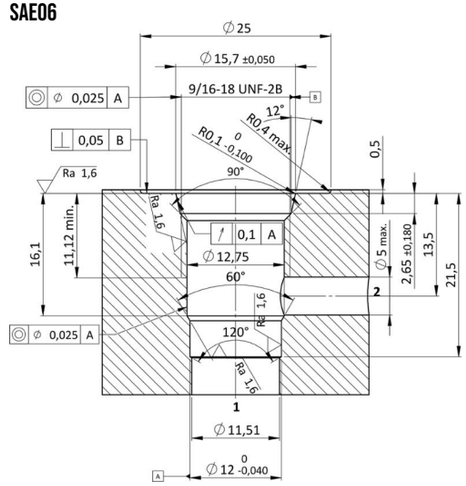
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S06 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

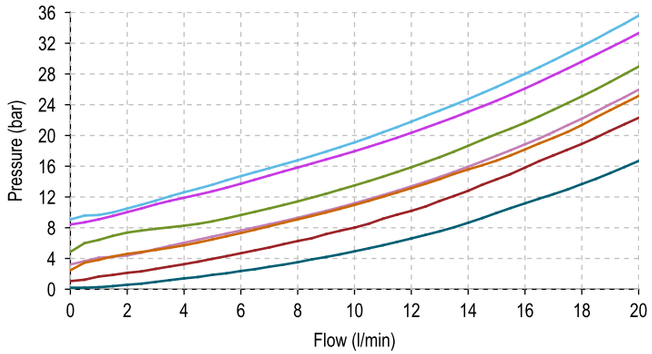


CAVITY

SAE06



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring P
- Spring N
- Spring G
- Spring S
- Spring V
- Spring B

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	20 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.118 (standard sealing NBR-BUNA-N)
WEIGHT	0,038 kg

ORDERING CODE

C	V	C	0	·	S	0	6	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
9/16-18 UNF with Ø12 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

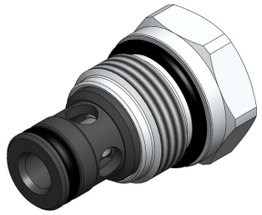
Spring model code	Cracking pressure (bar)
Y	<0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

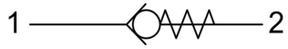
CVC0.S08 VALVE SERIES

SAE08 Cartridge - 420 bar

Direct acting - Poppet type



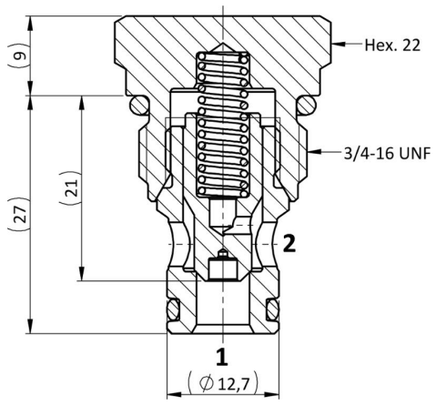
HYDRAULIC SYMBOL



DESCRIPTION

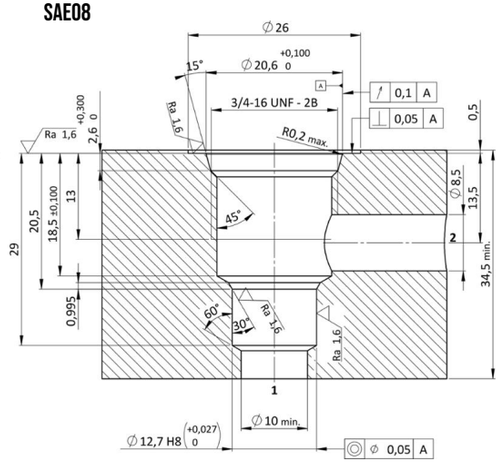
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S08 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

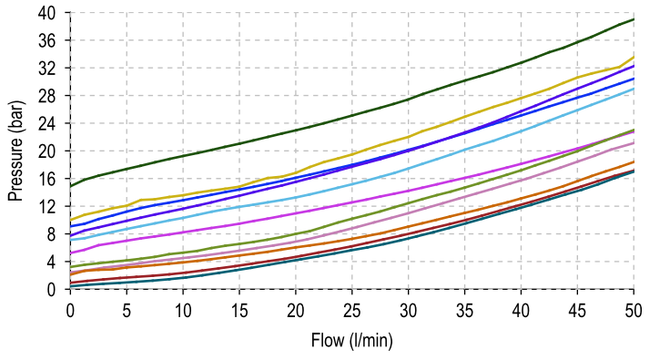


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring I
- Spring N
- Spring G
- Spring M
- Spring V
- Spring S
- Spring R
- Spring B
- Spring W
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

C	V	C	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

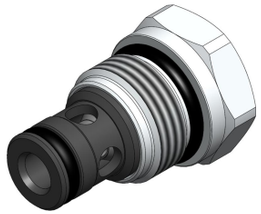
Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	0,5	V	9,0
N	1,0	R	10,0
M	2,0	W	15,0
S	2,5		
B	3,0		
P	5,0		
I	7,0		
G	8,0		

Specifications may change without notice.

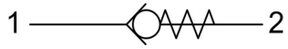
CVC5.S08 VALVE SERIES

SAE08 Cartridge - 420 bar

Direct acting - Poppet type



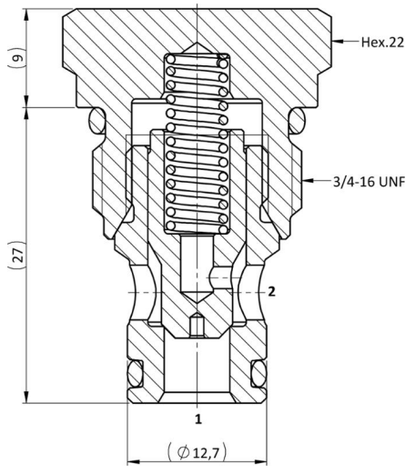
HYDRAULIC SYMBOL



DESCRIPTION

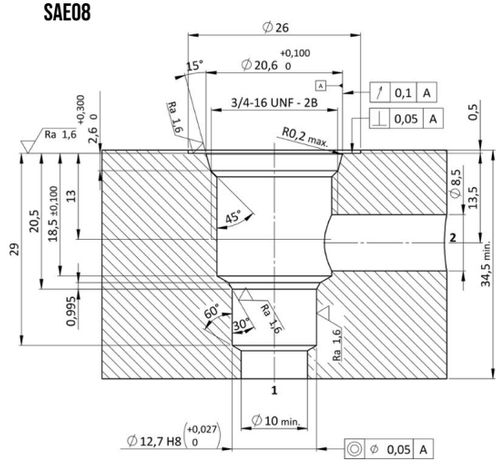
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC5.S08 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

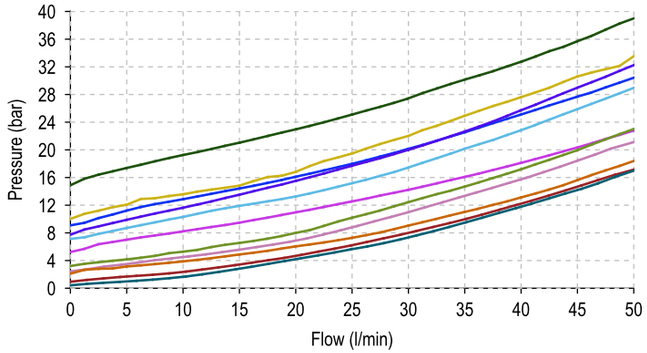


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring I
- Spring N
- Spring G
- Spring M
- Spring V
- Spring S
- Spring R
- Spring B
- Spring W
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

C	V	C	5	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

CVF0= version with filtration

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

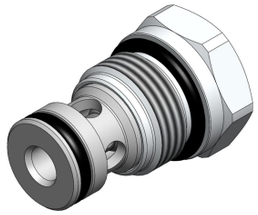
Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	0,5	V	9,0
N	1,0	R	10,0
M	2,0	W	15,0
S	2,5		
B	3,0		
P	5,0		
I	7,0		
G	8,0		

Specifications may change without notice.

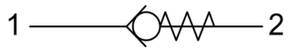
CVC0.S09 VALVE SERIES

Hybrid SAE Cartridge - 420 bar

Direct acting - Poppet type



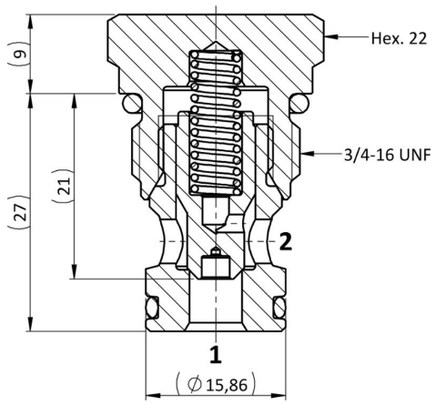
HYDRAULIC SYMBOL



DESCRIPTION

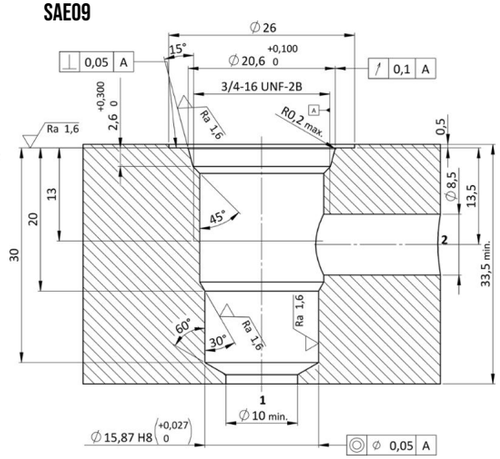
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S09 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

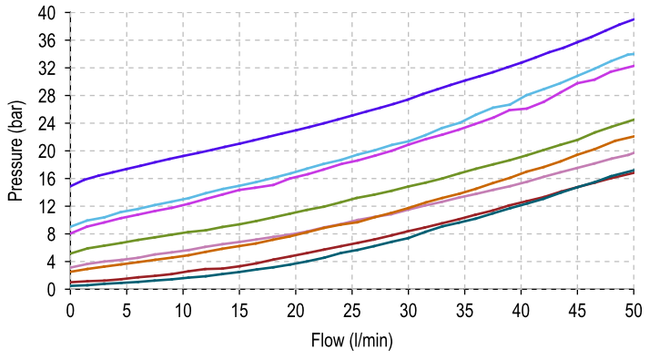


CAVITY

SAE09



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring P
- Spring N
- Spring G
- Spring S
- Spring V
- Spring B
- Spring W

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 (standard sealing NBR-BUNA-N)
WEIGHT	0,070 kg

ORDERING CODE

C	V	C	0	·	S	0	9	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0
W	15,0

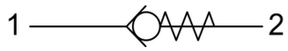
Specifications may change without notice.

CVC0.S10 VALVE SERIES

SAE10 Cartridge - 420 bar

Direct acting - Poppet type

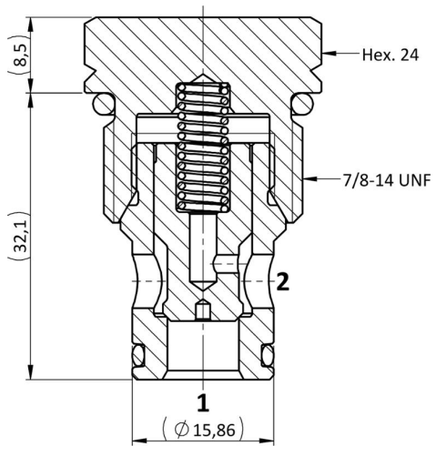
HYDRAULIC SYMBOL



DESCRIPTION

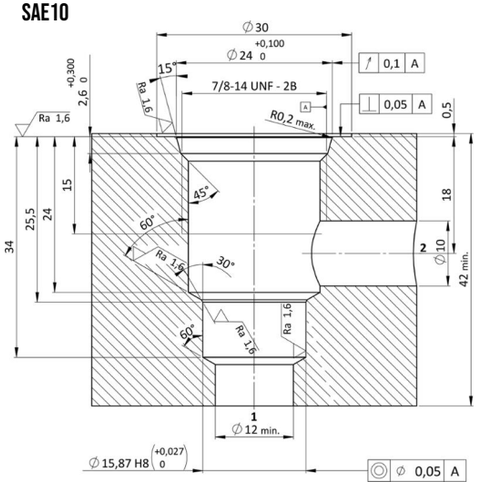
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S10 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

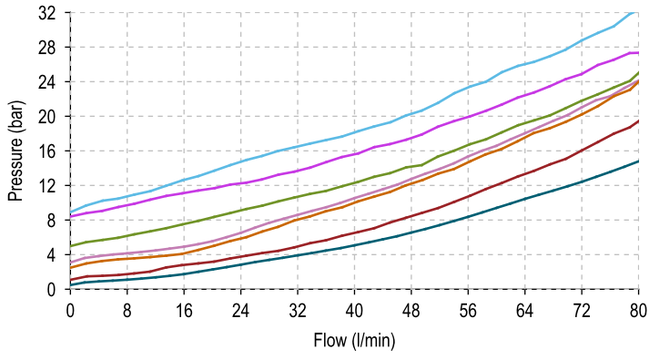


CAVITY

SAE10



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring P
- Spring N
- Spring G
- Spring S
- Spring V
- Spring B

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	80 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg

ORDERING CODE

C	V	C	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

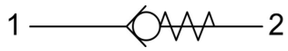
Rev. 1

CVC0.S12 VALVE SERIES

SAE12 Cartridge - 420 bar

Direct acting - Poppet type

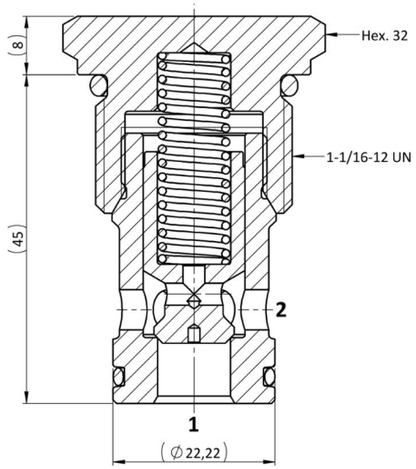
HYDRAULIC SYMBOL



DESCRIPTION

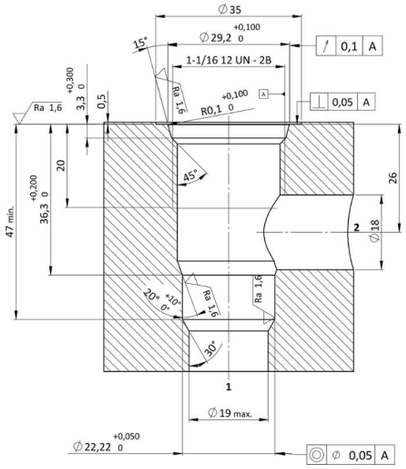
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S12 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

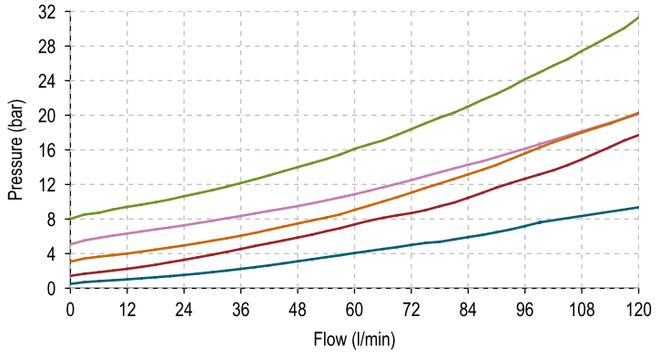


CAVITY

SAE12



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring G
- Spring N
- Spring B
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	120 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	130-140 Nm Hex.32
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.077 (standard sealing NBR-BUNA-N)
WEIGHT	0,169 kg

ORDERING CODE

C	V	C	0	·	S	1	2	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE

1-1/16-12 UN with Ø22,22 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
B	3,0
P	5,0
G	8,0

Specifications may change without notice.

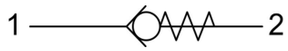
Rev. 1

CVC0.S16 VALVE SERIES

SAE16 Cartridge - 350 bar

Direct acting - Poppet type

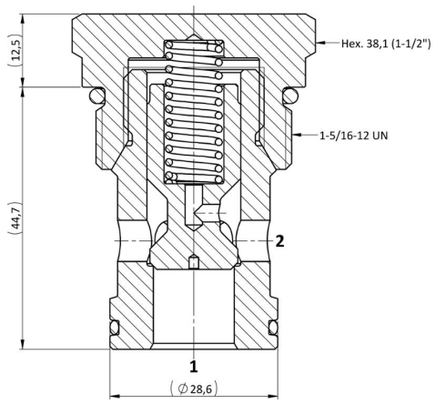
HYDRAULIC SYMBOL



DESCRIPTION

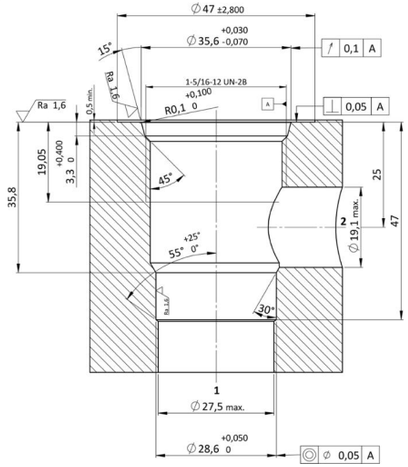
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S16 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

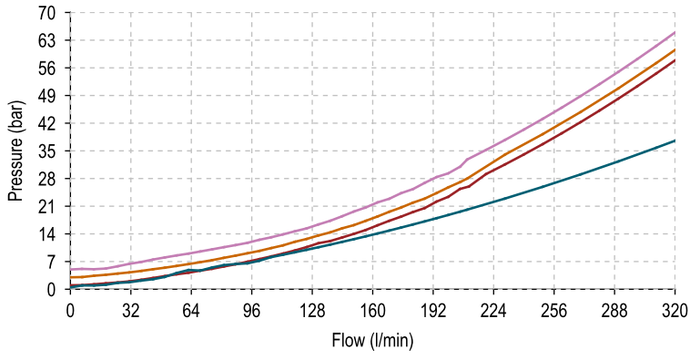


CAVITY

SAE16



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	320 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	150-160 Nm Hex.38,1 (1-1/2")
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.074 (standard sealing NBR-BUNA-N)
WEIGHT	0,290 kg

ORDERING CODE

C	V	C	0	·	S	1	6	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
1-5/16-12 UN with Ø28,6 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

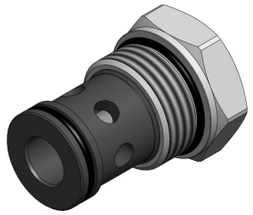
Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
B	3,0
P	5,0

Specifications may change without notice.

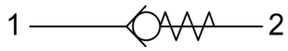
CVC0.S20 VALVE SERIES

SAE20 Cartridge - 350 bar

Direct acting - Poppet type



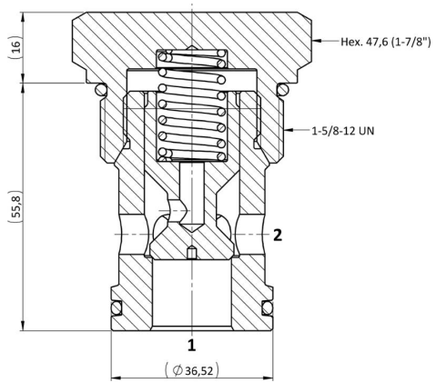
HYDRAULIC SYMBOL



DESCRIPTION

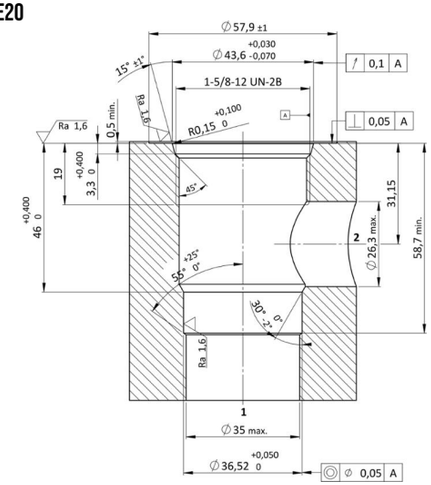
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.S20 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

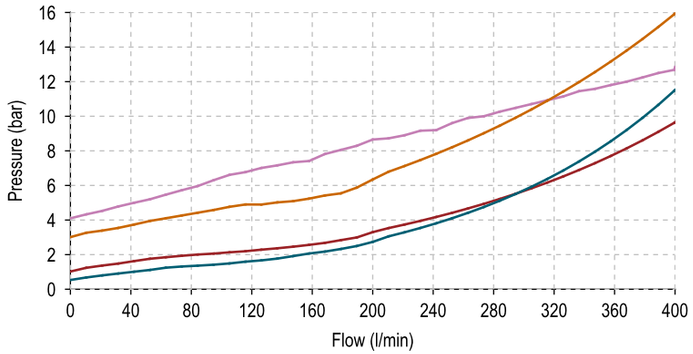


CAVITY

SAE20



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring L

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	400 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	200-215 Nm Hex.47,6 (1-7/8")
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.078 (standard sealing NBR-BUNA-N)
WEIGHT	0,558 kg

ORDERING CODE

C	V	C	0	·	S	2	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
1-5/8-12 UN with Ø36,52 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
B	3,0
L	4,1

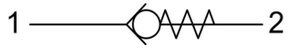
Specifications may change without notice.

CVC0.M18 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type

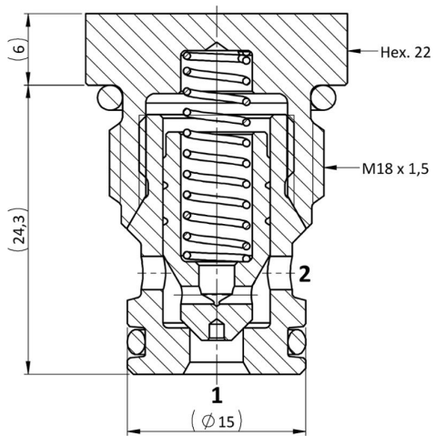
HYDRAULIC SYMBOL



DESCRIPTION

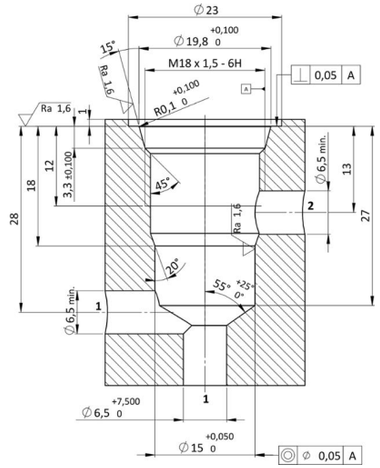
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.M18 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

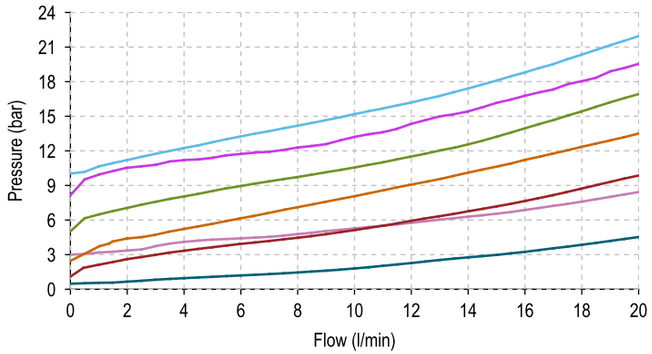


CAVITY

VH120



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring Y — Spring P
Spring N — Spring G
Spring S — Spring V
Spring B

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	20 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.041 (standard sealing NBR-BUNA-N)
WEIGHT	0,047 kg

ORDERING CODE

C	V	C	0	·	M	1	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M18x1,5 with Ø15 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

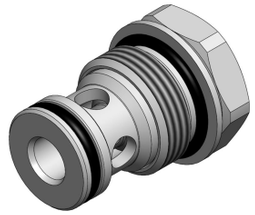
Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

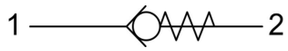
CVC0.M22 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type



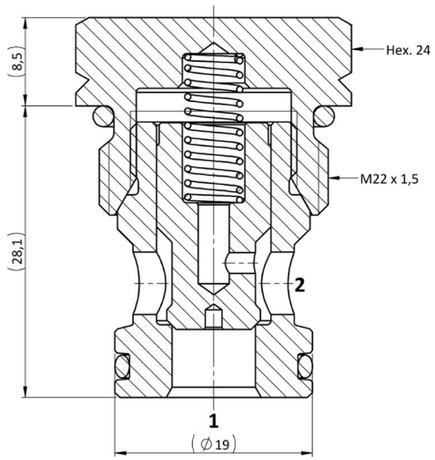
HYDRAULIC SYMBOL



DESCRIPTION

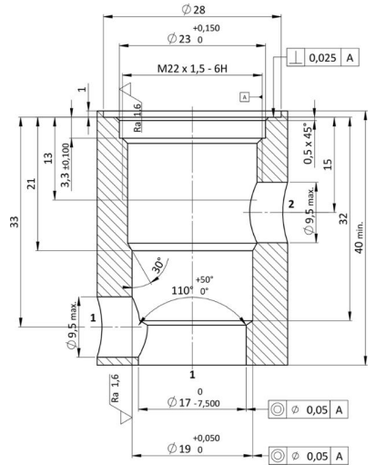
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.M22 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

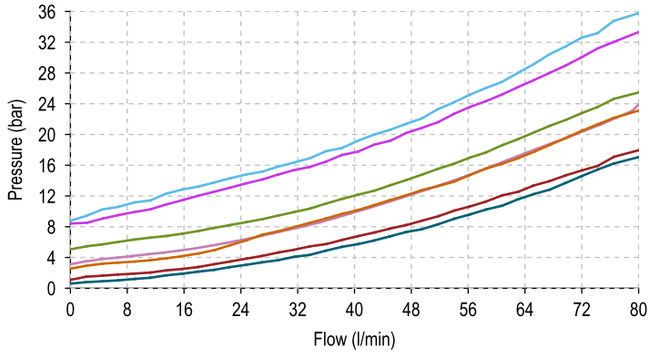


CAVITY

VH045



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring P
- Spring N
- Spring G
- Spring S
- Spring V
- Spring B

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	80 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.029 (standard sealing NBR-BUNA-N)
WEIGHT	0,080 kg

ORDERING CODE

C	V	C	0	·	M	2	2	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE

METRIC M22x1,5 with Ø19 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

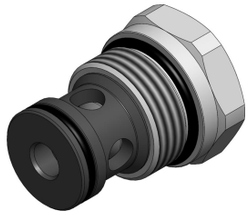
Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

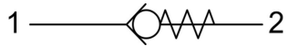
CVC0.M33 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type



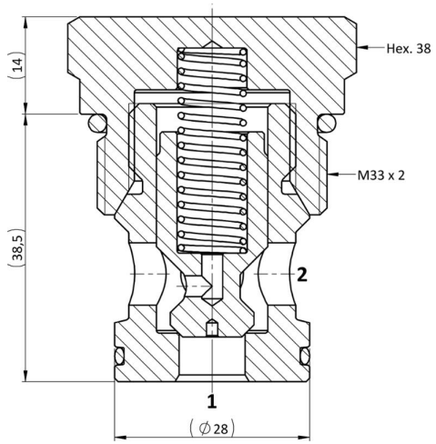
HYDRAULIC SYMBOL



DESCRIPTION

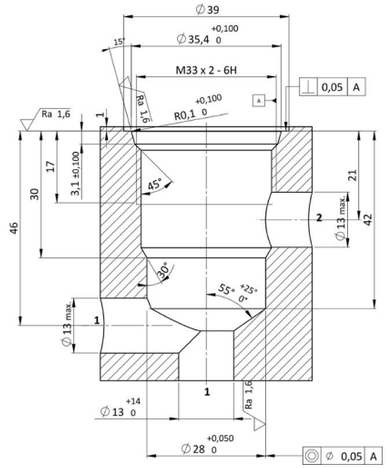
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.M33 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

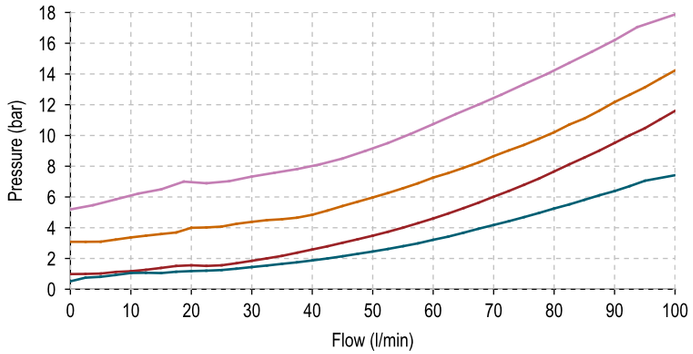


CAVITY

VH121



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	150-160 Nm Hex.38
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.074 (standard sealing NBR-BUNA-N)
WEIGHT	0,274 kg

ORDERING CODE

C	V	C	0	·	M	3	3	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M33x2 with Ø28 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

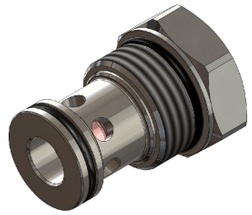
Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
B	3,0
P	5,0

Specifications may change without notice.

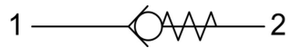
CVC0.M42 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



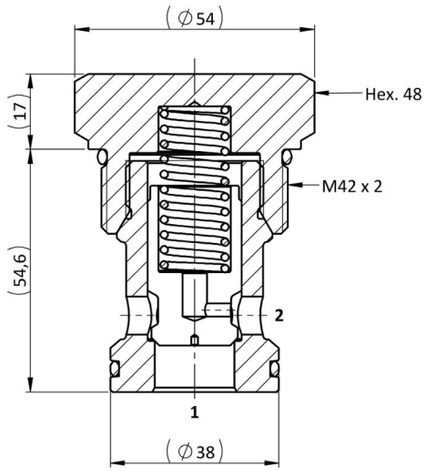
HYDRAULIC SYMBOL



DESCRIPTION

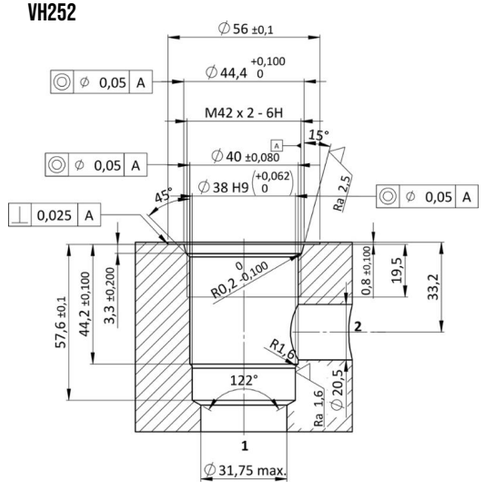
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVC0.M42 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

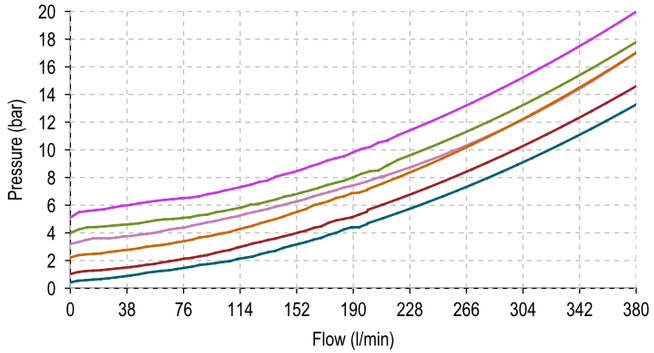


CAVITY

VH252



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt. p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

LEGEND

- Spring Y
- Spring G
- Spring N
- Spring M
- Spring B
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	380 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	200-215 Nm Hex.48
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.127 (standard sealing NBR-BUNA-N)
WEIGHT	0,595 kg

ORDERING CODE

C	V	C	0	·	M	4	2	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M42x2 with Ø38 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
B	2,0
P	3,2
G	4,1
M	5,0

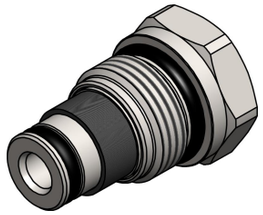
Specifications may change without notice.

CVFO.S08 VALVE SERIES

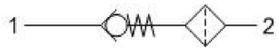
Hybrid SAE Cartridge - 350 bar

Direct acting - Poppet type

With filter



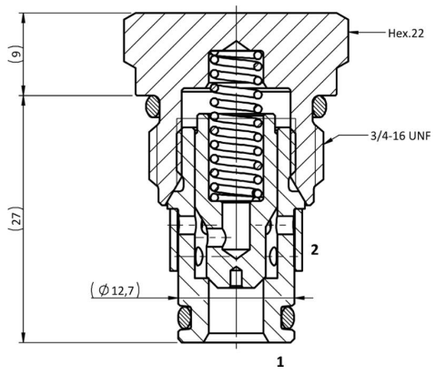
HYDRAULIC SYMBOL



DESCRIPTION

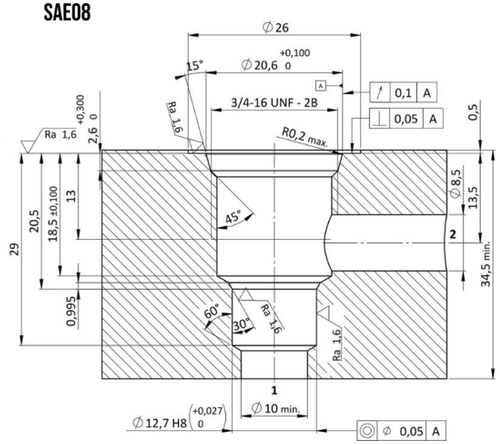
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVF.S08 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). The valve also has a filter in port 2, mesh size 280 um.

CROSS SECTION

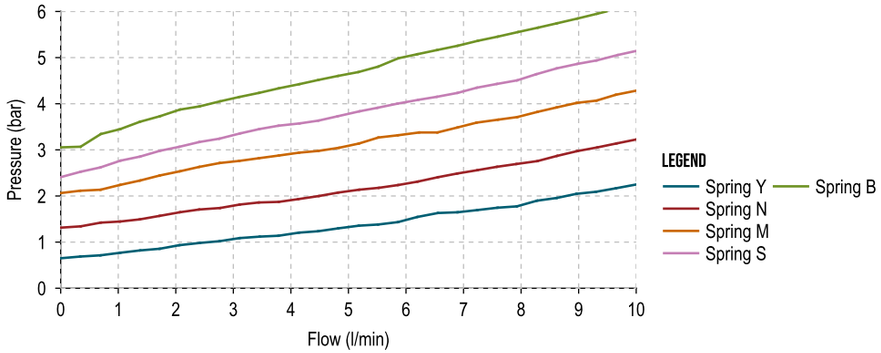


CAVITY

SAE08



PERFORMANCE DETAILS



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	10 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.045 (standard sealing NBR-BUNA-N) (standard sealing NBR-BUNA-N)

ORDERING CODE

C	V	F	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request

000= standard configuration

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1
M	2
S	2,5
B	3

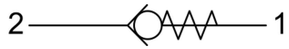
Specifications may change without notice.

CVP0.M24 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type

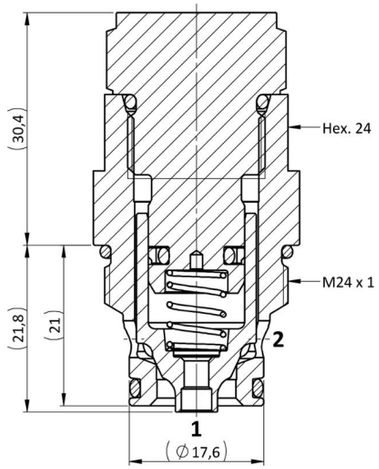
HYDRAULIC SYMBOL



DESCRIPTION

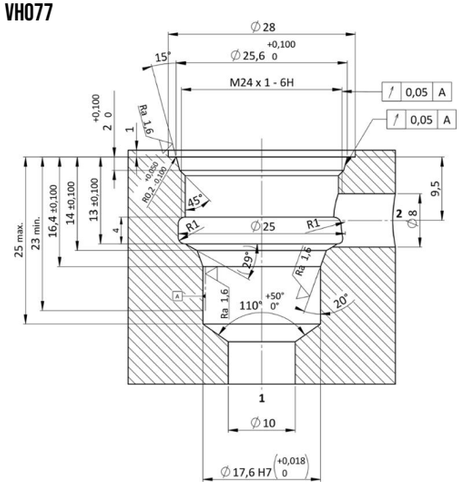
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVP0.M24 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

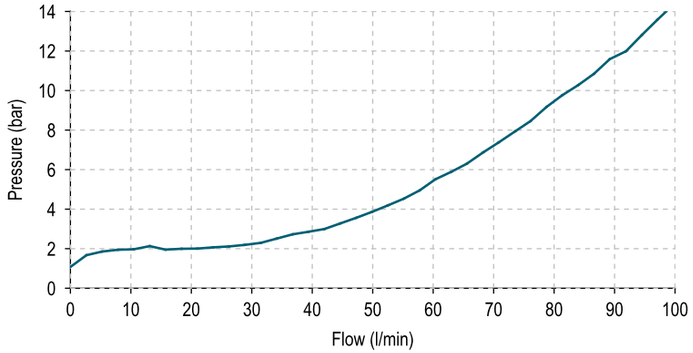


CAVITY

VH077



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70-80 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.010 (standard sealing NBR-BUNA-N)
WEIGHT	0,150 kg

ORDERING CODE

C	V	P	0	·	M	2	4	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M24x1 with Ø17,6 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	<2,0

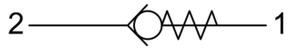
Specifications may change without notice.

CVP0.M28 VALVE SERIES

METRIC Cartridge - 300 bar

Direct acting - Poppet type

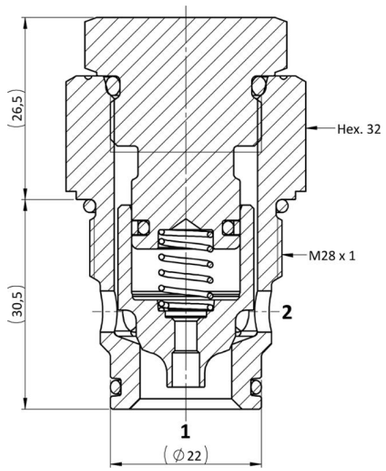
HYDRAULIC SYMBOL



DESCRIPTION

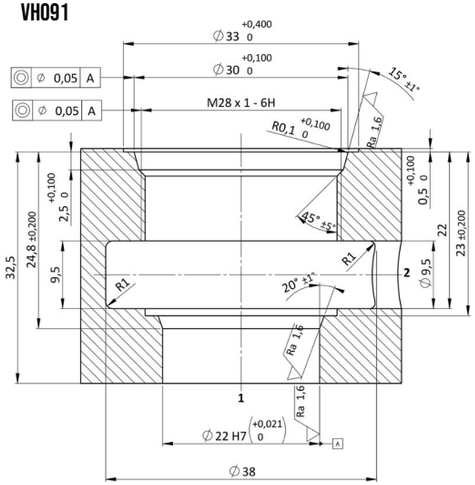
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVP0.M28 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

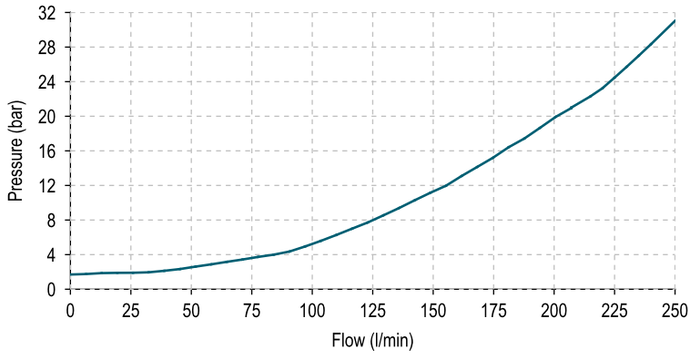


CAVITY

VH091



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	300 bar
MAXIMUM FLOW	250 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 300 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	90-100 Nm Hex.32
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.050 (standard sealing NBR-BUNA-N)
WEIGHT	0,230 kg

ORDERING CODE

C	V	P	0	·	M	2	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M28x1 with Ø22 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

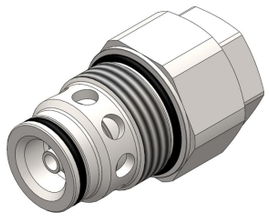
Spring model code	Cracking pressure (bar)
N	<2,0

Specifications may change without notice.

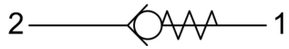
CVP4.M28 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type



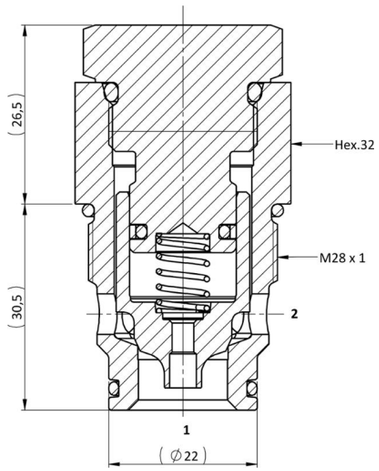
HYDRAULIC SYMBOL



DESCRIPTION

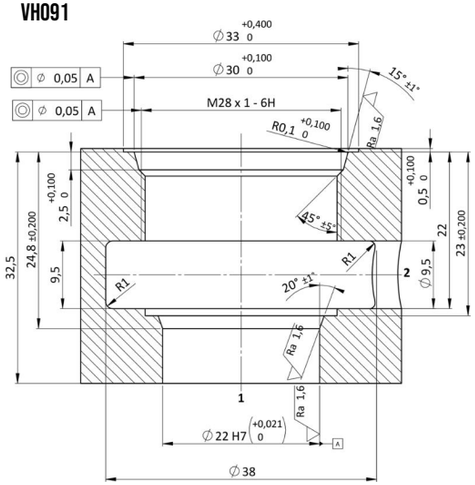
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVP4.M28 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

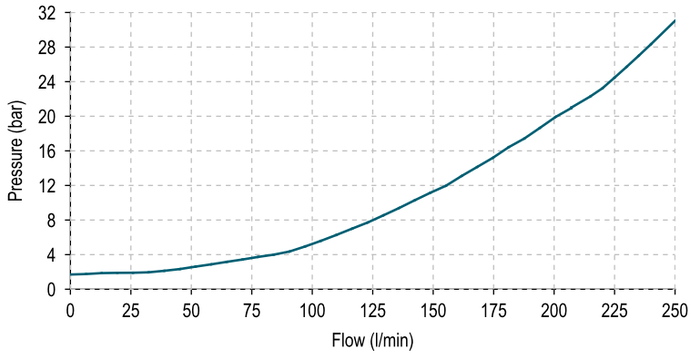


CAVITY

VH091



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	250 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	90-100 Nm Hex.32
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.050 (standard sealing NBR-BUNA-N)
WEIGHT	0,230 kg

ORDERING CODE

C	V	P	4	·	M	2	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M28x1 with Ø22 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	<2,0

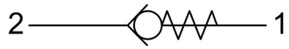
Specifications may change without notice.

CVP0.M30 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type

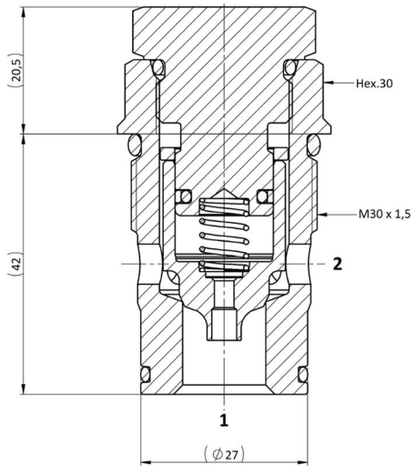
HYDRAULIC SYMBOL



DESCRIPTION

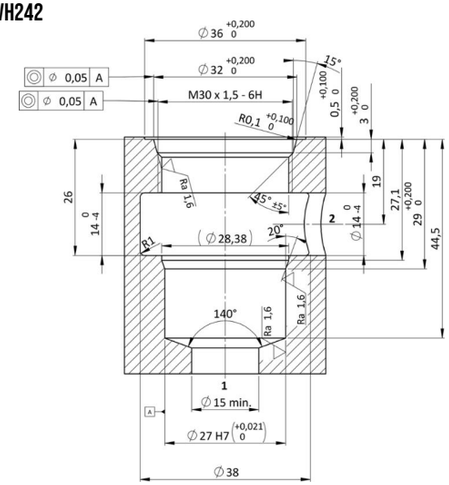
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVP0.M30 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

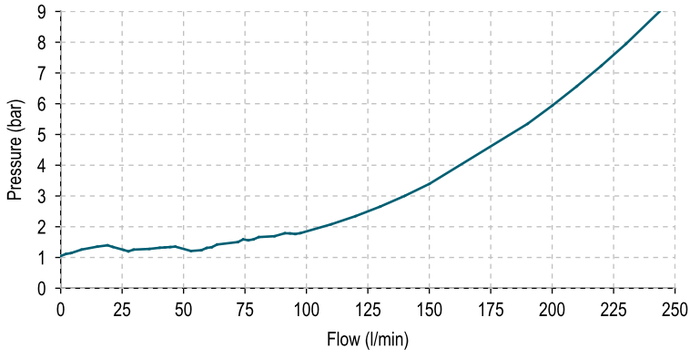


CAVITY

VH242



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	250 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	140-150 Nm Hex.30
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.123 (standard sealing NBR-BUNA-N)
WEIGHT	0,259 kg

ORDERING CODE

C	V	P	0	·	M	3	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M30x1,5 with Ø27 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

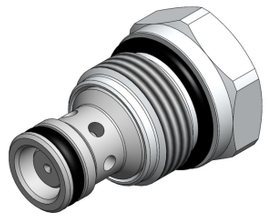
Spring model code	Cracking pressure (bar)
N	<2,0

Specifications may change without notice.

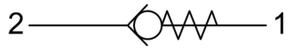
CVZ0.S08 VALVE SERIES

SAE08 Cartridge - 420 bar

Direct acting - Poppet type



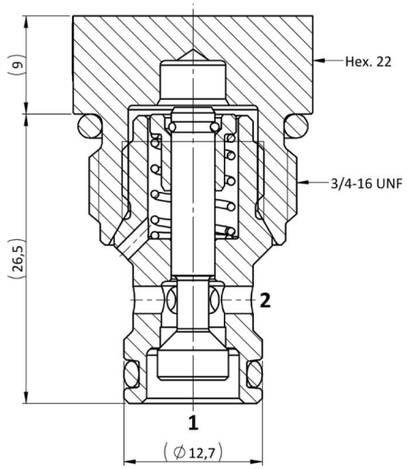
HYDRAULIC SYMBOL



DESCRIPTION

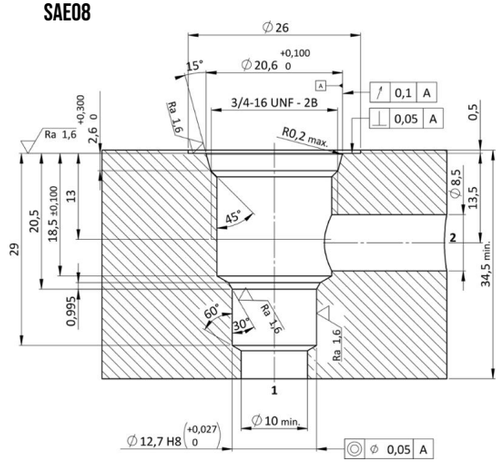
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVZ0.S08 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

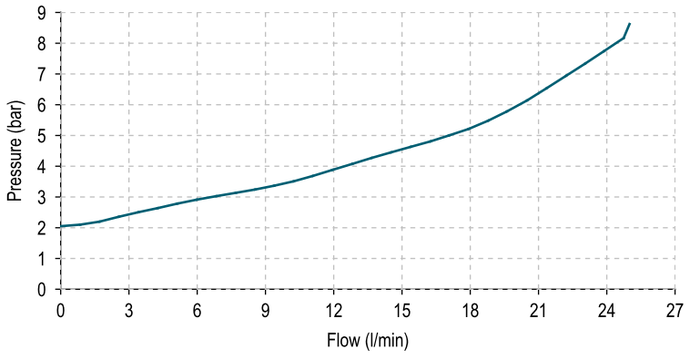


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

— Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	25 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

C	V	Z	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

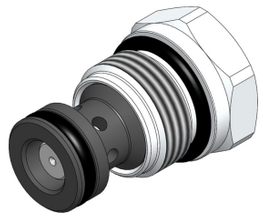
Spring model code	Cracking pressure (bar)
N	2,0

Specifications may change without notice.

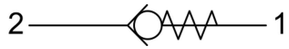
CVZ0.S09 VALVE SERIES

Hybrid SAE Cartridge - 420 bar

Direct acting - Poppet type



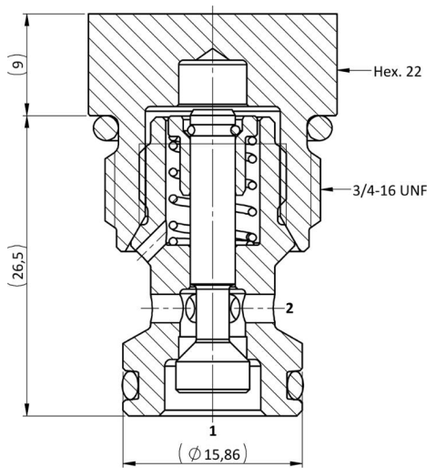
HYDRAULIC SYMBOL



DESCRIPTION

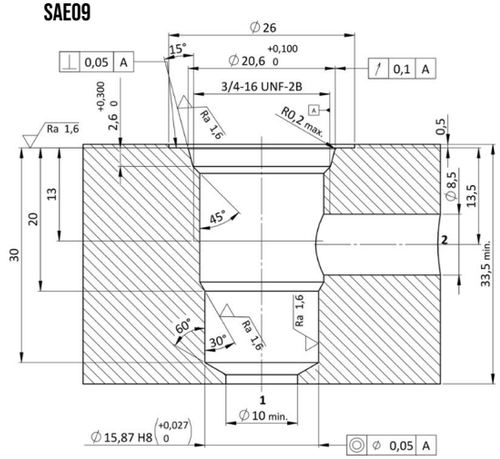
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVZ0.S09 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

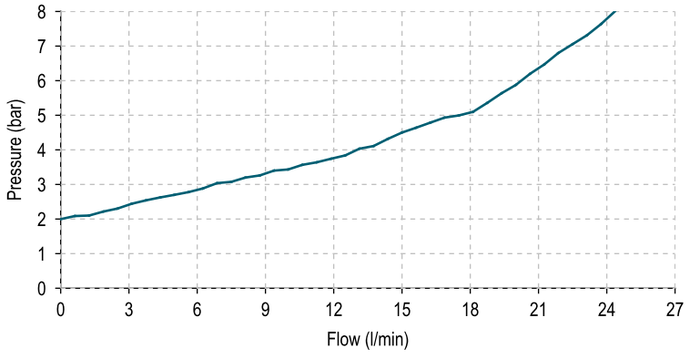


CAVITY

SAE09



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

— Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	25 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 (standard sealing NBR-BUNA-N)
WEIGHT	0,062 kg

ORDERING CODE

C	V	Z	0	·	S	0	9	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	2,0

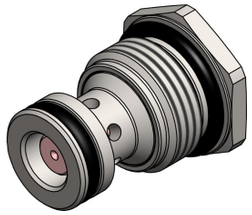
Specifications may change without notice.

CVZ1.S09 VALVE SERIES

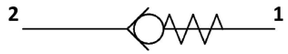
Hybrid SAE Cartridge - 350 bar

Direct acting - Poppet type

Compact size



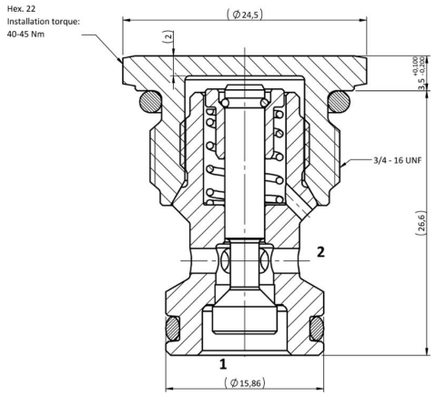
HYDRAULIC SYMBOL



DESCRIPTION

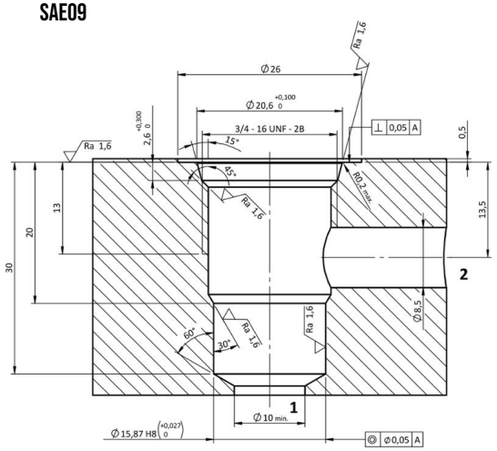
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVZ1.S09 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2). The valve sticking out has been reduced for a reduced overall dimension of your application.

CROSS SECTION

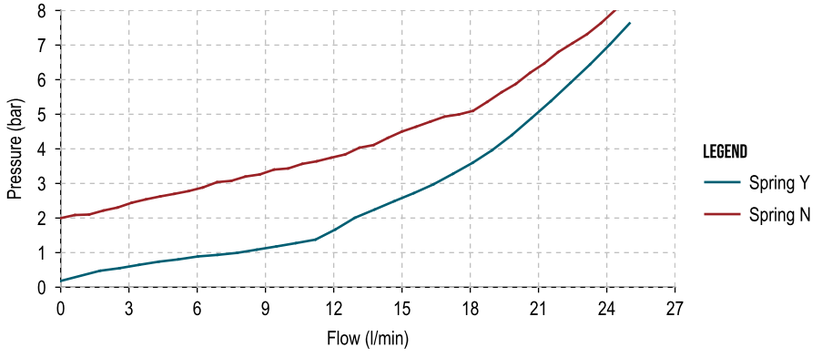


CAVITY

SAE09



PERFORMANCE DETAILS



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	25 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 30 bar 0,10 cm^3 / min @ 50 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -25° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 (standard sealing NBR-BUNA-N)
WEIGHT	0,044 kg

ORDERING CODE

C	V	Z	1	·	S	0	9	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with 15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done updon request

Standard configuration

BIAS SPRING OPTIONS

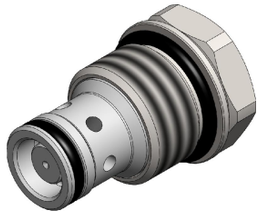
Spring model code	Cracking pressure (bar)
N	2
Y	0,5

Specifications may change without notice.

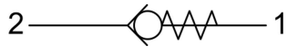
CVZ0.S10 VALVE SERIES

SAE10 Cartridge - 420 bar

Direct acting - Poppet type



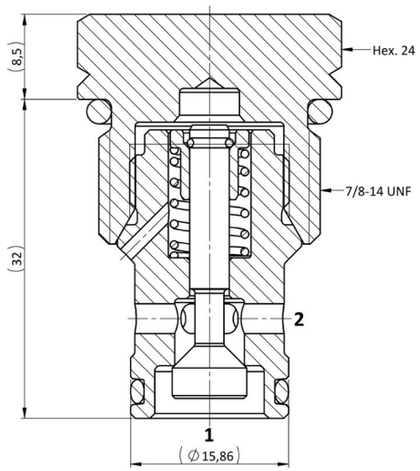
HYDRAULIC SYMBOL



DESCRIPTION

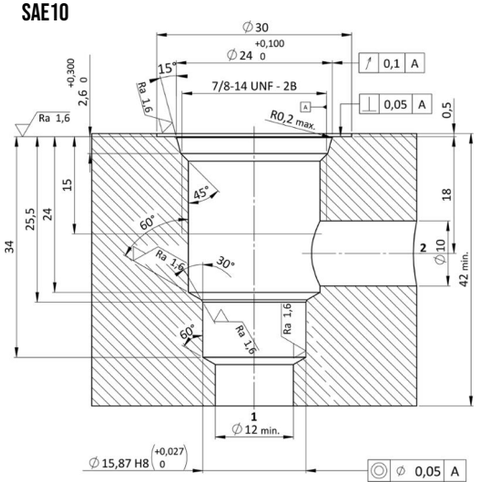
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVZ0.S10 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

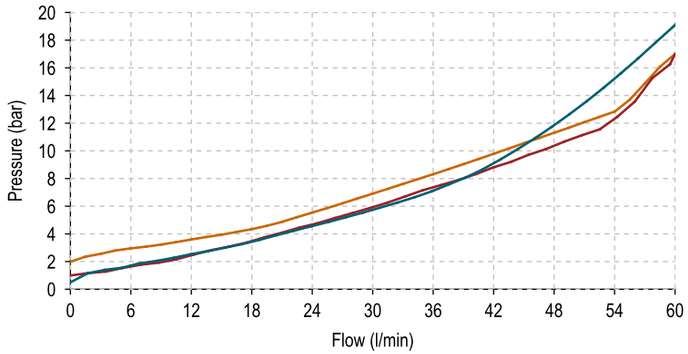


CAVITY

SAE10



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring L
- Spring Y
- Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg

ORDERING CODE

C	V	Z	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
L	0,5
Y	1,0
N	2,0

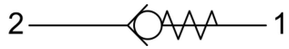
Specifications may change without notice.

CVZ0.M16 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type

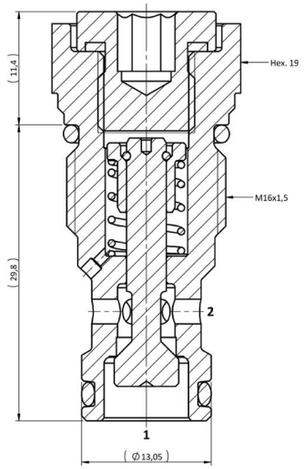
HYDRAULIC SYMBOL



DESCRIPTION

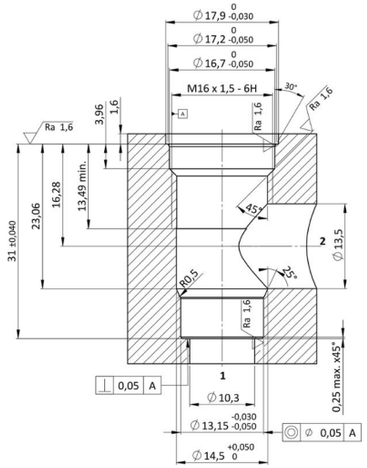
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVZ0.M16 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

CROSS SECTION

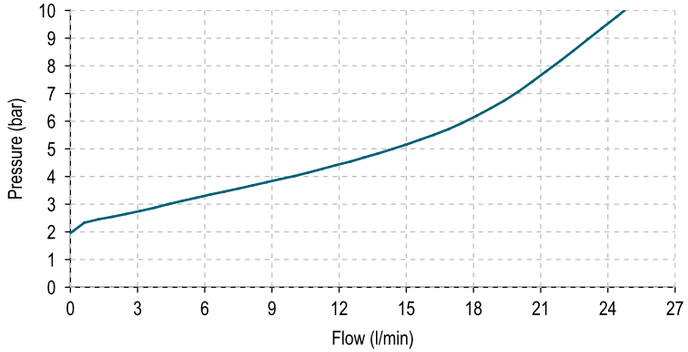


CAVITY

VH238



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	25 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.131 (standard sealing NBR-BUNA-N)
WEIGHT	0,051 kg

ORDERING CODE

C	V	Z	0	·	M	1	6	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M16x1,5 with Ø13,05 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

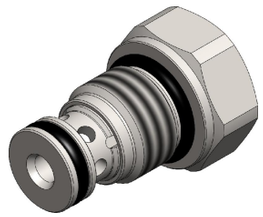
Spring model code	Cracking pressure (bar)
N	2,0

Specifications may change without notice.

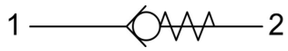
CVH0.S06 VALVE SERIES

SAE06 Cartridge - 420 bar

Direct acting - Ball type



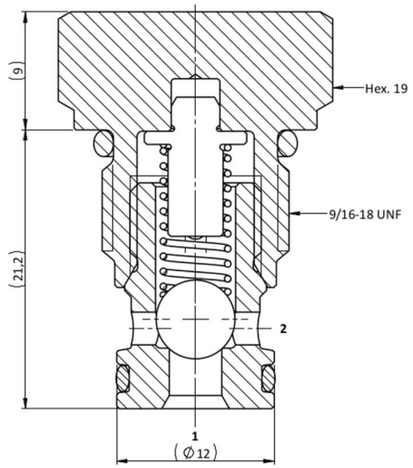
HYDRAULIC SYMBOL



DESCRIPTION

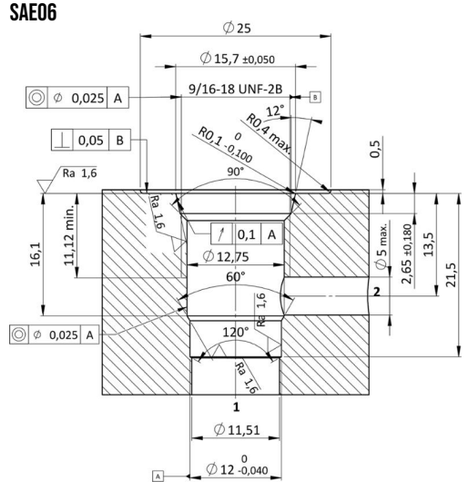
A screw-in, cartridge style, direct acting, ball type check valve. Main use is as a blocking or load-holding device. The CVH0.S06 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

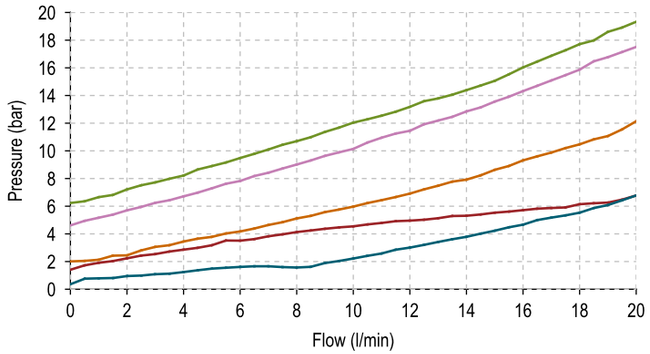


CAVITY

SAE06



PERFORMANCE DETAILS



NOTE

The performace chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring U
- Spring N
- Spring M
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	20 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.126 (standard sealing NBR-BUNA-N)
WEIGHT	0,038 kg

ORDERING CODE

C	V	H	0	·	S	0	6	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
9/16-18 UNF with Ø12 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

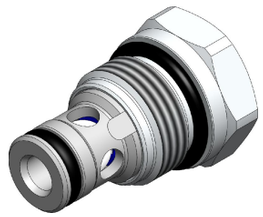
Spring model code	Cracking pressure (bar)
Y	0,5
N	1,5
M	2,0
P	4,5
U	6,0

Specifications may change without notice.

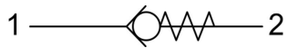
CVH0.S08 VALVE SERIES

SAE08 Cartridge - 420 bar

Direct acting - Ball type



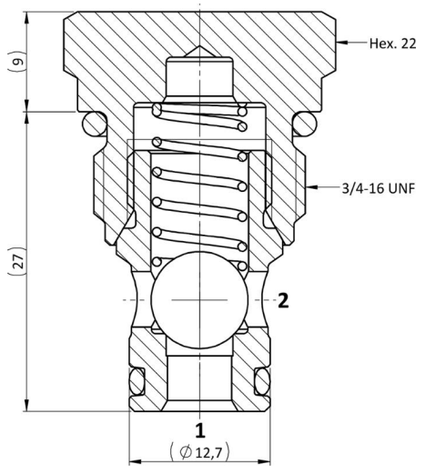
HYDRAULIC SYMBOL



DESCRIPTION

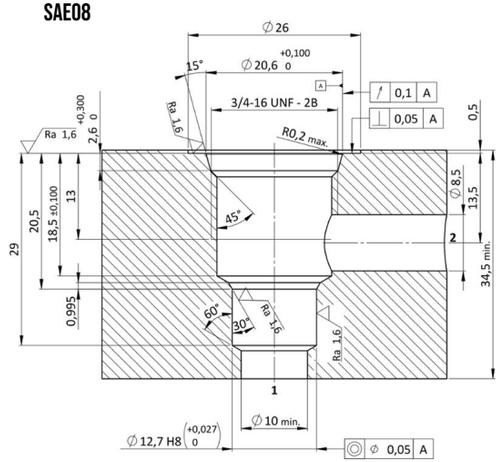
A screw-in, cartridge style, direct acting, ball type check valve. Main use is as a blocking or load-holding device. The CVH0.S08 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

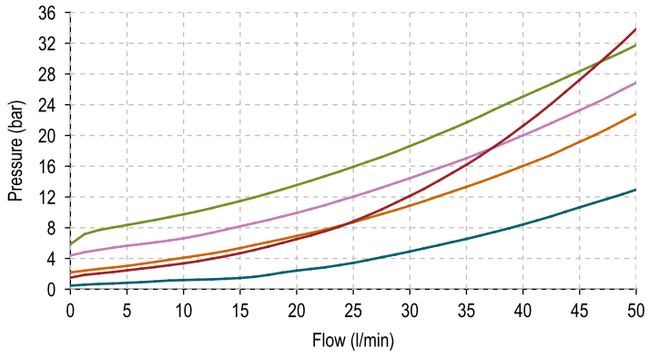


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring U
- Spring N
- Spring M
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
WEIGHT	0,055 kg

ORDERING CODE

C	V	H	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

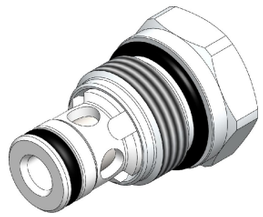
Spring model code	Cracking pressure (bar)
Y	0,5
N	1,5
M	2,0
P	4,5
U	6,0

Specifications may change without notice.

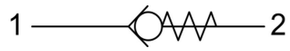
CVHG.S08 VALVE SERIES

SAE08 Cartridge - 420 bar

Direct acting - Ball type



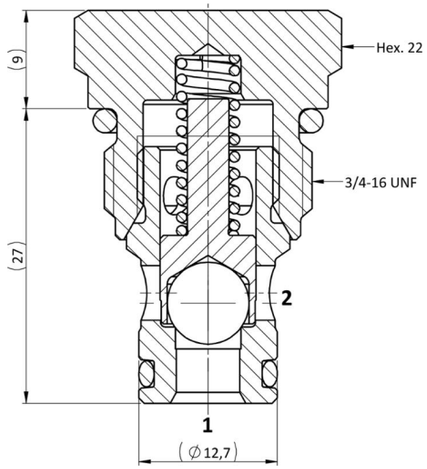
HYDRAULIC SYMBOL



DESCRIPTION

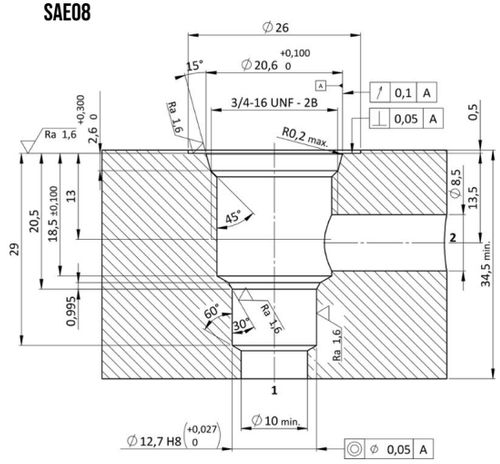
A screw-in, cartridge style, direct acting, ball type check valve. Main use is as a blocking or load-holding device. The CVHG.S08 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

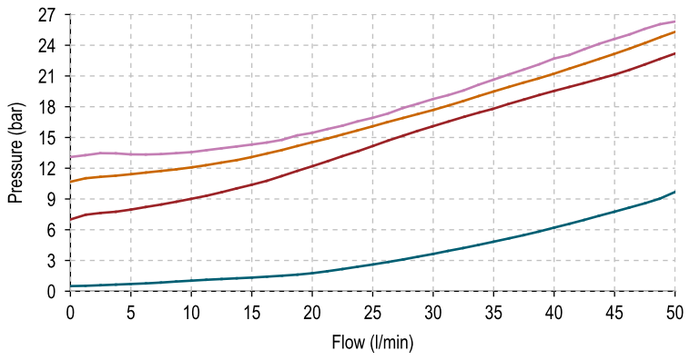


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring I
- Spring F
- Spring R
- Spring T

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
WEIGHT	0,056 kg

ORDERING CODE

C	V	H	G	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

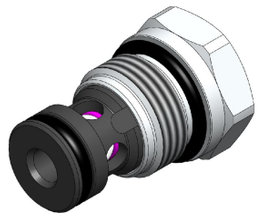
Spring model code	Cracking pressure (bar)
I	0,5
F	7,0
R	10,3
T	13,0

Specifications may change without notice.

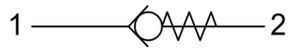
CVH0.S09 VALVE SERIES

Hybrid SAE Cartridge - 420 bar

Direct acting - Ball type



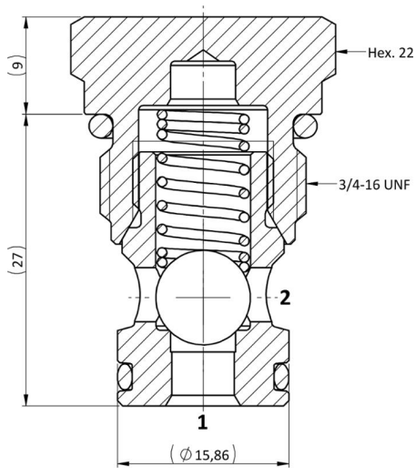
HYDRAULIC SYMBOL



DESCRIPTION

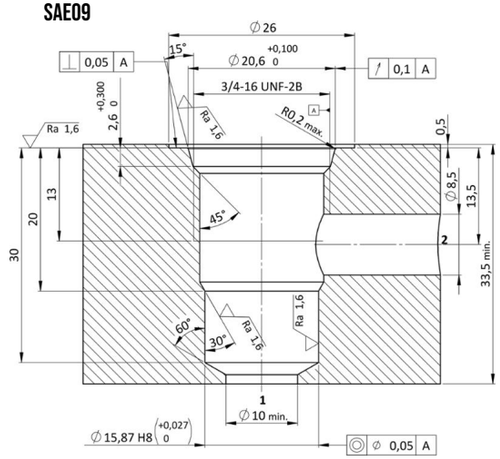
A screw-in, cartridge style, direct acting, ball type check valve. Main use is as a blocking or load-holding device. The CVH0.S09 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

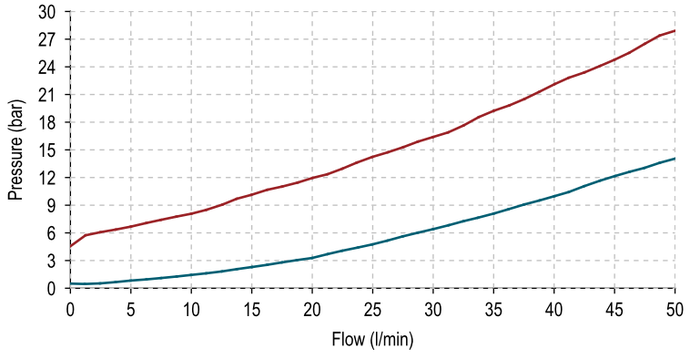


CAVITY

SAE09



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

C	V	H	0	·	S	0	9	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
P	4,5

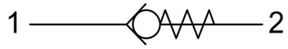
Specifications may change without notice.

CVH0.S10 VALVE SERIES

SAE10 Cartridge - 420 bar

Direct acting - Ball type

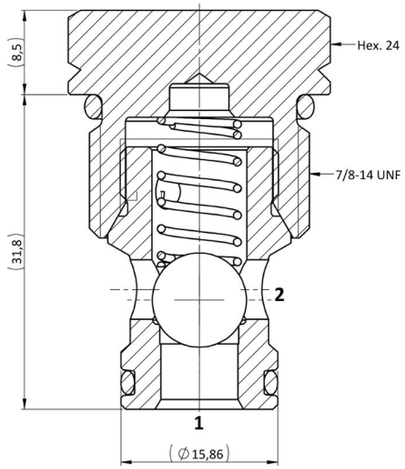
HYDRAULIC SYMBOL



DESCRIPTION

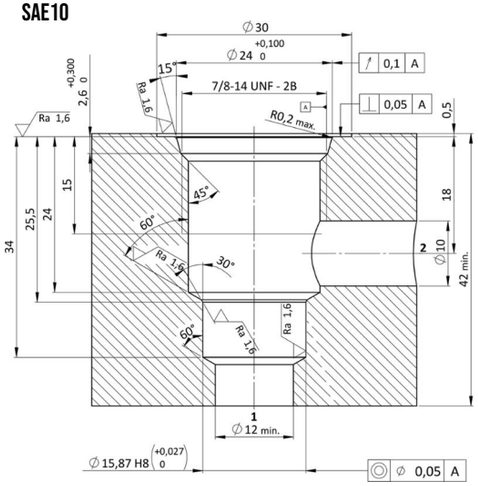
A screw-in, cartridge style, direct acting, ball type check valve. Main use is as a blocking or load-holding device. The CVH0.S10 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

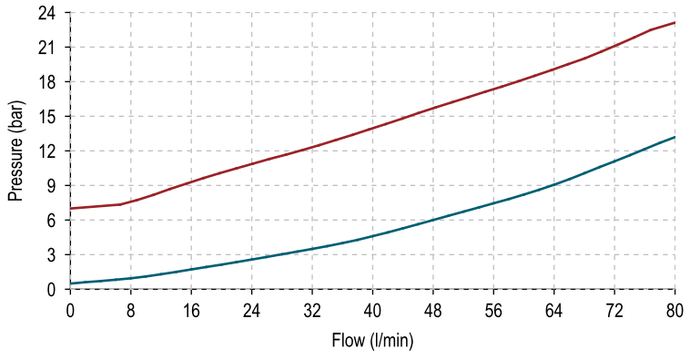


CAVITY

SAE10



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring G

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	80 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
WEIGHT	0,083 kg

ORDERING CODE

C	V	H	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	<0,5
G	7,0

Specifications may change without notice.

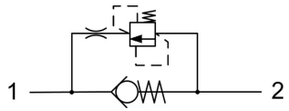
CVT0.U78 VALVE SERIES

U78 Cartridge - 475 bar

Direct acting with Thermal relief function

Poppet type

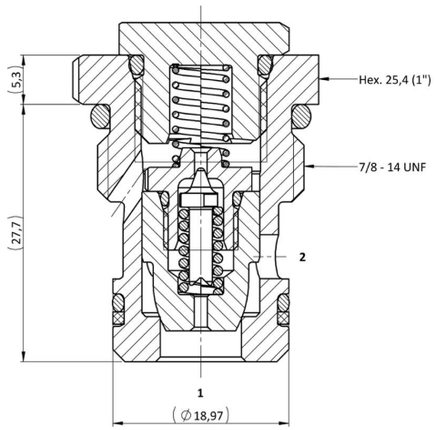
HYDRAULIC SYMBOL



DESCRIPTION

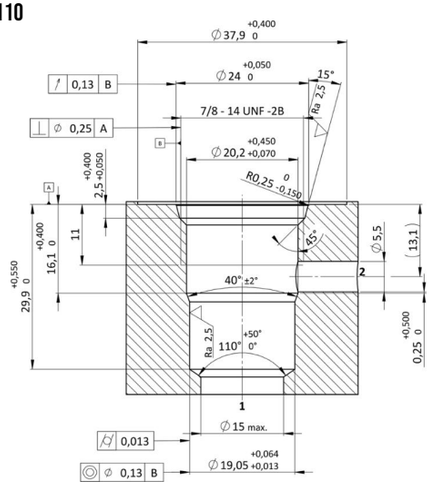
A screw-in, cartridge style, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The CVT0.U78 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Small amount of oil is allowed from 2 to 1 when the pressure on port 2 increase caused by the thermal expansion and meet the thermal relief setting pressure. This function prevents circuit damage that should be caused by thermal expansion.

CROSS SECTION

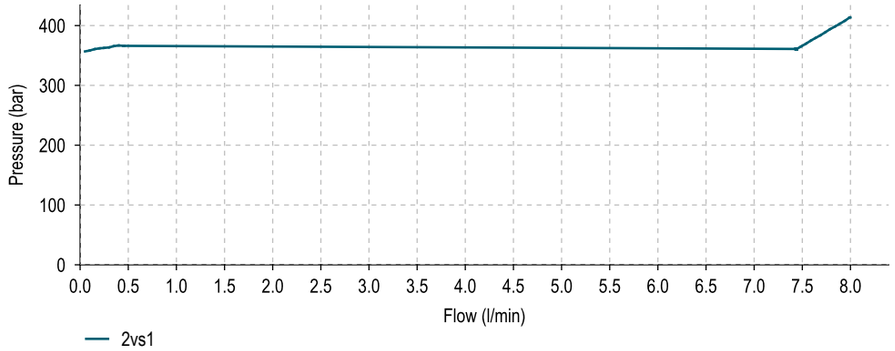


CAVITY

VH110



PERFORMANCE DETAILS



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	475 bar
MAXIMUM FLOW	115 l/min
MAXIMUM FLOW THERMAL RELIEF VALVE	8 l/min
THERMAL RELIEF CRACK PRESSURE FROM 2 TO 1	325 - 475 bar (@0,16 - 0,25 l/min)
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 6,9 bar - from 2 to 1 port 0,50 cm^3 / min @ 69 bar - from 2 to 1 port
EXTERNAL COMPONENT TREATMENT	External parts aren't coated
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-50 Nm Hex.25,4 (1")
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.136 (standard sealing NBR-BUNA-N)
WEIGHT	0,080 kg

ORDERING CODE

C	V	T	0	·	U	7	8	·	0	*	·	4	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø18,97 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
S	2 (-0,5/+2)

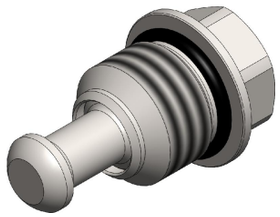
400 = Standard configuration.

Specifications may change without notice.

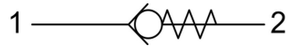
ICV0.M16 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type



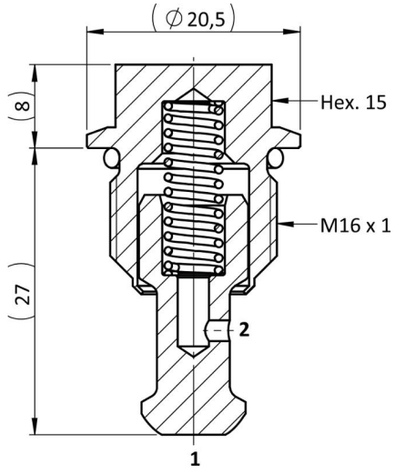
HYDRAULIC SYMBOL



DESCRIPTION

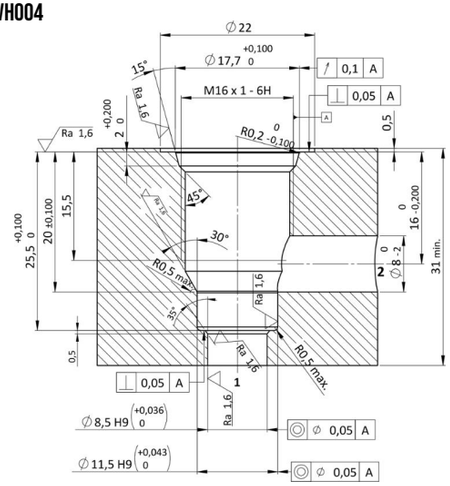
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV0.M16 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

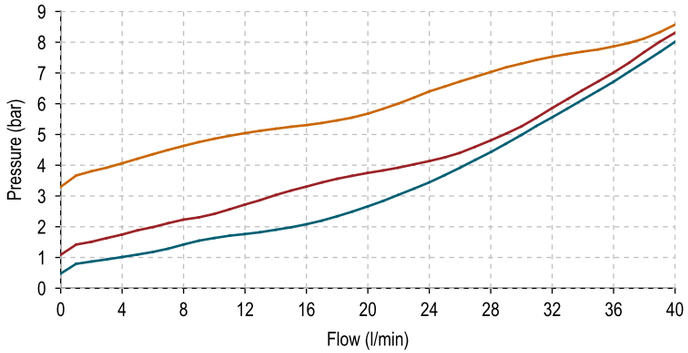


CAVITY

VH004



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B
- Spring G

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	40 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	30-35 Nm Hex.15
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.008 (standard sealing NBR-BUNA-N)
COINING KIT	CK.001
WEIGHT	0,032 kg

ORDERING CODE

I	C	V	0	·	M	1	6	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M16x1

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	0,5
B	1,0
G	3,0

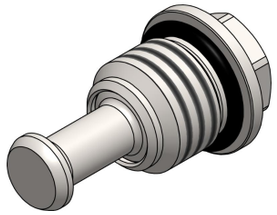
Specifications may change without notice.

ICV6.M16 VALVE SERIES

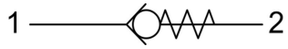
METRIC Insert - 420 bar

Direct acting - Poppet type

Hybrid cavity - Compact size



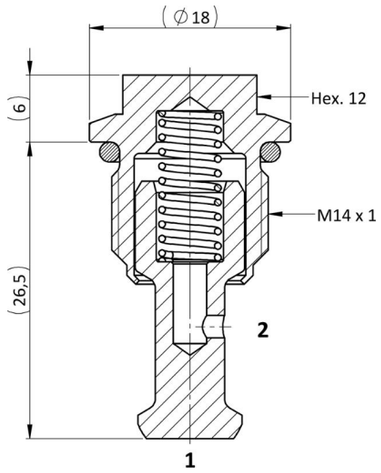
HYDRAULIC SYMBOL



DESCRIPTION

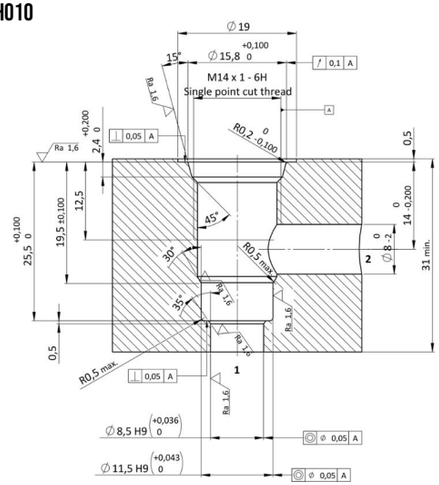
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV6.M16 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

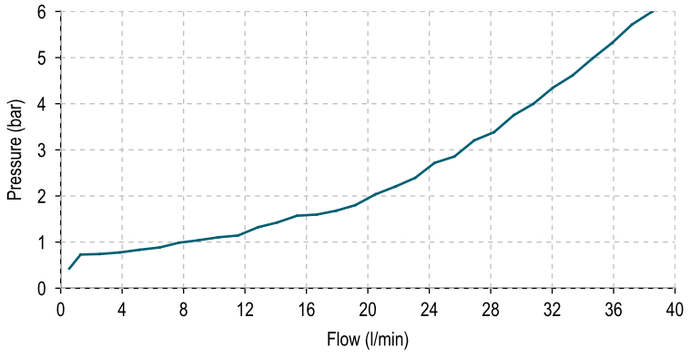


CAVITY

VH010



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	40 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 30 bar 0,10 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.12
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COINING KIT	CK.001
WEIGHT	0,021 kg

ORDERING CODE

I	C	V	6	·	M	1	6	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M14x1

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	0,5

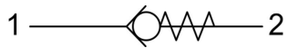
Specifications may change without notice.

ICV0.M18 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type

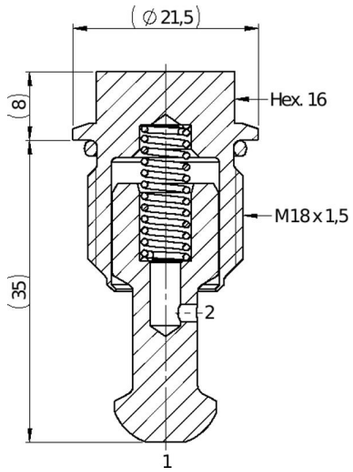
HYDRAULIC SYMBOL



DESCRIPTION

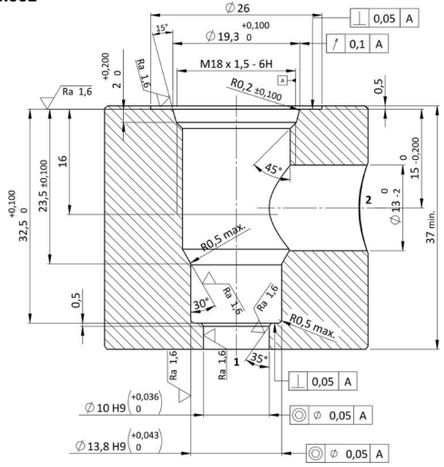
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV0.M18 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

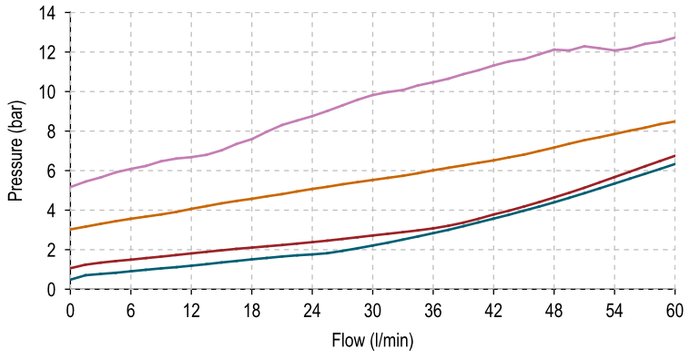


CAVITY

VH002



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B
- Spring G
- Spring V

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.16
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.005 (standard sealing NBR-BUNA-N)
COINING KIT	CK.002
WEIGHT	0,048 kg

ORDERING CODE

I	C	V	0	·	M	1	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M18x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

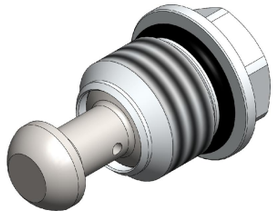
Spring model code	Cracking pressure (bar)
N	0,5
B	1,0
G	3,0
V	5,0

Specifications may change without notice.

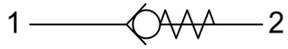
ICV0.M20 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type



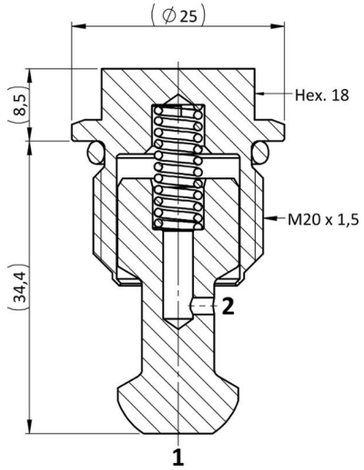
HYDRAULIC SYMBOL



DESCRIPTION

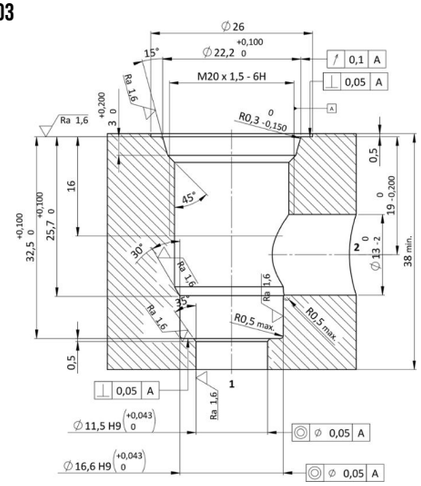
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV0.M20 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

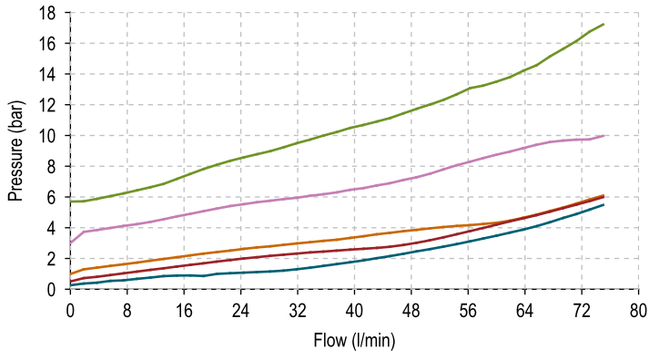


CAVITY

VH003



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring P
- Spring N
- Spring B
- Spring G

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.18
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.007 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,062 kg

ORDERING CODE

I	C	V	0	·	M	2	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M20x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,25
N	0,5
B	1,0
G	3,6
P	5,7

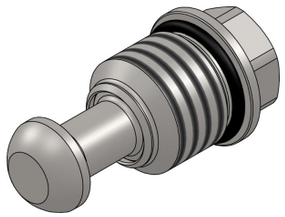
Specifications may change without notice.

ICV6.M20 VALVE SERIES

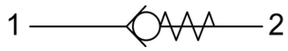
METRIC Insert - 420 bar

Direct acting - Poppet type

Hybrid cavity - Compact size



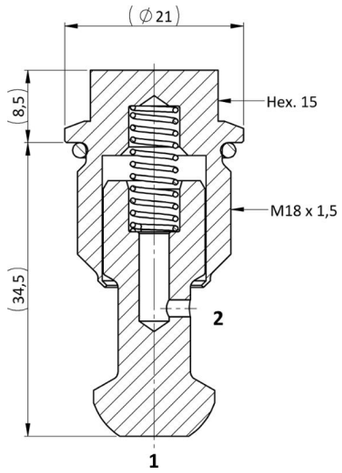
HYDRAULIC SYMBOL



DESCRIPTION

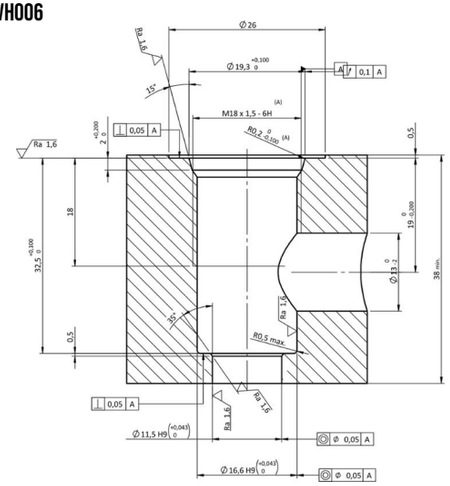
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV6.M20 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

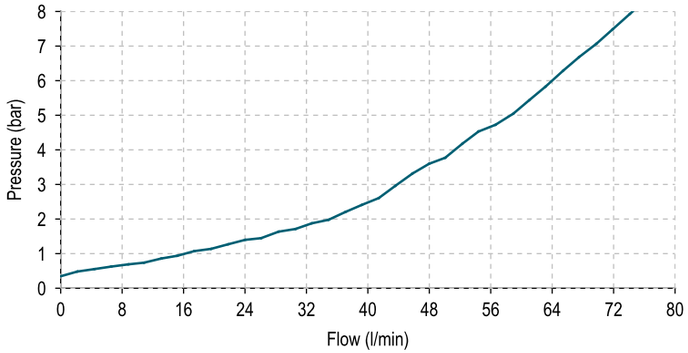


CAVITY

VH006



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.15
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.005 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,050 kg

ORDERING CODE

I	C	V	6	·	M	2	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M18x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

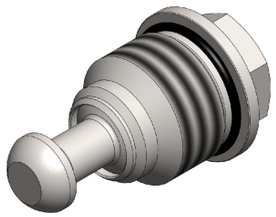
Spring model code	Cracking pressure (bar)
N	<0,5 bar

Specifications may change without notice.

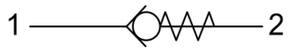
ICV0.M24 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type



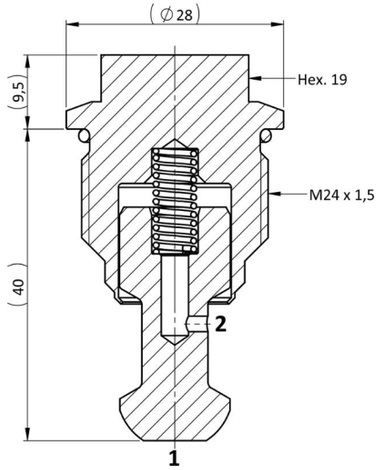
HYDRAULIC SYMBOL



DESCRIPTION

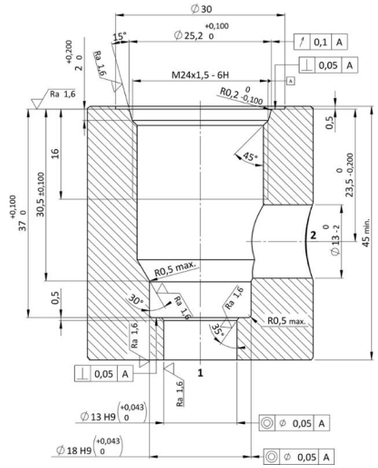
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV0.M24 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

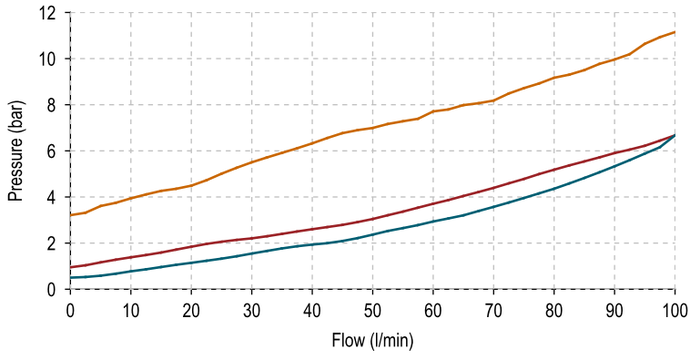


CAVITY

VH005



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B
- Spring G

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.009 (standard sealing NBR-BUNA-N)
COINING KIT	CK.004
WEIGHT	0,100 kg

ORDERING CODE

I	C	V	0	·	M	2	4	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M24x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

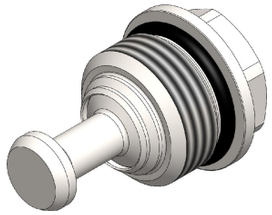
Spring model code	Cracking pressure (bar)
N	0,5
B	1,0
G	3,0

Specifications may change without notice.

ICV0.M27 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type

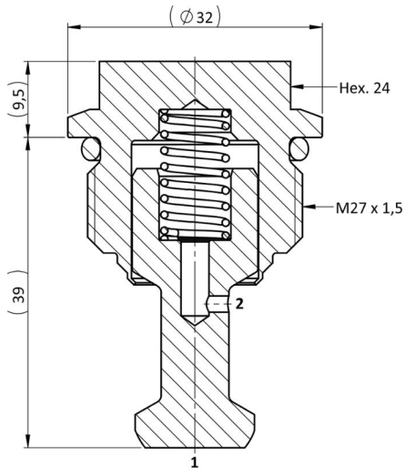


HYDRAULIC SYMBOL

DESCRIPTION

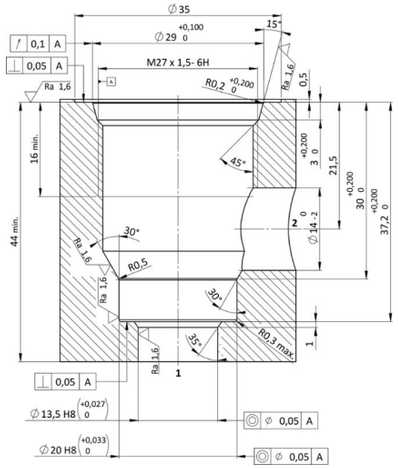
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV0.M27 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

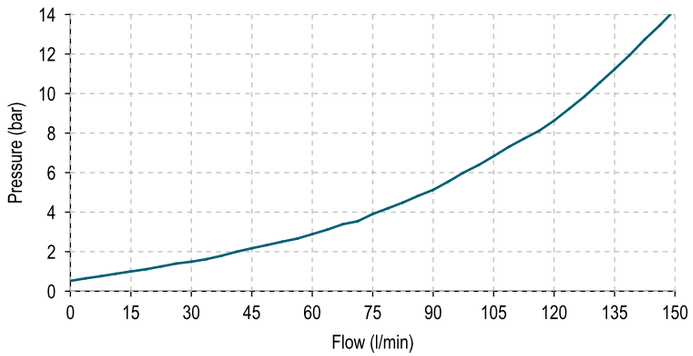


CAVITY

VH054



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for standard bias springs.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring N

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	150 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70-80 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.044 (standard sealing NBR-BUNA-N)
COINING KIT	CK.005
WEIGHT	0,113 kg

ORDERING CODE

I	C	V	0	·	M	2	7	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M27x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	0,5

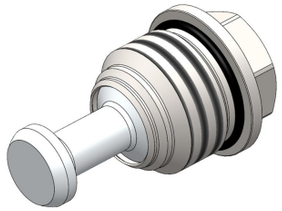
Specifications may change without notice.

ICV6.M27 VALVE SERIES

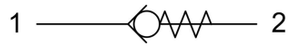
METRIC Insert - 420 bar

Direct acting - Poppet type

Hybrid cavity - Compact size



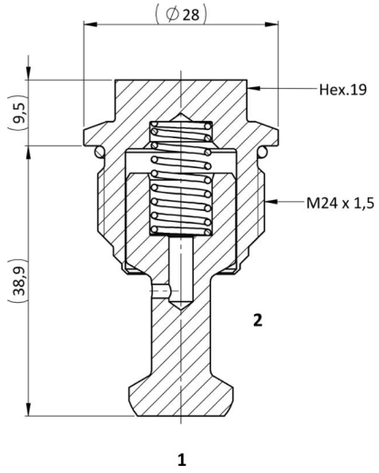
HYDRAULIC SYMBOL



DESCRIPTION

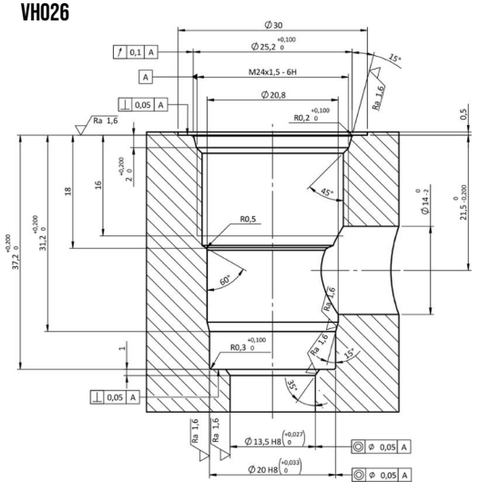
A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICV6.M27 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Insert type valve: the poppet seals directly against the cavity.

CROSS SECTION

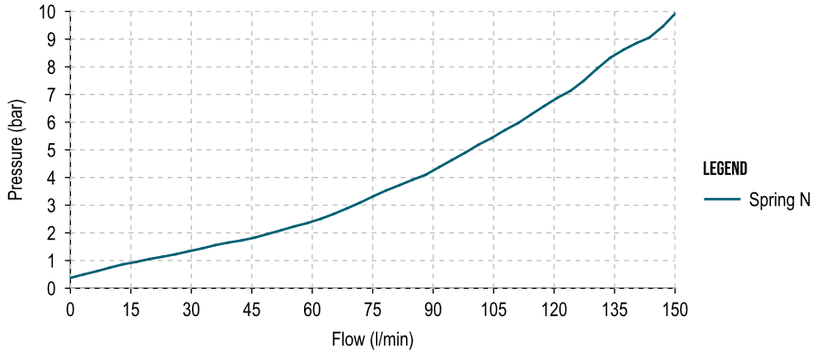


CAVITY

VH026



PERFORMANCE DETAILS



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	150 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.009 (standard sealing NBR-BUNA-N)
COINING KIT	CK.005
WEIGHT	0,087 kg

ORDERING CODE

I	C	V	6	·	M	2	7	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

SIZE
METRIC M24x1,5

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	<0,5

000 = Standard configuration.

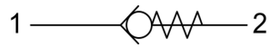
Specifications may change without notice.

CVD0 VALVE SERIES

SAE Insert - 350 bar

Direct acting - Poppet type

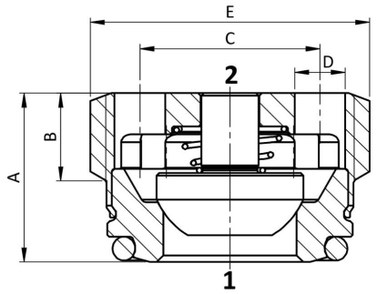
HYDRAULIC SCHEME



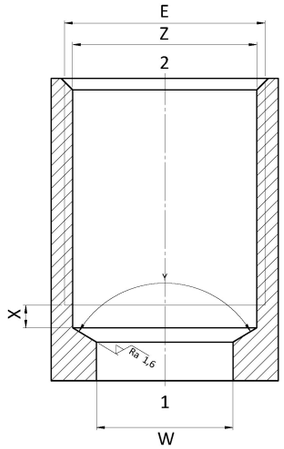
DESCRIPTION

A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVD0 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

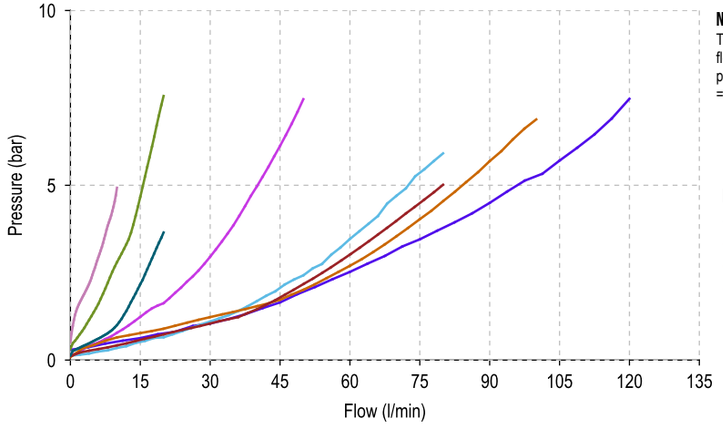
CROSS SECTION



CAVITY



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

S06 G14
S08 G38
S10 G12
G18 G34

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	see table below
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/ 18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	see table below
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	see table below
WEIGHT	see table below

ORDERING CODE

C	V	D	0	·	*	*	*	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE (see table below)

BIAS SPRING
N = Standard (cracking pressure <0.5)

Note = customized bias spring can be offered upon request

000 = Standard configuration.

Valve Details										Cavity Details				
E	A	B	C	D	MAX FLOW	Install. Torque	Install Tool	Seal Kit	Weight	Cavity code	X	Y	Z	W
[size]	[mm]	[mm]	[mm]	[mm]	[l/min]	[Nm]	[code]	[code]	[kg]	[code]	[mm]	[mm]	[mm]	[mm]
S06	10,0	6,0	Ø8,4	Ø2,2	20	6	IK.001	SK.091	0,008	VH169	3,0	118°	Ø12,9	Ø7
S08	12,7	6,5	Ø12,0	Ø3,8	80	10	IK.016	SK.108	0,016	VH106	3,0	118°	Ø17,4	Ø12
S10	12,7	6,6	Ø14,0	Ø4,3	100	30	IK.003	SK.107	0,023	VH166	3,0	118°	Ø20,3	Ø12
G18	7,5	3,5	Ø5,6	Ø1,6	10	6	IK.004	SK.013	0,002	VH056	3,0	118°	Ø8,7	Ø5
G14	8,5	4,4	Ø8,4	Ø2,2	20	15	IK.001	SK.016	0,005	VH007	3,0	118°	Ø11,6	Ø7
G38	11,3	6,0	Ø11,1	Ø3,0	50	30	IK.002	SK.017	0,011	VH008	3,0	118°	Ø15,1	Ø9
G12	12,7	6,5	Ø13,5	Ø3,8	80	30	IK.003	SK.148	0,019	VH009	3,0	118°	Ø18,8	Ø12
G34	14,8	7,6	Ø16,5	Ø5,0	120	50	IK.005	SK.015	0,040	VH057	3,0	118°	Ø24,3	Ø18

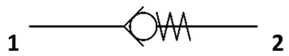
Specifications may change without notice.

CVD4.G14 VALVE SERIES

GAS Insert - 350 bar

Direct acting - Poppet type

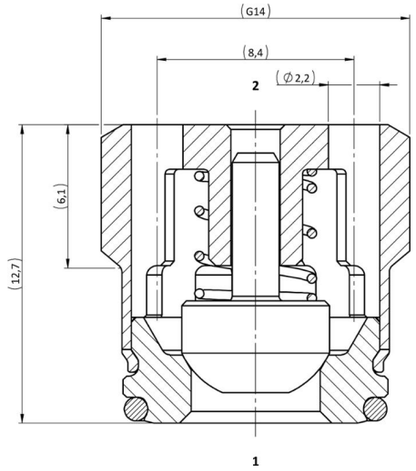
HYDRAULIC SYMBOL



DESCRIPTION

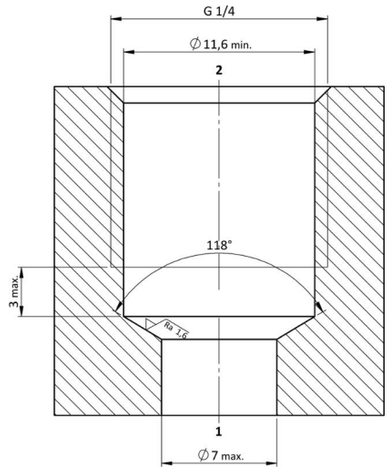
A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVD4.G14 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

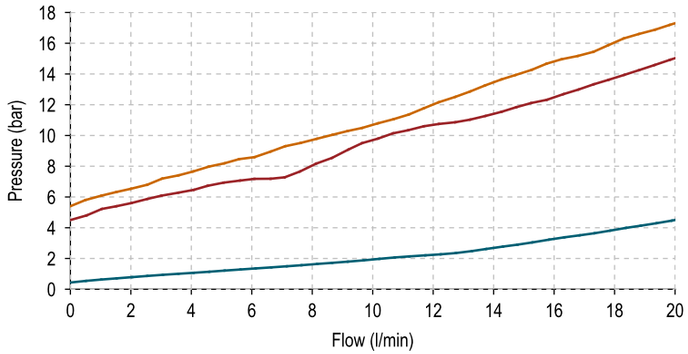


CAVITY

VH007



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring R
- Spring S

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	20 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 30 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	6-8 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.165 (standard sealing NBR-BUNA-N)
WEIGHT	0,007 kg

ORDERING CODE

C	V	D	4	·	G	1	4	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

SIZE
GAS G1/4

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
T	1,2
B	2
G	3
R	4
S	5,5

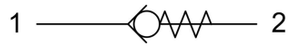
Specifications may change without notice.

CVD4.G18 VALVE SERIES

GAS Insert - 350 bar

Direct acting - Poppet type

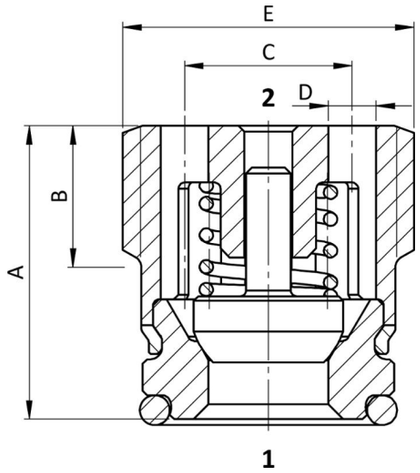
HYDRAULIC SYMBOL



DESCRIPTION

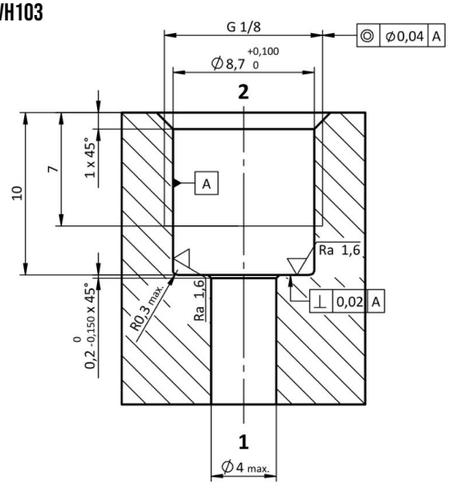
A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVD4.G18 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

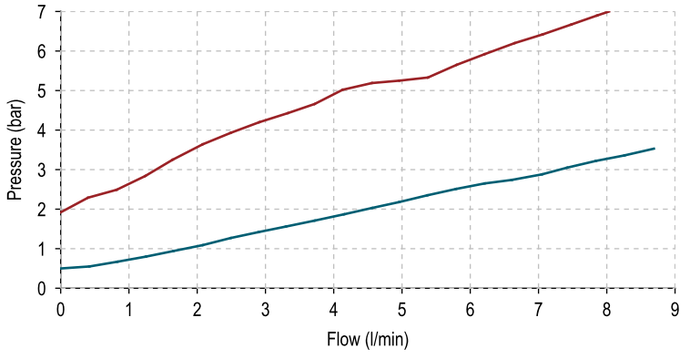


CAVITY

VH103



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	8 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 30 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	10,0 to 500 cSt
FILTRATION	19/17/14 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	5 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.088 (standard sealing NBR-BUNA-N)
WEIGHT	0,003 kg

ORDERING CODE

C	V	D	4	·	G	1	8	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

SIZE
GAS G1/8

000 = Standard configuration.

BIAS SPRING OPTIONS

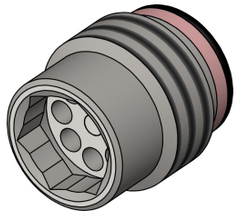
Spring model code	Cracking pressure (bar)
N	0,5
B	2

Specifications may change without notice.

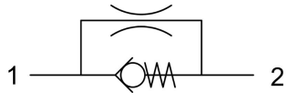
CVDM.G14 VALVE SERIES

GAS Insert - 350 bar

Direct Acting - Poppet Type



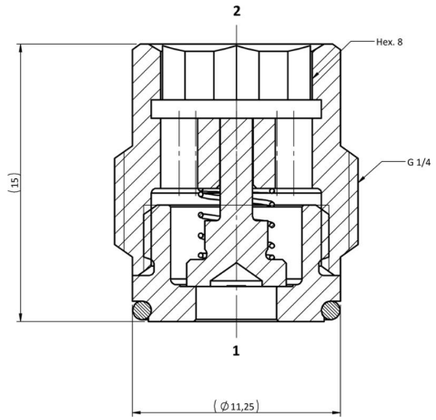
HYDRAULIC SYMBOL



DESCRIPTION

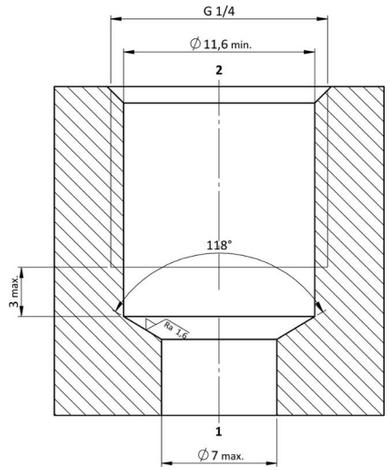
A screw-in, direct acting, poppet type in-line check valve in 1vs2 operation and regulated throttled flow in 2vs1 operation. The CVDM.G14 allows flow passage from port 1 to 2: the cartridge has a fully guided poppet which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow in the opposite direction (2 to 1) is calibrated in a fixed range using a special slot on the poppet's surface that interfaces with the valve seat.

CROSS SECTION

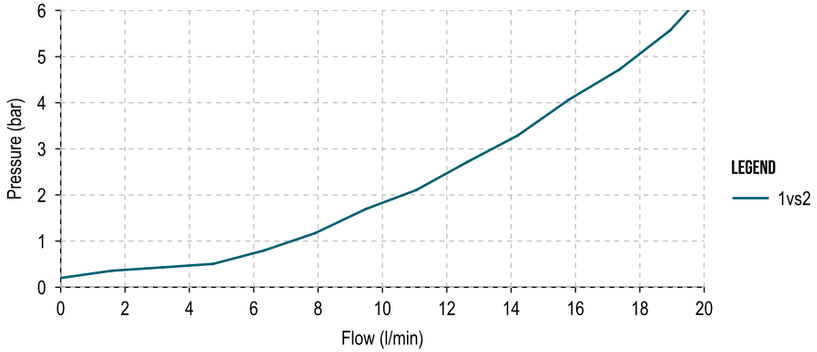


CAVITY

VH007



PERFORMANCE DETAILS



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	20 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	7 cm^3 / min @ 4,1 bar - Restricted flow tolerances: ± 3 cc/min 90 cm^3 / min @ 46,2 bar - Restricted flow tolerances: ± 52 cc/min
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	6 Nm Hex.8
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt @ 50 ± 5 °C
WEIGHT	0,009 kg

ORDERING CODE

C	V	D	M	·	G	1	4	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

SIZE
G14 = GAS G1/4

000 = Standard configuration

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	<0,5

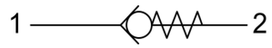
Specifications may change without notice.

CVD0 VALVE SERIES

GAS Insert - 350 bar

Direct acting - Poppet type

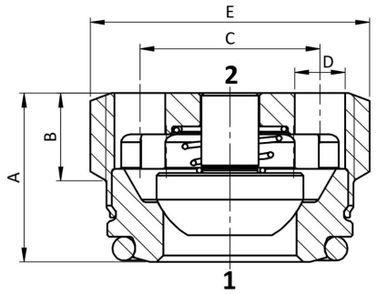
HYDRAULIC SCHEME



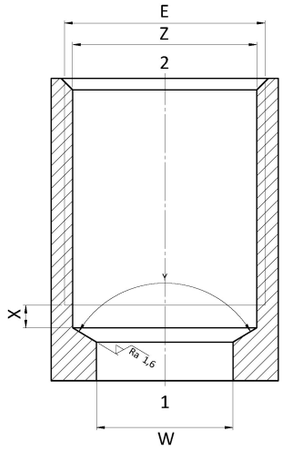
DESCRIPTION

A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVD0 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

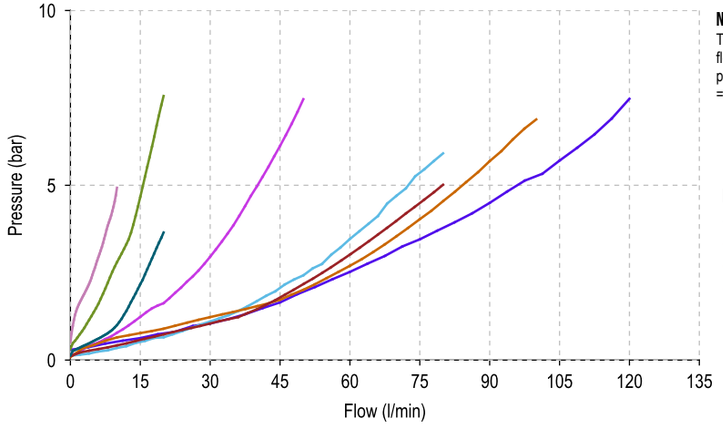
CROSS SECTION



CAVITY



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

S06 G14
S08 G38
S10 G12
G18 G34

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	see table below
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/ 18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	see table below
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	see table below
WEIGHT	see table below

ORDERING CODE

C V D 0	.	* * *	.	0 *	.	0 0 0
VALVE BASIC CODE		SIZE (see table below)		BIAS SPRING		000 = Standard configuration.

BIAS SPRING
N = Standard (cracking pressure <0.5)

Note = customized bias spring can be offered upon request

Valve Details										Cavity Details				
E	A	B	C	D	MAX FLOW	Install. Torque	Install Tool	Seal Kit	Weight	Cavity code	X	Y	Z	W
[size]	[mm]	[mm]	[mm]	[mm]	[l/min]	[Nm]	[code]	[code]	[kg]	[code]	[mm]	[mm]	[mm]	[mm]
S06	10,0	6,0	Ø8,4	Ø2,2	20	6	IK.001	SK.091	0,008	VH169	3,0	118°	Ø12,9	Ø7
S08	12,7	6,5	Ø12,0	Ø3,8	80	10	IK.016	SK.108	0,016	VH106	3,0	118°	Ø17,4	Ø12
S10	12,7	6,6	Ø14,0	Ø4,3	100	30	IK.003	SK.107	0,023	VH166	3,0	118°	Ø20,3	Ø12
G18	7,5	3,5	Ø5,6	Ø1,6	10	6	IK.004	SK.013	0,002	VH056	3,0	118°	Ø8,7	Ø5
G14	8,5	4,4	Ø8,4	Ø2,2	20	15	IK.001	SK.016	0,005	VH007	3,0	118°	Ø11,6	Ø7
G38	11,3	6,0	Ø11,1	Ø3,0	50	30	IK.002	SK.017	0,011	VH008	3,0	118°	Ø15,1	Ø9
G12	12,7	6,5	Ø13,5	Ø3,8	80	30	IK.003	SK.148	0,019	VH009	3,0	118°	Ø18,8	Ø12
G34	14,8	7,6	Ø16,5	Ø5,0	120	50	IK.005	SK.015	0,040	VH057	3,0	118°	Ø24,3	Ø18

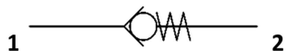
Specifications may change without notice.

CVD6.G38 VALVE SERIES

GAS Insert - 350 bar

Direct acting - Poppet type

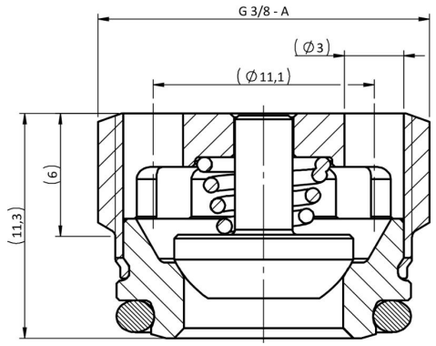
HYDRAULIC SYMBOL



DESCRIPTION

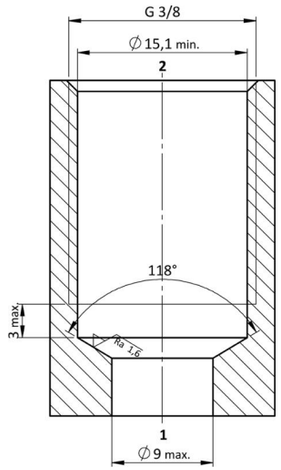
A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVD0 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

CROSS SECTION

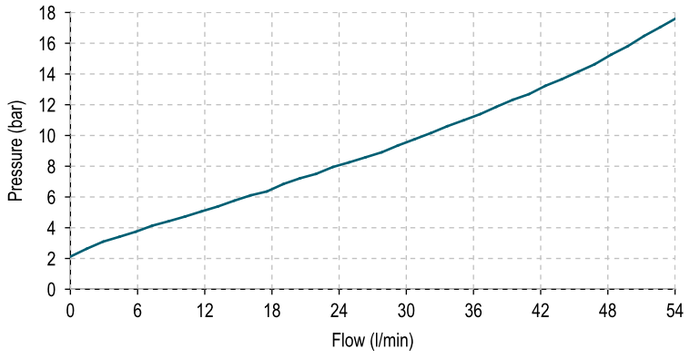


CAVITY

VH008



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

— Spring B

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	50 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
ORIENTATION	No restrictions
INSTALLATION TORQUE	30 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.017 (standard sealing NBR-BUNA-N)

ORDERING CODE

C	V	D	6	·	G	3	8	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

SIZE

G38 = GAS 3/8

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
B	2

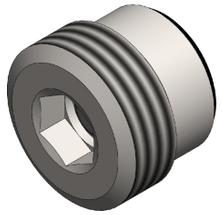
000= Standard configuration

Specifications may change without notice.

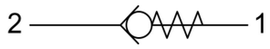
CVRO VALVE SERIES

SAE Insert - 350 bar

Direct acting - Poppet type



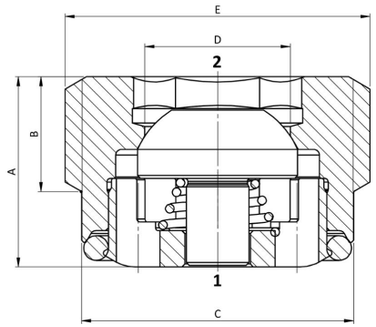
HYDRAULIC SCHEME



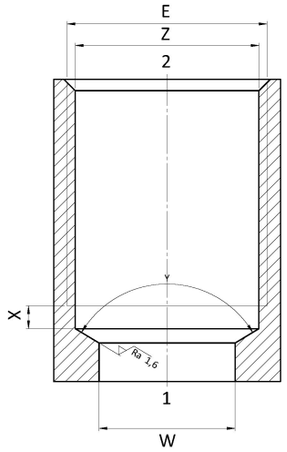
DESCRIPTION

A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVR0 allows flow passage from port 2 to 1: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 2 to open to 1. The flow is blocked in the opposite direction (1 to 2).

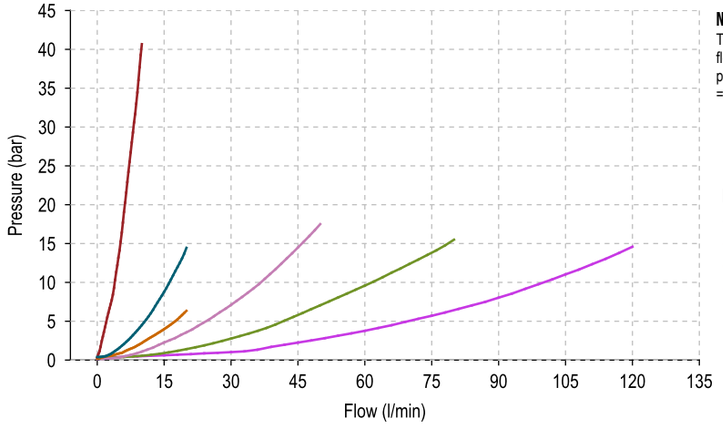
CROSS SECTION



CAVITY



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

S06 — G12
G18 — G34
G14
G38

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	see table below
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/ 18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	see table below
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	see table below
WEIGHT	see table below

ORDERING CODE

C	V	R	0	·	*	*	*	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE (see table below)

BIAS SPRING
N = Standard (cracking pressure <0.5)

Note = customized bias spring can be offered upon request

000 = Standard configuration.

Valve Details									Cavity Details				
E	A	B	C	D	MAX FLOW	Install. Torque	Seal Kit	Weight	Cavity code	X	Y	Z	W
[size]	[mm]	[mm]	[mm]	[mm]	[l/min]	[Nm]	[code]	[kg]	[code]	[mm]	[mm]	[mm]	[mm]
S06	10,5	5,8	Ø12,5	Ø6,0	20	15	SK.121	0,009	VH169	3,0	118°	Ø12,9	Ø7
G18	8,0	3,9	Ø8,5	Ø4,0	10	9	SK.088	0,003	VH056	3,0	118°	Ø8,7	Ø5
G14	10,2	5,5	Ø11,5	Ø6,0	20	15	SK.016	0,007	VH007	3,0	118°	Ø11,6	Ø7
G38	11,7	7,5	Ø14,9	Ø8,0	50	25	SK.153	0,015	VH008	3,0	118°	Ø15,1	Ø9
G12	13,5	7,9	Ø18,7	Ø10,0	80	40	SK.018	0,023	VH009	3,0	118°	Ø18,8	Ø12
G34	17,5	11,5	Ø24,0	Ø10,0	120	50	SK.015	0,050	VH057	3,0	118°	Ø24,3	Ø18

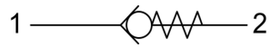
Specifications may change without notice.

CVB0 VALVE SERIES

GAS Insert - 350 bar

Direct acting - Ball type

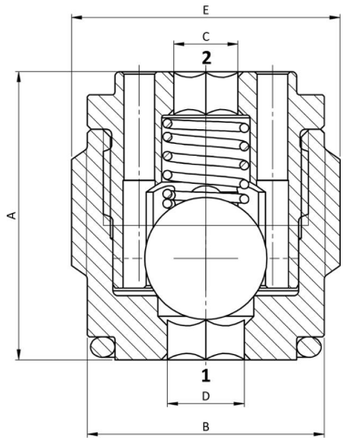
HYDRAULIC SCHEME



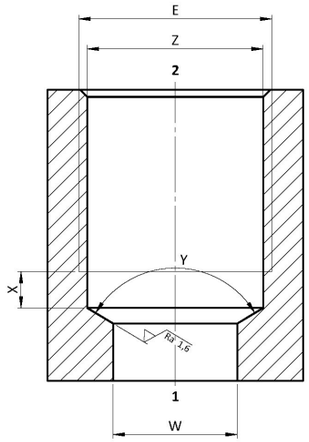
DESCRIPTION

A screw-in, direct acting, ball type in-line check valve. Main use is as a blocking or load-holding device. The CVB0 allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1). Reserved installation is possible (except for size G18) yet not recommended.

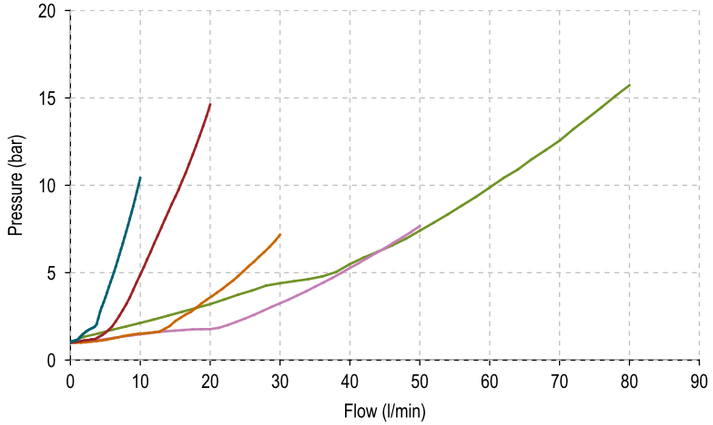
CROSS SECTION



CAVITY



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity.
p/Qcurves are recorded at TOil = 40°C and 46 cSt.

LEGEND

G18 — G34
G14
G38
G12

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	see table below
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/ 18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	see table below
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	see table below
WEIGHT	see table below

ORDERING CODE

C	V	B	0	·	*	*	*	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE (see table below)

BIAS SPRING

Y = Standard (cracking pressure 0.3)

N = Standard (cracking pressure 1.0)

B = Standard (cracking pressure 3.0)

Note = customized bias spring can be offered upon request

000 = Standard configuration.

Valve Details										Cavity Details				
E	A	B	C	D	MAX FLOW	Install. Torque	Install Tool	Seal Kit	Weight	Cavity code	X	Y	Z	W
[size]	[mm]	[mm]	[mm]	[mm]	[l/min]	[Nm]	[code]	[code]	[kg]	[code]	[mm]	[mm]	[mm]	[mm]
G18	12,5	8,4	Ø2,0	Ø0,0	10	2	IK.006	SK.013	0,004	VH058	2,5	118°	Ø8,5	Ø5
G14	17,0	11,3	Ø2,5	Ø3,0	20	4	IK.007	SK.016	0,013	VH012	3,0	118°	Ø11,4	Ø7
G38	18,5	14,8	Ø3,0	Ø4,0	30	6	IK.008	SK.017	0,021	VH013	3,0	118°	Ø14,9	Ø9
G12	22,5	18,5	Ø5,0	Ø6,0	50	10	IK.009	SK.018	0,041	VH014	4,0	118°	Ø18,6	Ø12
G34	28,0	24,0	Ø8,0	Ø8,0	80	20	IK.010	SK.022	0,082	VH015	5,0	118°	Ø24,1	Ø17

Specifications may change without notice.

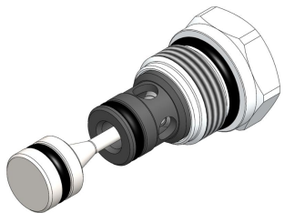
Rev. 1

SPCO.S08 VALVE SERIES

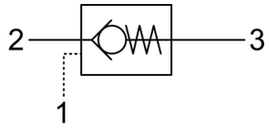
Hybrid SAE08 Cartridge - 420 bar

Direct acting check valve

Pilot piston to open



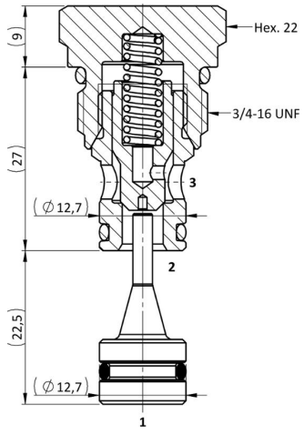
HYDRAULIC SYMBOL



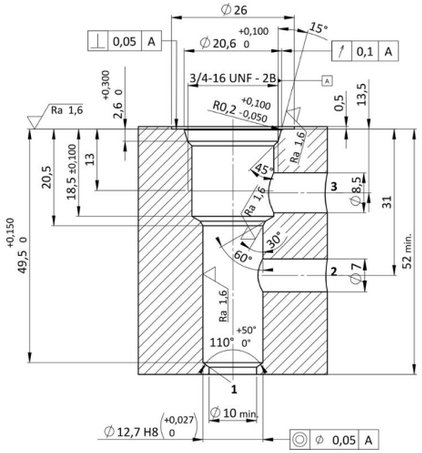
DESCRIPTION

Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

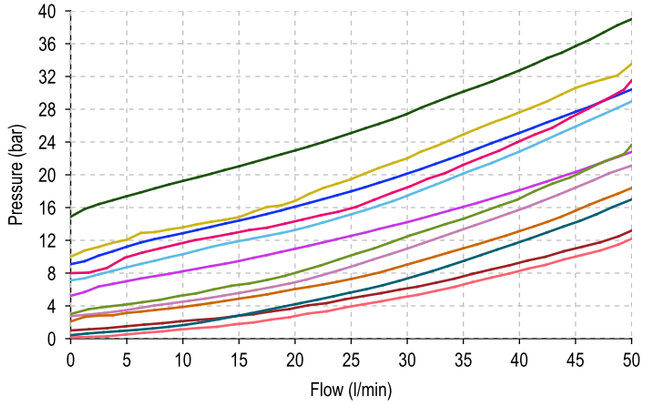
CROSS SECTION



CAVITY VH102



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring M
- Spring S
- Spring B
- Spring P
- Spring I
- Spring G
- Spring V
- Spring R
- Spring W
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
PILOT RATIO	4,5:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.045 (standard sealing NBR-BUNA-N)
WEIGHT	0,068 kg

ORDERING CODE

S	P	C	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

0 = Standard configuration

4 = Without O-Ring on the pilot piston

SPF0 = With standard filtration

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	0,5	G	8,0
N	1,0	V	9,0
M	2,0	R	10,0
S	2,5	W	15,0
B	3,0		
P	5,0		
I	7,0		

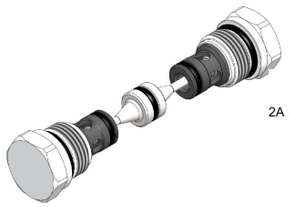
Specifications may change without notice.

DPC0.S08 VALVE SERIES

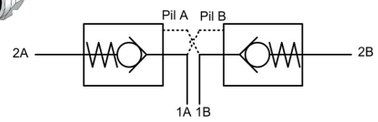
Hybrid SAE08 Cartridge - 420 bar

Direct acting check valve

Pilot piston to open



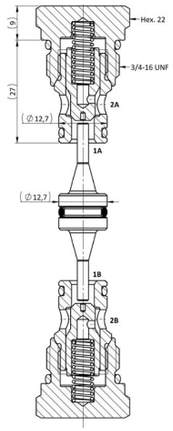
HYDRAULIC SYMBOL



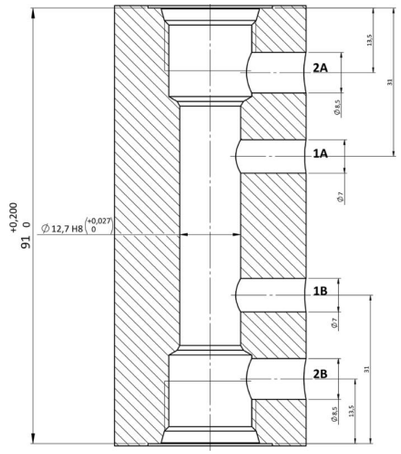
DESCRIPTION

Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting, lift the poppet and allow free flow to port 2 . The valve is normally closed from port 2 to 1. When sufficient pressure is applied on Pilot Port , the pilot piston lifts the poppet from its seat and allows flow from port 2 to port 1 (Pil A = 1B. Pil B = 1A). Very limited leakage in the check condition.

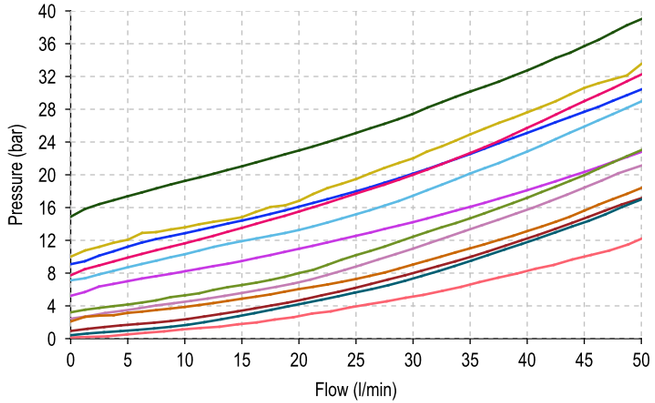
CROSS SECTION



CAVITY VH081



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring M
- Spring S
- Spring B
- Spring P
- Spring I
- Spring G
- Spring V
- Spring R
- Spring W
- 2vs1 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	50 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
PILOT RATIO	4,5:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.046 (standard sealing NBR-BUNA-N)
WEIGHT	0,127 kg

ORDERING CODE

D	P	C	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

0 = Standard configuration

4 = Without O-Ring on the pilot piston

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	0,5	G	8,0
N	1,0	V	9,0
M	2,0	R	10,0
S	2,5	W	15,0
B	3,0		
P	5,0		
I	7,0		

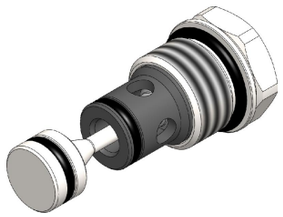
Specifications may change without notice.

SPCO.S10 VALVE SERIES

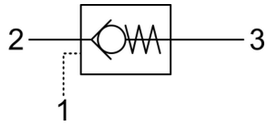
Hybrid SAE10 Cartridge - 420 bar

Direct acting check valve

Pilot piston to open



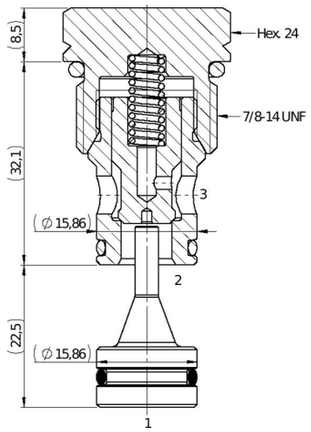
HYDRAULIC SYMBOL



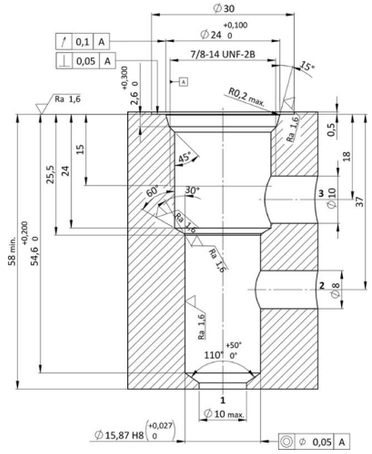
DESCRIPTION

Normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

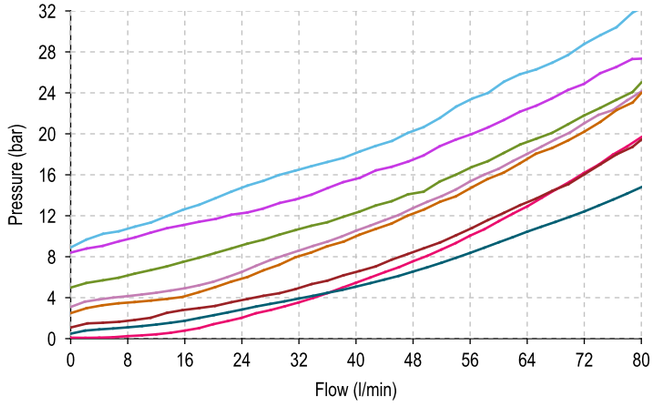
CROSS SECTION



CAVITY VH146



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
PILOT RATIO	3,9:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.081 (standard sealing NBR-BUNA-N)
WEIGHT	0,100 kg

ORDERING CODE

S	P	C	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

0 = Standard configuration

B = Without O-Ring on the pilot piston

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

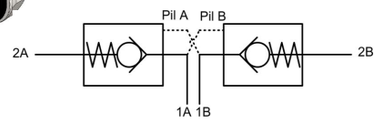
DPC0.S10 VALVE SERIES

Hybrid SAE10 Cartridge - 420 bar

Direct acting check valve

Pilot piston to open

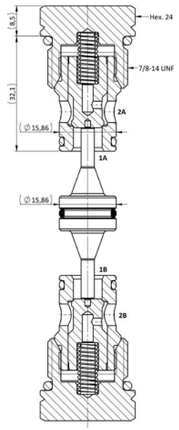
HYDRAULIC SYMBOL



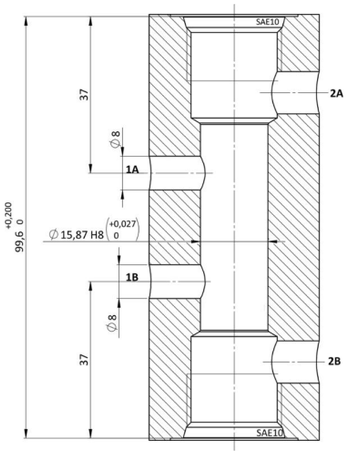
DESCRIPTION

Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting, lift the poppet and allow free flow to port 2 . The valve is normally closed from port 2 to 1. When sufficient pressure is applied on Pilot Port , the pilot piston lifts the poppet from its seat and allows flow from port 2 to port 1 (Pil A = 1B. Pil B = 1A). Very limited leakage in the check condition.

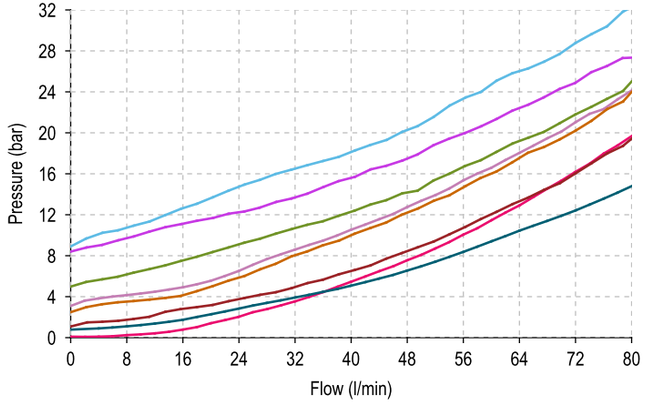
CROSS SECTION



CAVITY VH144



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- 2vs1 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
PILOT RATIO	3,9:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.080 (standard sealing NBR-BUNA-N)
WEIGHT	0,196 kg

ORDERING CODE

D	P	C	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

0 = Standard configuration

B = Without O-Ring on the pilot piston

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

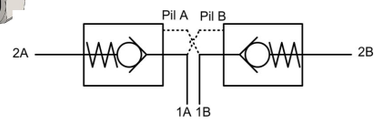
DPC5.S10 VALVE SERIES

Hybrid SAE10 Cartridge - 350 bar

Direct acting check valve

Pilot piston to open

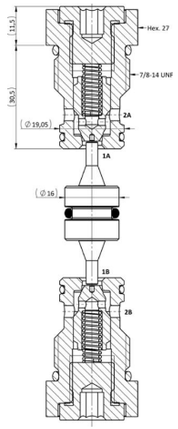
HYDRAULIC SYMBOL



DESCRIPTION

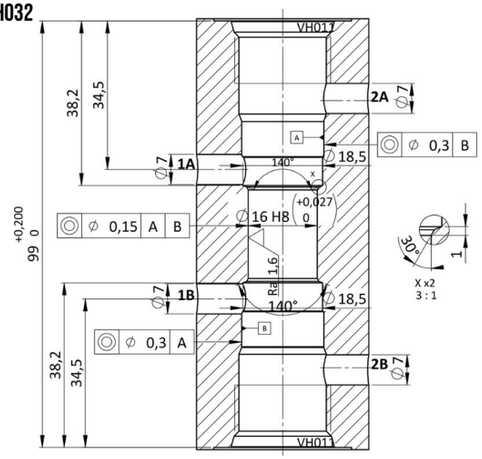
Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting, lift the poppet and allow free flow to port 2 . The valve is normally closed from port 2 to 1. When sufficient pressure is applied on Pilot Port , the pilot piston lifts the poppet from its seat and allows flow from port 2 to port 1 (Pil A = 1B. Pil B = 1A). Very limited leakage in the check condition.

CROSS SECTION

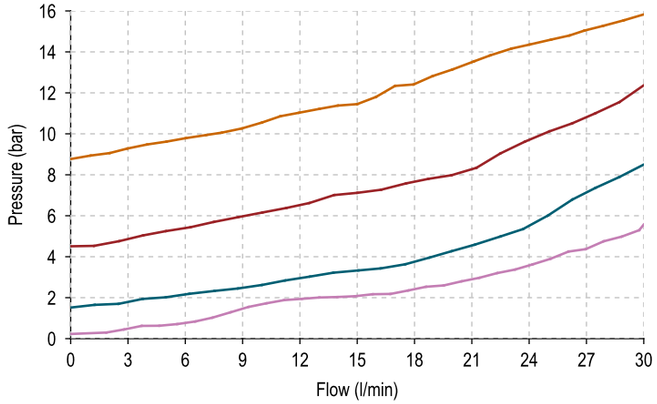


CAVITY

VH032



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B
- Spring G
- 2vs1 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	7:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	80-85 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.155 (standard sealing NBR-BUNA-N)
WEIGHT	0,255 kg

ORDERING CODE

D	P	C	5	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

5 = Standard configuration

4 = Without O-Ring on the pilot piston

SIZE

7/8-14 UNF with Ø19,05 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	1,5
B	4,5
G	8,5

Specifications may change without notice.

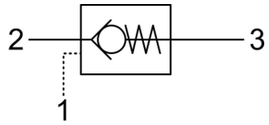
SPC5.S10 VALVE SERIES

Hybrid SAE10 Cartridge - 350 bar

Direct acting check valve

Pilot piston to open

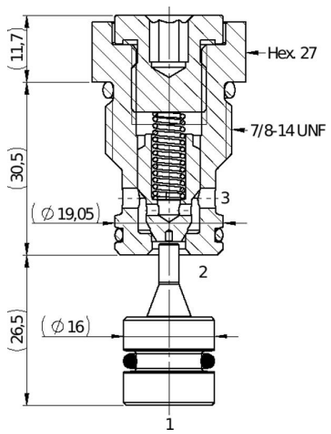
HYDRAULIC SYMBOL



DESCRIPTION

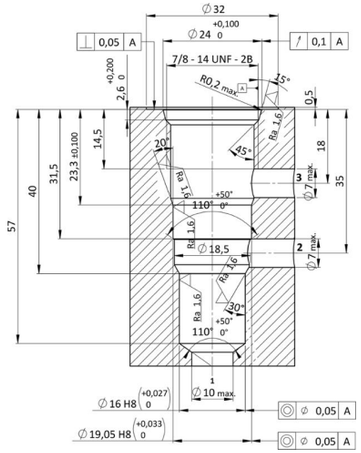
Normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

CROSS SECTION

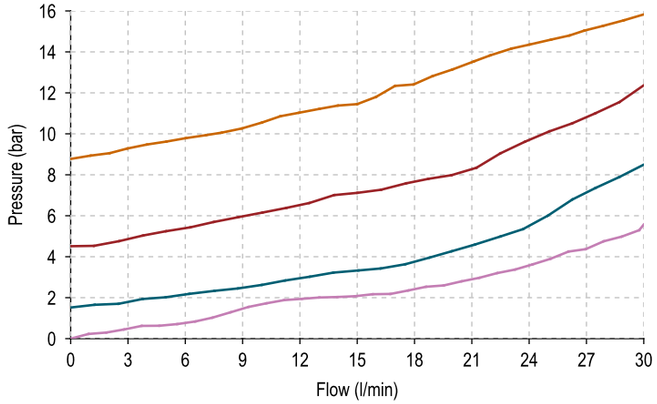


CAVITY

VH070



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring N
- Spring B
- Spring G
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	7:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	80-85 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.154 (standard sealing NBR-BUNA-N)
WEIGHT	0,137 kg

ORDERING CODE

S	P	C	5	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

5 = Standard configuration

4 = Without O-Ring on the pilot piston

SIZE

7/8-14 UNF with Ø19,05 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	1,5
B	4,5
G	8,5

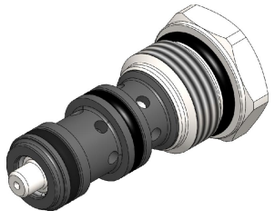
Specifications may change without notice.

SPC6.S08 VALVE SERIES

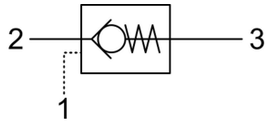
SAE Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



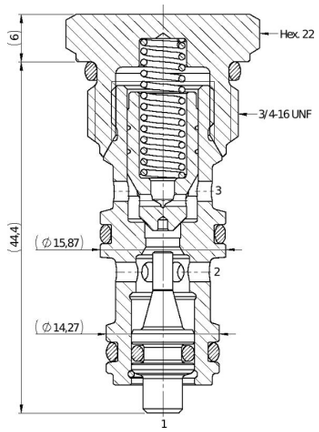
HYDRAULIC SYMBOL



DESCRIPTION

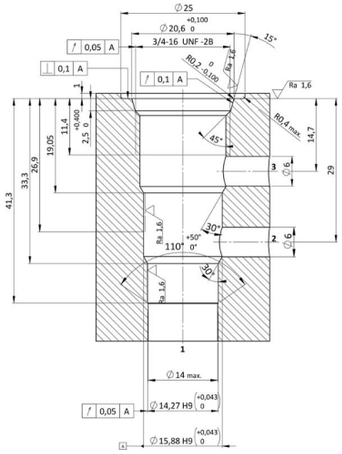
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

CROSS SECTION

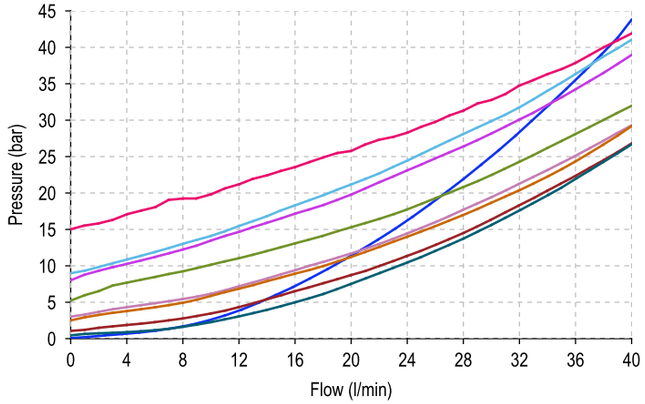


CAVITY

SAE08-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- Spring W
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm³ / min @ 10 bar 0,10 cm³ / min @ 350 bar
PILOT RATIO	3,2:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.047 (standard sealing NBR-BUNA-N)
WEIGHT	0,063 kg

ORDERING CODE

S	P	C	6	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

6 = Standard configuration

7 = Without O-Ring on the pilot piston

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	<0,5	W	15,0
N	1,0		
S	2,5		
B	3,0		
P	5,0		
G	8,0		
V	9,0		

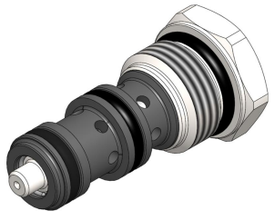
Specifications may change without notice.

SPCF.S08 VALVE SERIES

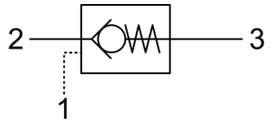
SAE Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



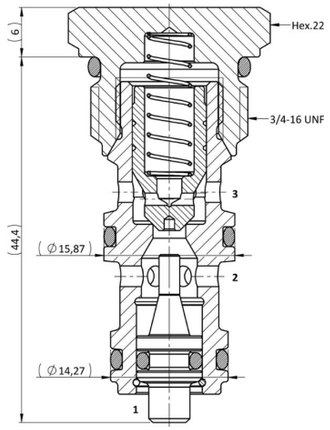
HYDRAULIC SYMBOL



DESCRIPTION

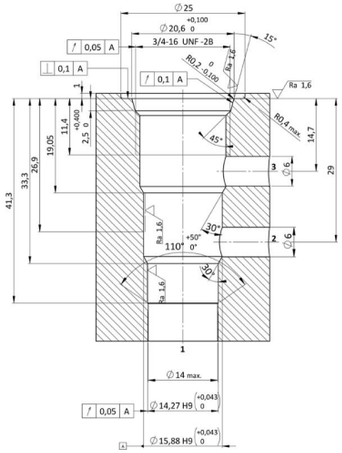
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition. Version with higher pilot ratio.

CROSS SECTION

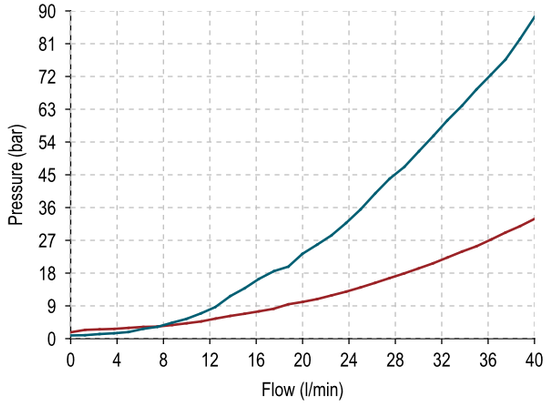


CAVITY

SAE08-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

— Pilot piston activated (3vs2)

— Spring S

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	4:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.047 (standard sealing NBR-BUNA-N)
WEIGHT	0,063 kg

ORDERING CODE

S	P	C	F	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

000 = Standard configuration

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
S	1,75

Specifications may change without notice.

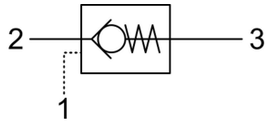
SPC6.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting check valve

Pilot piston to open

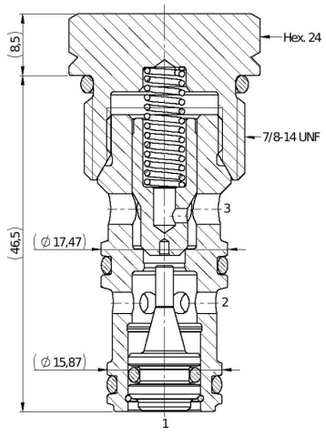
HYDRAULIC SYMBOL



DESCRIPTION

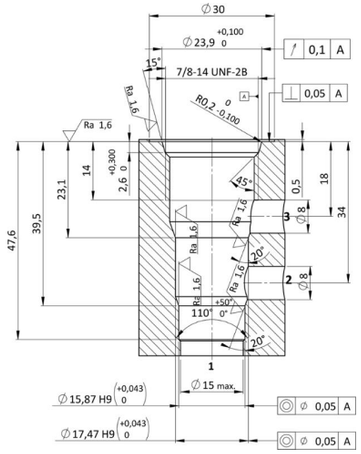
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

CROSS SECTION

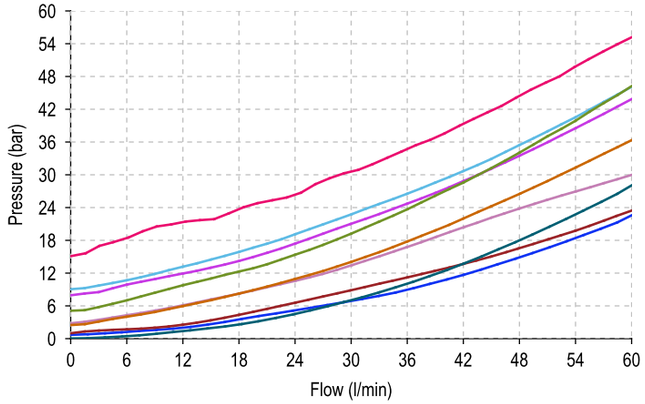


CAVITY

SAE10-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- Spring W
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.049 (standard sealing NBR-BUNA-N)
WEIGHT	0,103 kg

ORDERING CODE

S	P	C	6	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

6 = Standard configuration

7 = Without O-Ring on the pilot piston

SIZE

7/8-14 UNF with Ø 17,47 and Ø 15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	<0,5	W	15,0
N	1,0		
S	2,5		
B	3,0		
P	5,0		
G	8,0		
V	9,0		

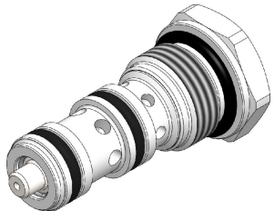
Specifications may change without notice.

SPC4.M18 VALVE SERIES

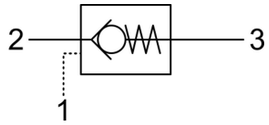
METRIC Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



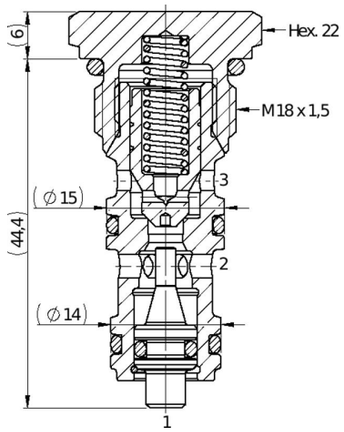
HYDRAULIC SYMBOL



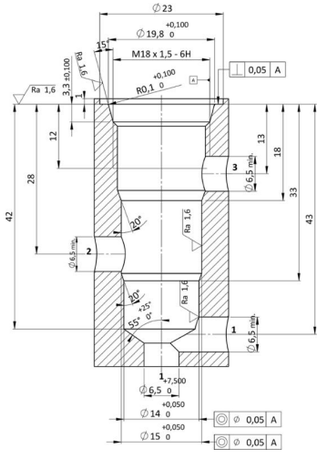
DESCRIPTION

Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

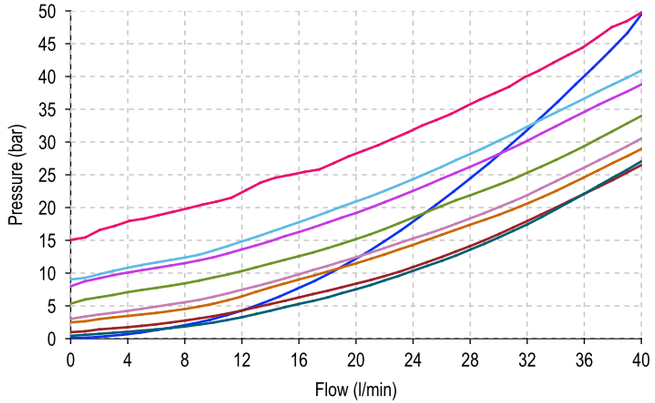
CROSS SECTION



CAVITY VH079



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- Spring W
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3,2:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.156 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

S	P	C	4	·	M	1	8	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

4 = Standard configuration

6 = Without O-Ring on the pilot piston

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

SIZE

METRIC M18x1,5 with Ø15 and Ø14 nose sizes

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)	Spring model code	Cracking pressure (bar)
Y	<0,5	W	15,0
N	1,0		
S	2,5		
B	3,0		
P	5,0		
G	8,0		
V	9,0		

Specifications may change without notice.

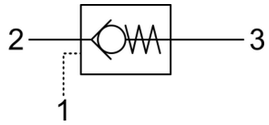
SPC4.M22 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting check valve

Pilot piston to open

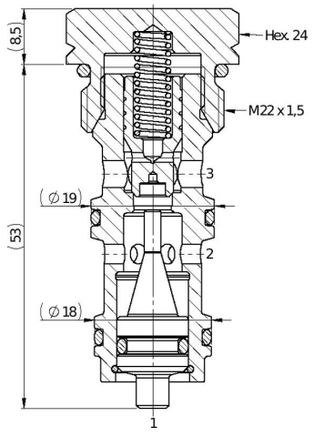
HYDRAULIC SYMBOL



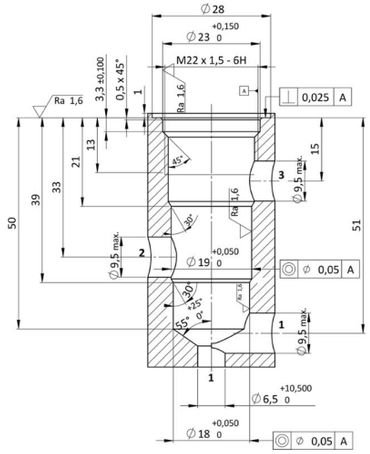
DESCRIPTION

Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

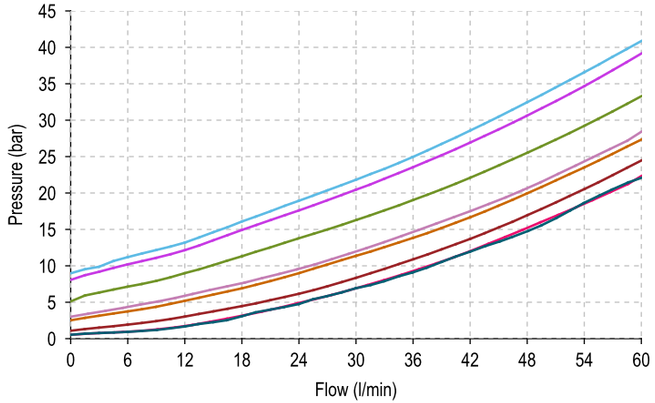
CROSS SECTION



CAVITY VH080



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3,4:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.042 (standard sealing NBR-BUNA-N)
WEIGHT	0,103 kg

ORDERING CODE

S	P	C	4	·	M	2	2	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

4 = Standard configuration

6 = Without O-Ring on the pilot piston

SIZE

METRIC M22x1,5 with Ø19 and Ø18 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

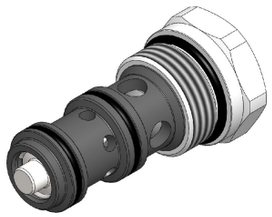
Specifications may change without notice.

SPC4.M33 VALVE SERIES

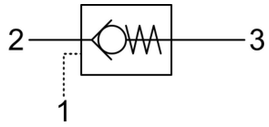
METRIC Cartridge - 420 bar

Direct acting check valve

Pilot piston to open



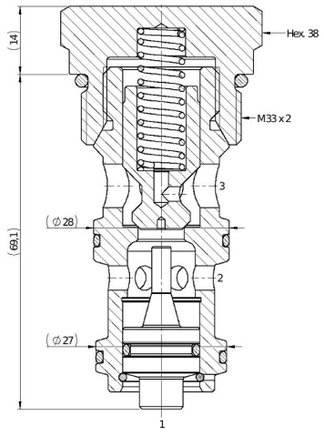
HYDRAULIC SYMBOL



DESCRIPTION

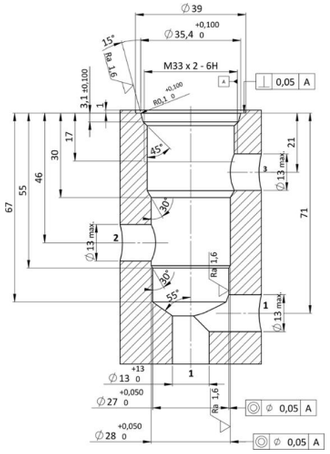
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.

CROSS SECTION

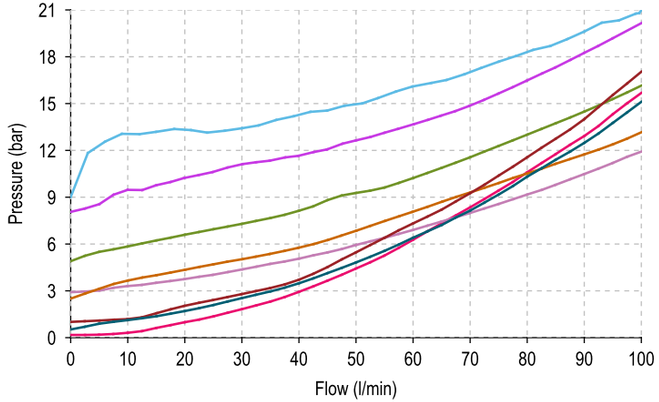


CAVITY

VH122



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring S
- Spring B
- Spring P
- Spring G
- Spring V
- 3vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 420 bar
PILOT RATIO	2,8:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	150-160 Nm Hex.38
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.067 (standard sealing NBR-BUNA-N)
WEIGHT	0,338 kg

ORDERING CODE

S	P	C	4	·	M	3	3	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

4 = Standard configuration

5 = Without O-Ring on the pilot piston

SIZE

METRIC M33x2 with Ø28 and Ø27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1,0
S	2,5
B	3,0
P	5,0
G	8,0
V	9,0

Specifications may change without notice.

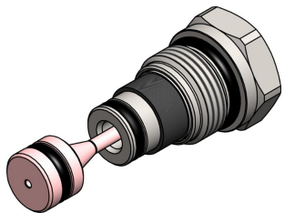
SPFO.S08 VALVE SERIES

Hybrid SAE08 Cartridge - 350 bar

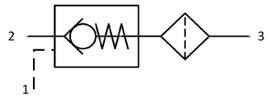
Direct acting check valve

Pilot piston to open

With Filter



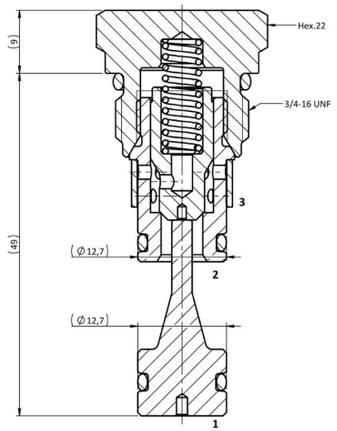
HYDRAULIC SYMBOL



DESCRIPTION

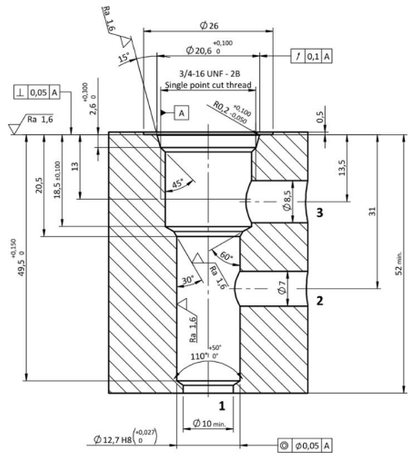
Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 3. The valve is normally closed from 3 to 2. When sufficent pressure is applied on port 1, the pilot piston lifts the poppet from its seat and allows flow from 3 to 2. Very limited leakage in the check condition.The valve also has a filter in port 3, mesh size 280 um.

CROSS SECTION

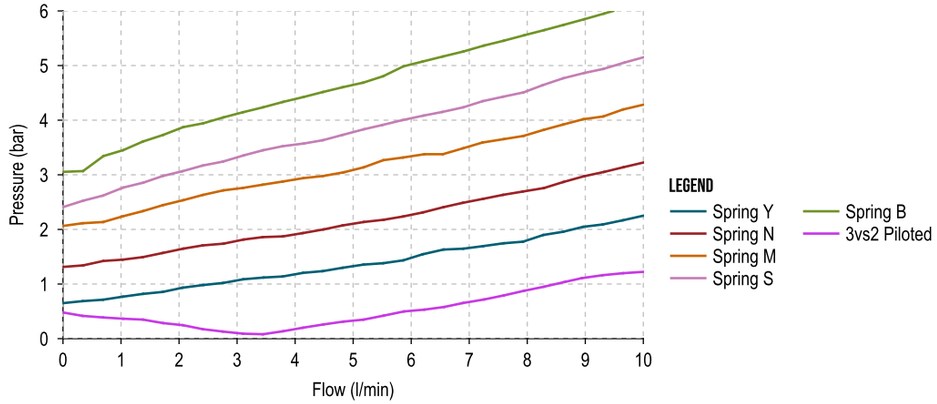


CAVITY

VH102



PERFORMANCE DETAILS



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	4,5:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 223° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.045 (standard NBR-BUNA-N) (standard sealing NBR-BUNA-N)
WEIGHT	0,067 kg

ORDERING CODE

S	P	F	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

4 = Without O-Ring on the pilot piston

0 = Standard configuration

MARKING

0 = Standard factory marking. Customized marking can be done upon request

SIZE

3/4-16 UNF with Ø12,7 nose size

000 = standard configuration

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
N	1
M	2
B	3
Y	0,5
S	2,5

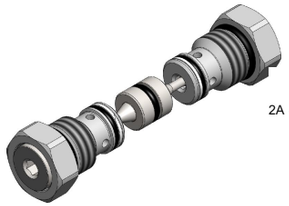
Specifications may change without notice.

DPCE.S10 VALVE SERIES

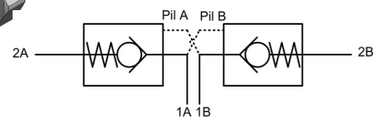
Hybrid SAE10 Cartridge - 450 bar

Direct acting check valve

Pilot piston to open



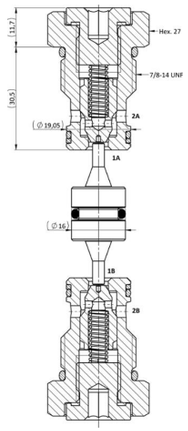
HYDRAULIC SYMBOL



DESCRIPTION

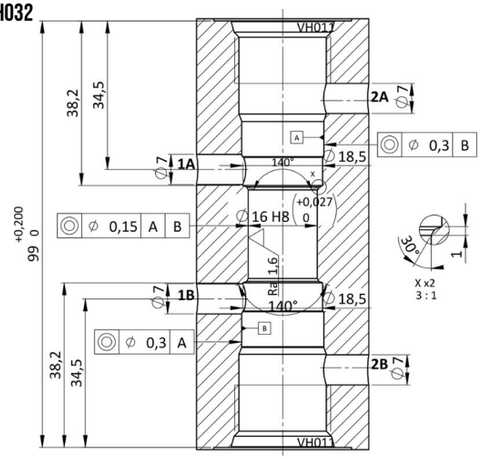
Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting, lift the poppet and allow free flow to port 2 . The valve is normally closed from port 2 to 1. When sufficient pressure is applied on Pilot Port , the pilot piston lifts the poppet from its seat and allows flow from port 2 to port 1 (Pil A = 1B. Pil B = 1A). Very limited leakage in the check condition.

CROSS SECTION

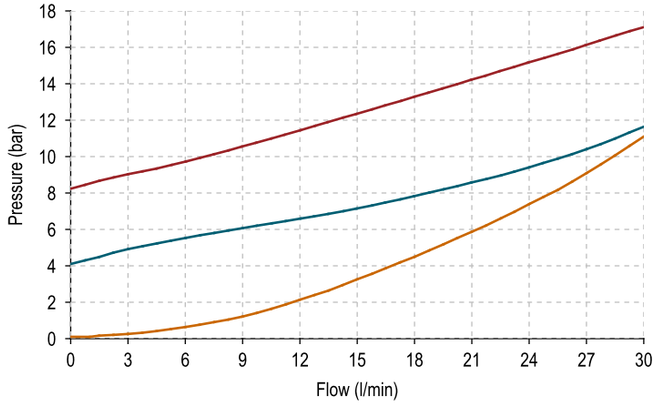


CAVITY

VH032



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring B
- Spring G
- 2vs1 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	450 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 450 bar
PILOT RATIO	7:1
EXTERNAL COMPONENT TREATMENT	Zn/Ni (720h)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	80-85 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.158 (standard sealing NBR-BUNA-N)
WEIGHT	0,250 kg

ORDERING CODE

D	P	C	E	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SIZE
7/8-14 UNF with Ø19,05 nose size

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
B	4,5
G	8,5

Specifications may change without notice.

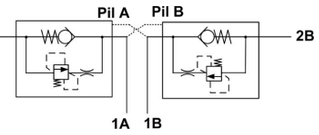
DPTO.U78 VALVE SERIES

U78 Cartridge - 475 bar

Direct acting with Thermal relief function

Pilot piston to open

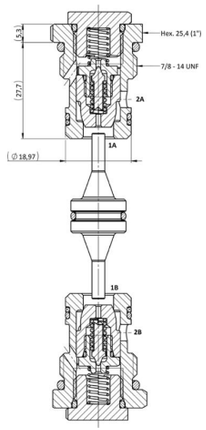
HYDRAULIC SYMBOL



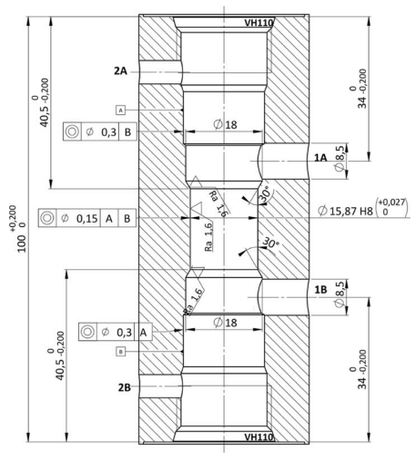
DESCRIPTION

Normally closed, dual pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting (cracking pressure), lift the main poppet and allow free flow to port 2. The valve is normally closed from port 2 to 1. When sufficient pressure is applied on Pilot Port, the pilot piston lifts the poppet from its seat and allows flow from port 2 to port 1 (Pil A = 1B. Pil B = 1A). Very limited leakage in the check condition.

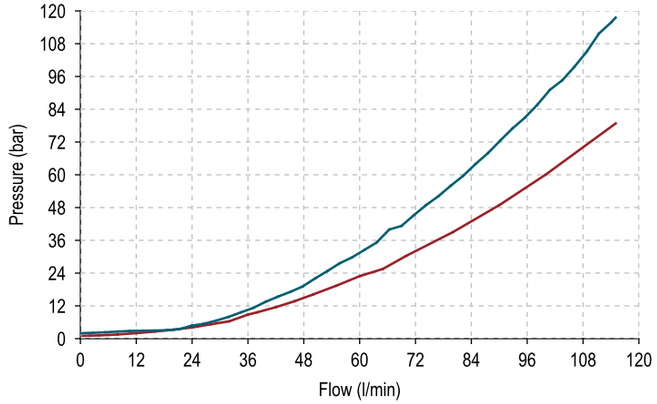
CROSS SECTION



CAVITY VH214



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring S
- 2vs1 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	475 bar
MAXIMUM FLOW	115 l/min
MAXIMUM FLOW THERMAL RELIEF VALVE	8 l/min
THERMAL RELIEF CRACK PRESSURE FROM 2 TO 1	325 - 475 bar (@0.16 - 0.25 l/min)
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 6,9 bar - from 2 to 1 port 0,50 cm^3 / min @ 69 bar - from 2 to 1 port
PILOT RATIO	3,3:1
EXTERNAL COMPONENT TREATMENT	External parts aren't coated
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.25,4 (1")
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.137 (standard sealing NBR-BUNA-N)
WEIGHT	0,180 kg

ORDERING CODE

D	P	T	0	·	U	7	8	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SIZE
7/8-14 UNF with Ø18,97 nose size

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
S	2 (-0,5 / +2)

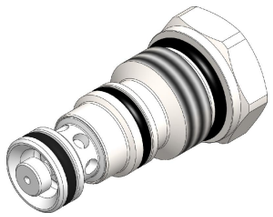
Specifications may change without notice.

PCRO.S08 VALVE SERIES

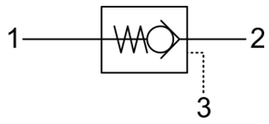
SAE Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



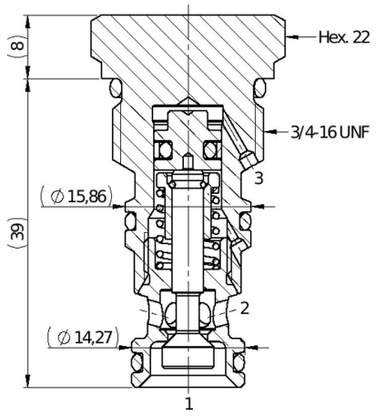
HYDRAULIC SYMBOL



DESCRIPTION

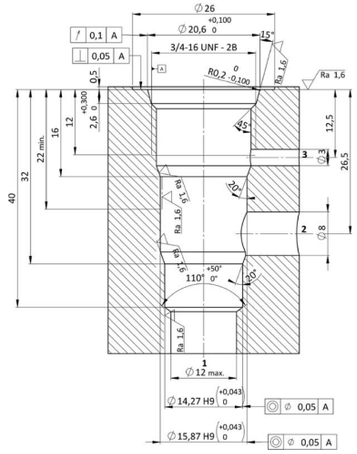
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 1. The valve is normally closed from 1 to 2. When sufficent pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 1 to 2. Very limited leakage in the check condition.

CROSS SECTION

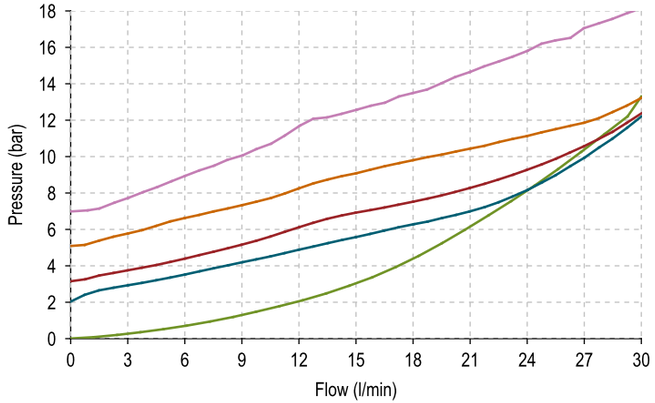


CAVITY

SAE08-1



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring G
- 1vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.047 (standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg

ORDERING CODE

P	C	R	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

0 = Standard configuration

4 = Without O-Ring on the pilot piston

SIZE

3/4-16 UNF with Ø15,86 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	2,0
N	3,0
B	5,0
G	7,0

Specifications may change without notice.

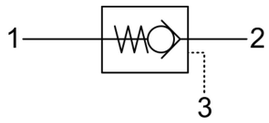
PCRO.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting check valve

Pilot piston to open

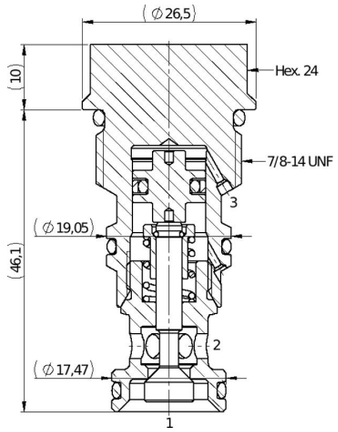
HYDRAULIC SYMBOL



DESCRIPTION

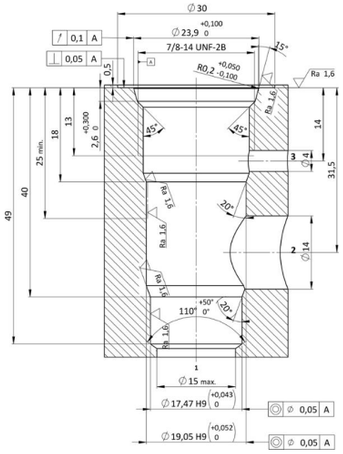
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 1. The valve is normally closed from 1 to 2. When sufficent pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 1 to 2. Very limited leakage in the check condition.

CROSS SECTION

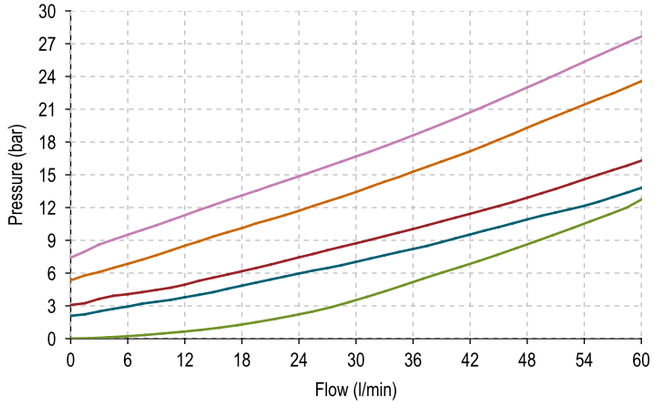


CAVITY

SAE10-1



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring G
- 1vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.048 (standard sealing NBR-BUNA-N)
WEIGHT	0,110 kg

ORDERING CODE

P	C	R	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

OPTIONS

0 = Standard configuration

4 = Without O-Ring on the pilot piston

SIZE

7/8-14 UNF with Ø19,05 and Ø17,47 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	2,0
N	3,0
B	5,0
G	7,0

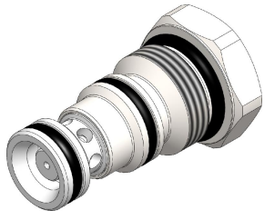
Specifications may change without notice.

PCRO.M20 VALVE SERIES

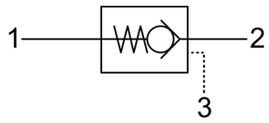
METRIC Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



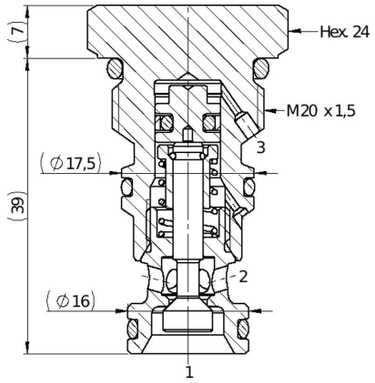
HYDRAULIC SYMBOL



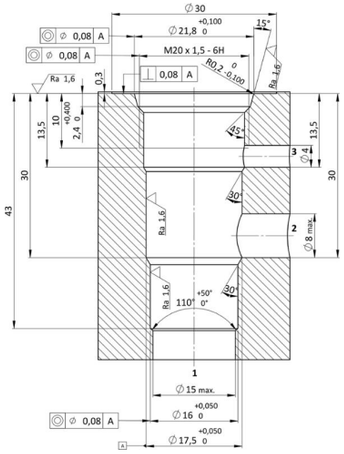
DESCRIPTION

Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 1. The valve is normally closed from 1 to 2. When sufficent pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 1 to 2. Very limited leakage in the check condition.

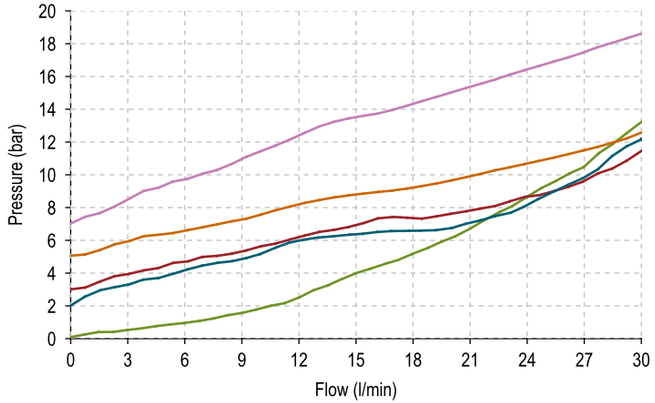
CROSS SECTION



CAVITY VH209



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring G
- 1vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.104 (standard sealing NBR-BUNA-N)
WEIGHT	0,077 kg

ORDERING CODE

P	C	R	0	·	M	2	0	·	0	*	·	0	0	0

VALVE BASIC CODE
0= Standard. 2= Pilot ratio 4:1

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SIZE
METRIC M20x1,5 with Ø17,5 and Ø16 nose sizes

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	2,0
N	3,0
B	5,0
G	7,0

Specifications may change without notice.

Rev. 1

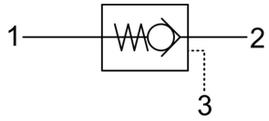
PCR1.M20 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting check valve

Pilot piston to open

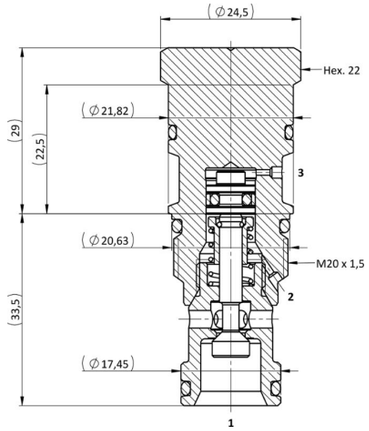
HYDRAULIC SYMBOL



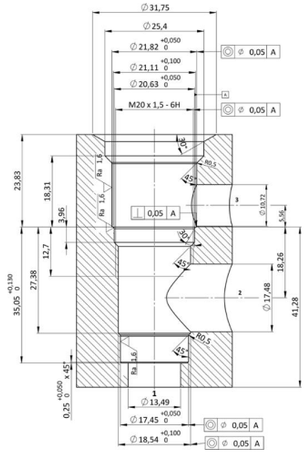
DESCRIPTION

Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 1. The valve is normally closed from 1 to 2. When sufficent pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 1 to 2. Very limited leakage in the check condition.

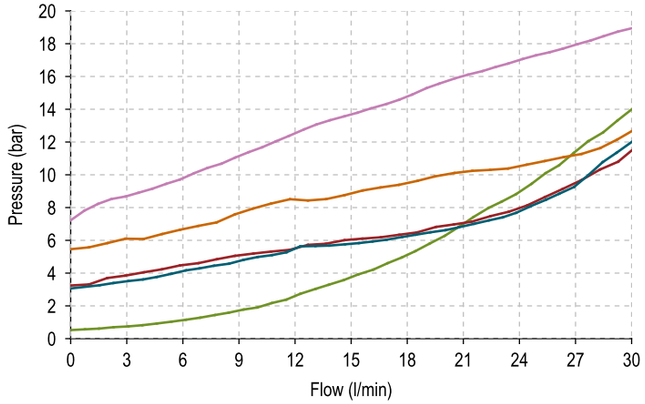
CROSS SECTION



CAVITY VH211



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring G
- 1vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.132 (standard sealing NBR-BUNA-N)
WEIGHT	0,122 kg

ORDERING CODE

P	C	R	1	·	M	2	0	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SIZE
METRIC M20x1,5 with Ø20,63 and Ø17,45 nose sizes

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	2,0
N	3,0
B	5,0
G	7,0

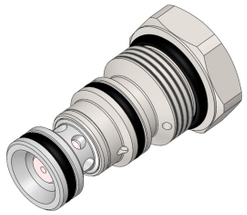
Specifications may change without notice.

PCR2.M20 VALVE SERIES

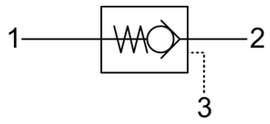
METRIC Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



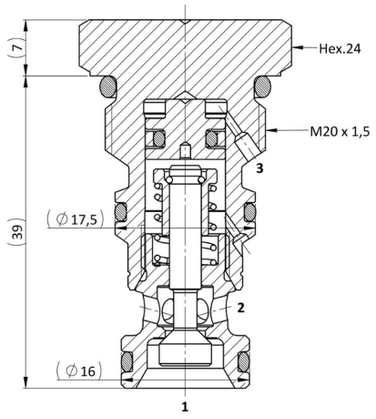
HYDRAULIC SYMBOL



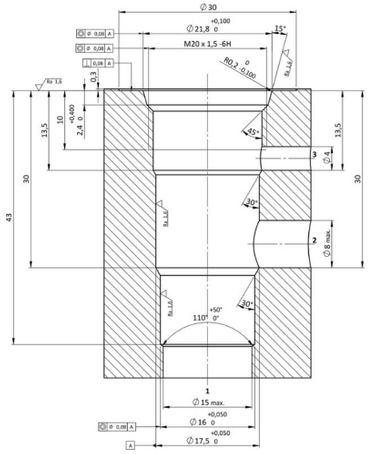
DESCRIPTION

Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 1. The valve is normally closed from 1 to 2. When sufficent pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 1 to 2. Very limited leakage in the check condition. Version with higher pilot ratio.

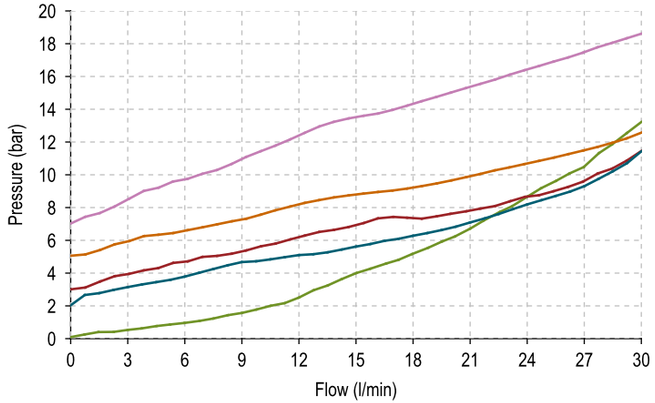
CROSS SECTION



CAVITY VH209



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring Y
- Spring N
- Spring B
- Spring G
- 1vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 10 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3,9:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.104 (standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg

ORDERING CODE

P	C	R	2	·	M	2	0	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SIZE
METRIC M20x1,5 with Ø17,5 and Ø16 nose sizes

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	2,0
N	3,0
B	5,0
G	7,0

000 = Standard configuration.

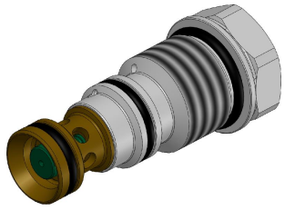
Specifications may change without notice.

PCRO.M22 VALVE SERIES

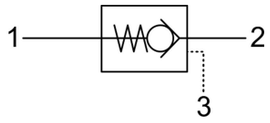
METRIC Cartridge - 350 bar

Direct acting check valve

Pilot piston to open



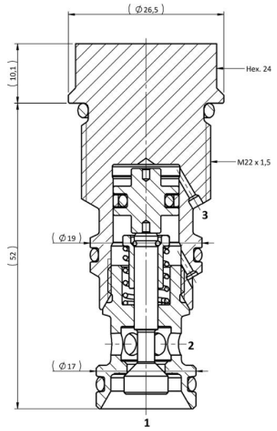
HYDRAULIC SYMBOL



DESCRIPTION

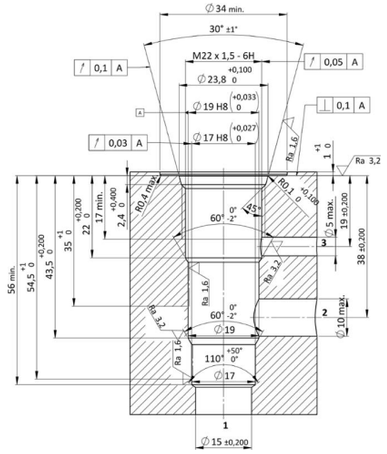
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 2 to reach the bias spring setting, lift the poppet and allow free flow to 1. The valve is normally closed from 1 to 2. When sufficent pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 1 to 2. Very limited leakage in the check condition.

CROSS SECTION

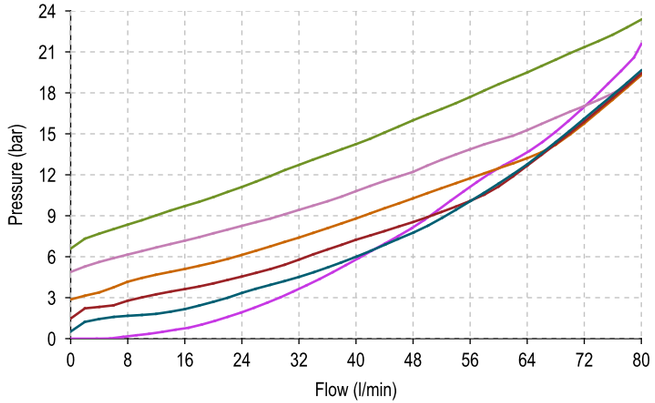


CAVITY

VH294



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring I
- Spring Y
- Spring N
- Spring B
- Spring G
- 1vs2 Piloted

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,10 cm^3 / min @ 30 bar 0,10 cm^3 / min @ 350 bar
PILOT RATIO	3:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.048 (standard sealing NBR-BUNA-N)
WEIGHT	0,120 kg

ORDERING CODE

P	C	R	0	·	M	2	2	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

SIZE

METRIC M22x1,5 with Ø19 and Ø17 nose sizes

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
I	1,0
Y	2,0
N	3,0
B	5,0
G	7,0

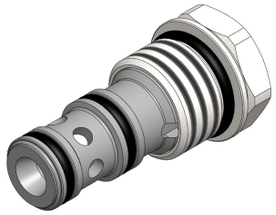
Specifications may change without notice.

PCCO.S10 VALVE SERIES

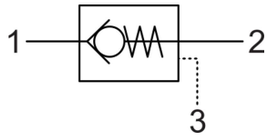
SAE Cartridge - 350 bar

Direct acting check valve

Pilot piston to close



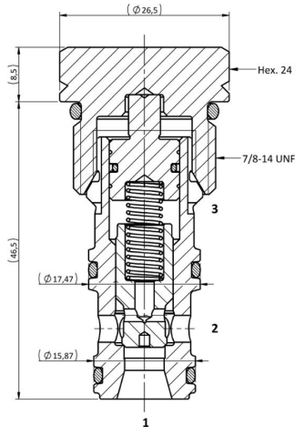
HYDRAULIC SYMBOL



DESCRIPTION

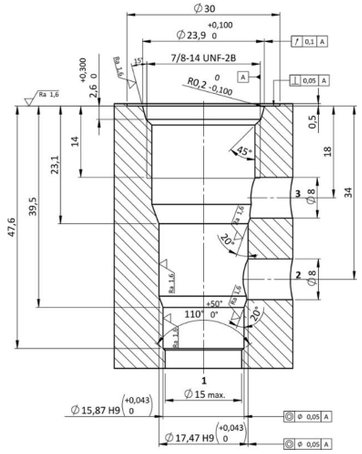
Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting, lift the poppet and allow free flow to 2. The valve is normally closed from 2 to 1. When sufficent pressure is applied on port 3, the pilot piston moves the poppet to its seat and stops flow from 1 to 2. Limited leakage when valve is closed.

CROSS SECTION

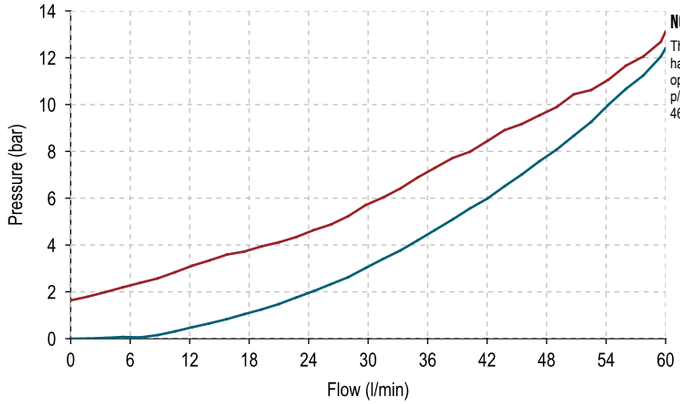


CAVITY

SAE10-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Spring 0
- Spring M

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 10 bar 0,25 cm^3 / min @ 350 bar
PILOT RATIO	2,8:1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to -420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.049 (standard sealing NBR-BUNA-N)
WEIGHT	0,110 kg

ORDERING CODE

P	C	C	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE
0 = Standard configuration

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SIZE
7/8-14 UNF with Ø17,47 and Ø15,87 nose sizes

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
0	0 (No spring)
M	1,7

000 = Standard configuration

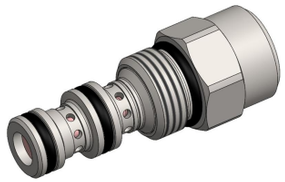
Specifications may change without notice.

PCV1.S08 VALVE SERIES

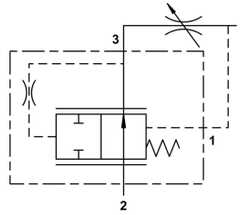
SAE Cartridge - 350 bar

Pressure compensator

Flow on demand



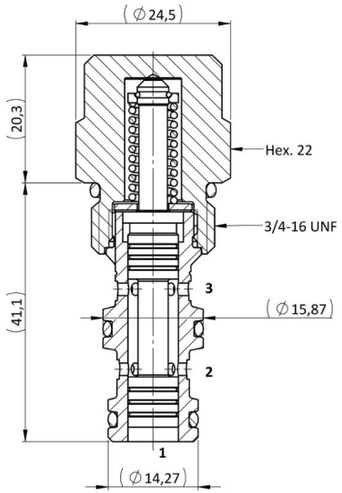
HYDRAULIC SYMBOL



DESCRIPTION

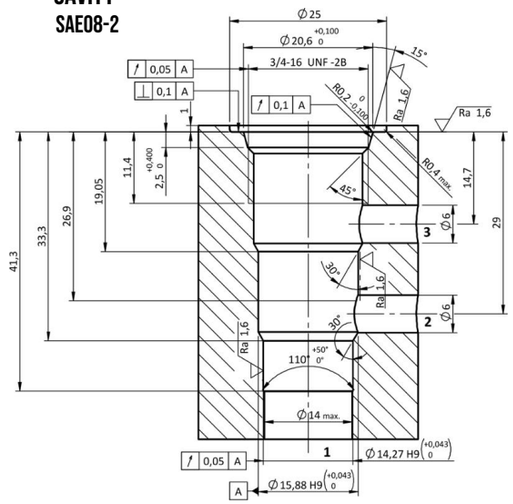
A screw-in, cartridge style, direct acting, spool type pressure compensator valve. Main use is into load-indipendent applications. The PCV1 allows flow from port 2 (usually pump) to 3 (usually load), while port 1 senses load pressure rise. When the pressure drop between port 3 and 1 varies, the valve re-calibrates its pressure rise to get a constant pressure rise and flow regulation.

CROSS SECTION

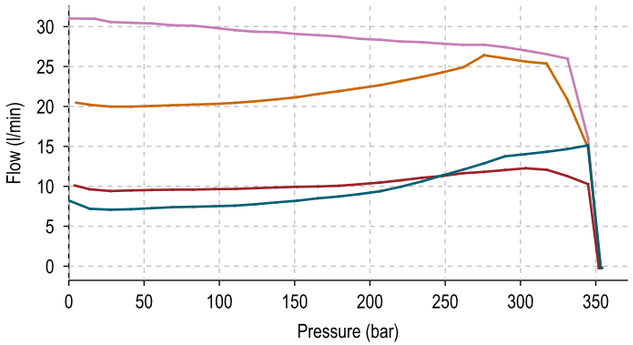


CAVITY

SAE08-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow regulation capacity 2 to 3 depending on the load (port 1).
p/Q curves are recorded at Toil = 40°C and 46 cSt.

LEGEND

- Spring Y - p = 2,8 bar
- Spring N - p = 5,5 bar
- Spring B - p = 10,3 bar
- Spring G - p = 17,2 bar

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	20 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46cSt
WEIGHT	0,104 kg

ORDERING CODE

P	C	V	1	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration

BIAS SPRING OPTIONS

Spring model code	Static LS pressure (bar)	Note
Y	2,8	Optimized flow rate range: 0÷8 l/min
N	5,5	Optimized flow rate range: 0÷10 l/min
B	10,3	Optimized flow rate range: 0÷20 l/min
G	17,2	Optimized flow rate range: 0÷30 l/min

Specifications may change without notice.

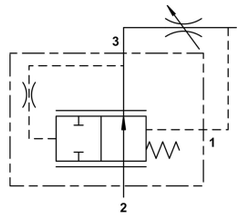
PCV1.S10 VALVE SERIES

SAE Cartridge - 350 bar

Pressure compensator

Flow on demand

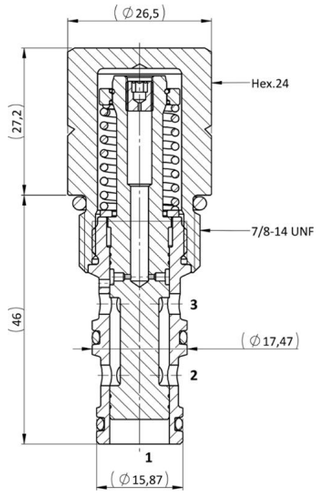
HYDRAULIC SYMBOL



DESCRIPTION

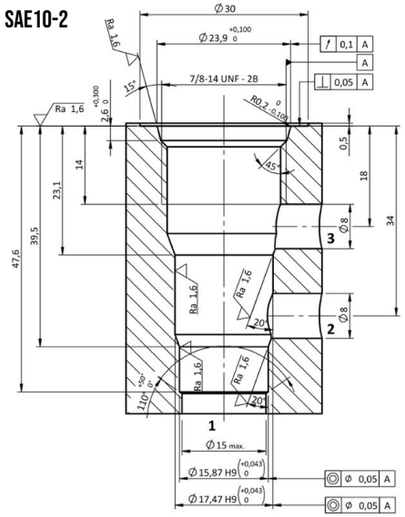
A screw-in, cartridge style, direct acting, spool type pressure compensator valve. Main use is into load-indipendent applications. The PCV1 allows flow from port 2 (usually pump) to 3 (usually load), while port 1 senses load pressure rise. When the pressure drop between port 3 and 1 varies, the valve re-calibrates its pressure rise to get a constant pressure rise and flow regulation.

CROSS SECTION

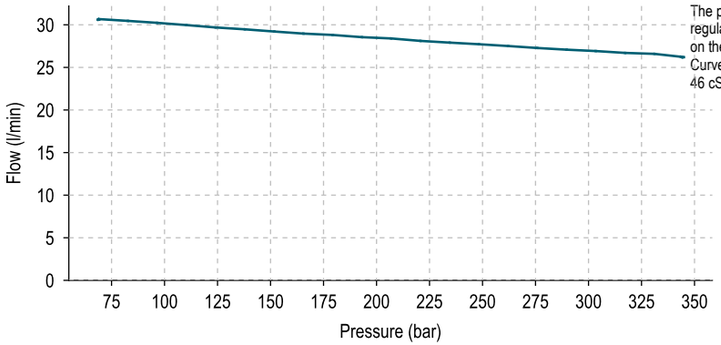


CAVITY

SAE10-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow regulation capacity 2 to 3 depending on the load (port 1).
Curves recorded at TOil = 40°C and 46 cSt.

LEGEND

p = 5,5 bar

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	163 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	60-70 Nm Hex.24
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,158 kg

ORDERING CODE

P	C	V	1	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø17,47 and Ø15,87 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Static LS pressure (bar)	Note
Y	2,8	Optimized flow rate range: 0÷20 l/min
N	5,5	Optimized flow rate range: 0÷30 l/min
B	10,3	Optimized flow rate range: 0÷40 l/min
G	14,5	Optimized flow rate range: 0÷40 l/min

Specifications may change without notice.

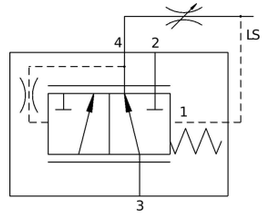
PCV0.S10 VALVE SERIES

SAE Cartridge - 350 bar

Pressure compensator

Priority on demand

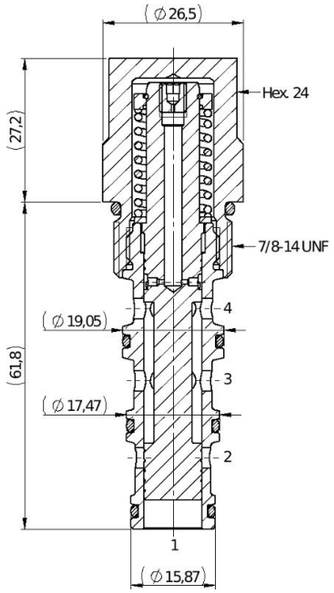
HYDRAULIC SYMBOL



DESCRIPTION

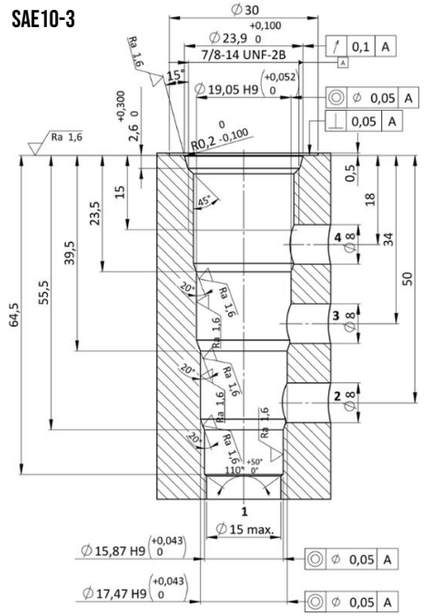
The PCV is a screw-in, cartridge style, priority- on-demand, pressure compensator with a static load sense. The valve delivers required priority flow (0 to max. available) on demand to 4 regardless of load pressure; inlet flow is at 3. In idle position, the valve will deliver all input flow at 3 to the priority port 4. Increasing pressure at 4 (applied to the spool against the spring force) will result in an increasing excess flow exit at 2 (by-pass of input flow). Excess flow at 2 can be used for auxiliary functions. Port 1 is the load sense pressure port. Pressure at 1 assists the spring and moves the spool back so priority flow is supplied.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	45 l/min
COMPENSATOR SPRING ACCURACY	± 20% for 5,5 bar compensator spring ± 15% for 10,3 bar compensator spring
MAXIMUM PRIORITY FLOW	35 l/min with 5,5 bar compensator spring
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	60-70 Nm Hex.24
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.103 (standard sealing NBR-BUNA-N)
WEIGHT	0,186 kg

ORDERING CODE

P	C	V	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø19,05 and Ø17,47 and Ø15,87 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

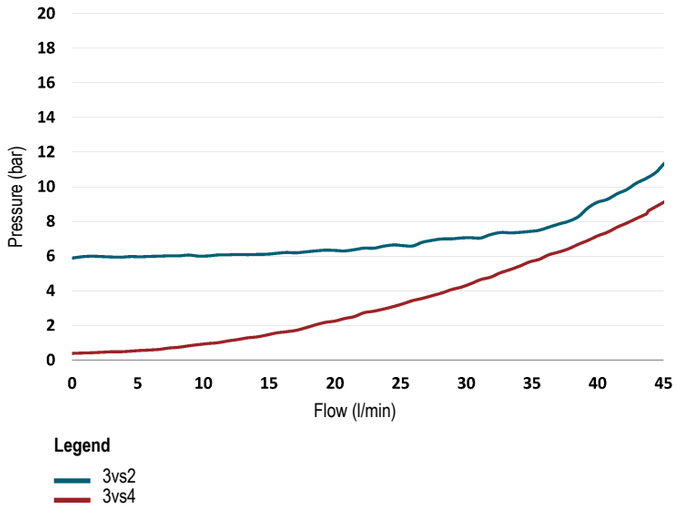
Spring model code	Static LS pressure (bar)	Note
N	5,5	-
B	10,3	-

Specifications may change without notice.

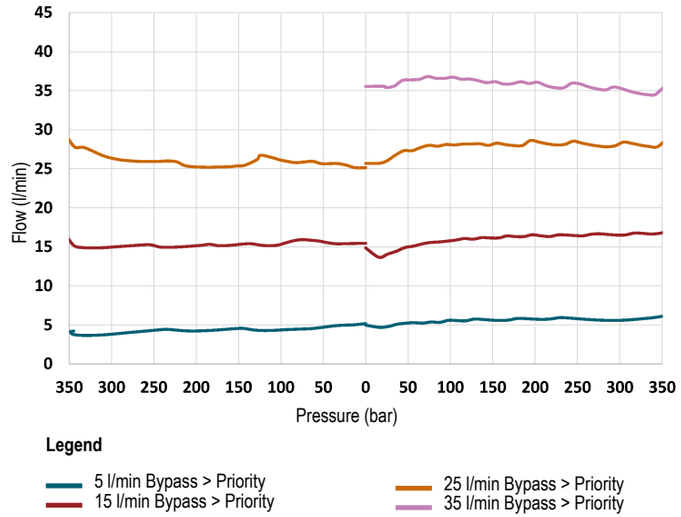
PCVO.S10

The performance chart illustrates flow handling capacity 3 to 4 and 3 to 2 and the trace of the priority flow at different values vs. load pressure.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

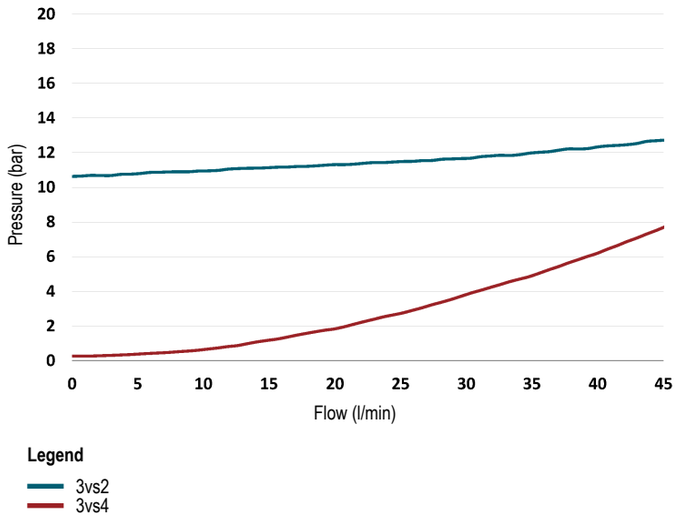
SPRING N



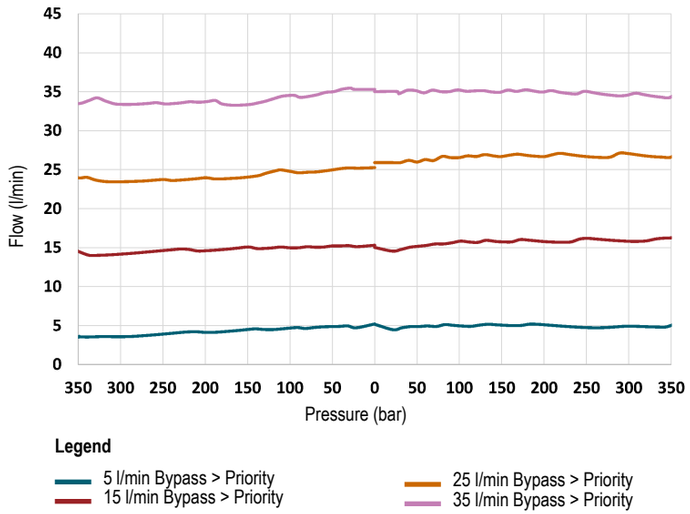
SPRING N



SPRING B



SPRING B

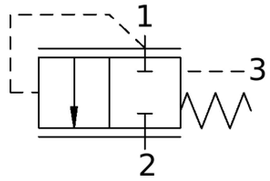


LSCO.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Spool Type

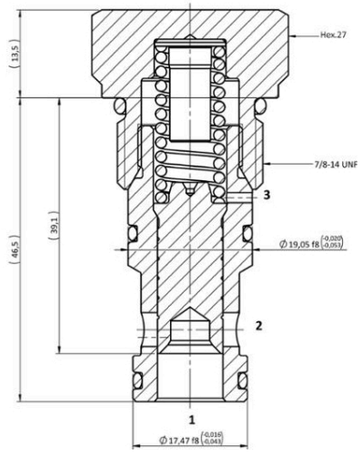
HYDRAULIC SYMBOL



DESCRIPTION

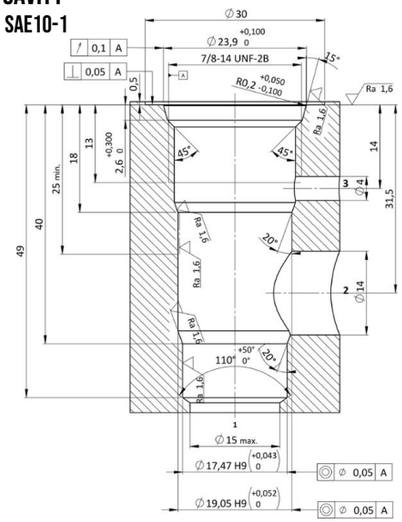
A cartridge style, screw-in. When pressure at 1 rises above the selected spring bias pressure against the spool, the valve shifts to allow flow from 1 to 2. Pilot pressure at 3 is additive to the spring bias pressure. The valve may be used in switching or compensation type applications.

CROSS SECTION

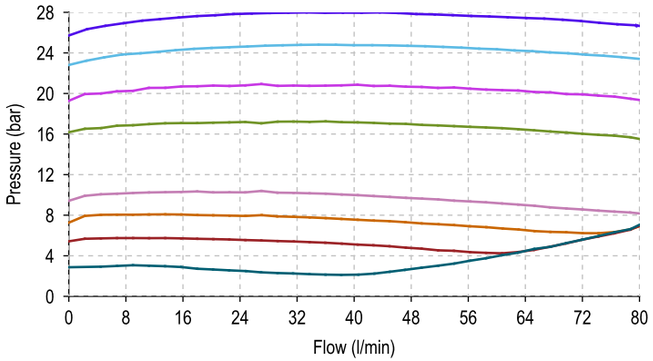


CAVITY

SAE10-1



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring Y — Spring G
Spring V — Spring R
Spring W — Spring T
Spring B — Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 200 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.27
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.124 (standard sealing NBR-BUNA-N)
WEIGHT	0,142 kg

ORDERING CODE

L	S	C	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø19,05 and Ø17,47 nose sizes

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

000 = Standard configuration.

BIAS SPRING OPTIONS

Spring model code	Static LS pressure (bar)	Note
Y	2,8	-
V	5,5	-
W	7,6	-
B	11	-
G	15,9	-
R	20	-
T	23	-
P	27	-

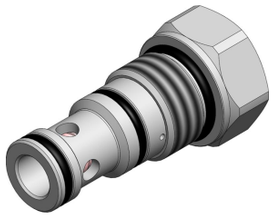
Specifications may change without notice.

Rev. 1

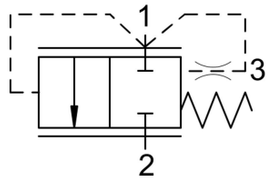
LSDO.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Spool Type



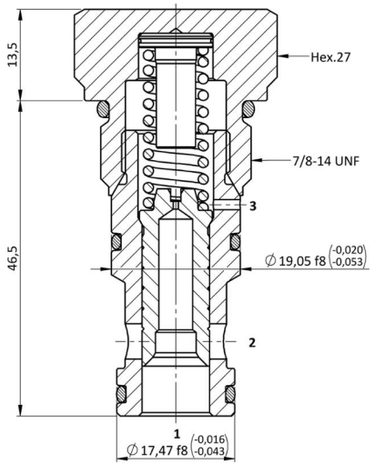
HYDRAULIC SYMBOL



DESCRIPTION

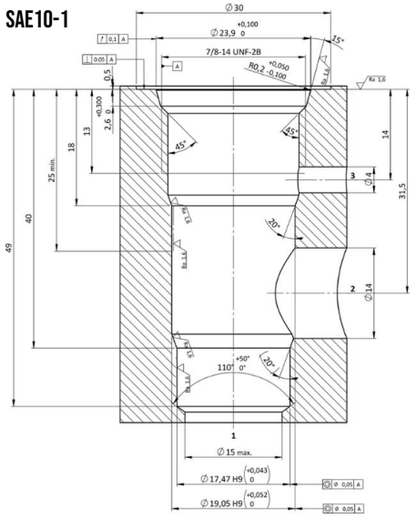
A cartrdige style, screw-in, spool type, normally closed, hydraulic directional element. An orifice through the spool connects port 1 to port 3, which allows remote control of the valve by connecting port 3 to a pressure control or a solenoid valve. The flow from 1 to 2 is allowed only when 3 is vented to create a pressure drop across the internal orifice which exceeds the pressure value of the selected bias spring force. These valves can be used as unloading valves or in pressure control and bypass circuits. Available version with cleaning wire to preserve cleanliness of the orifice.

CROSS SECTION

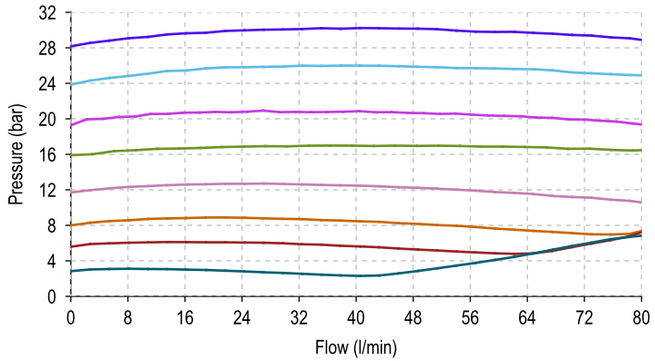


CAVITY

SAE10-1



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for significant spring options. pQ curves are recorded at TOil = 40°C and 46 cSt

LEGEND

Spring Y — Spring G
Spring V — Spring R
Spring W — Spring T
Spring B — Spring P

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 200 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.27
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.124 (standard sealing NBR-BUNA-N)
WEIGHT	0,137 kg

ORDERING CODE

L	S	D	0	·	S	1	0	·	0	*	·	0	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø19,05 and Ø17,47 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

STEEL WIRE OPTION

00W = with steel wire
000 = Standard configuration

BIAS SPRING OPTIONS

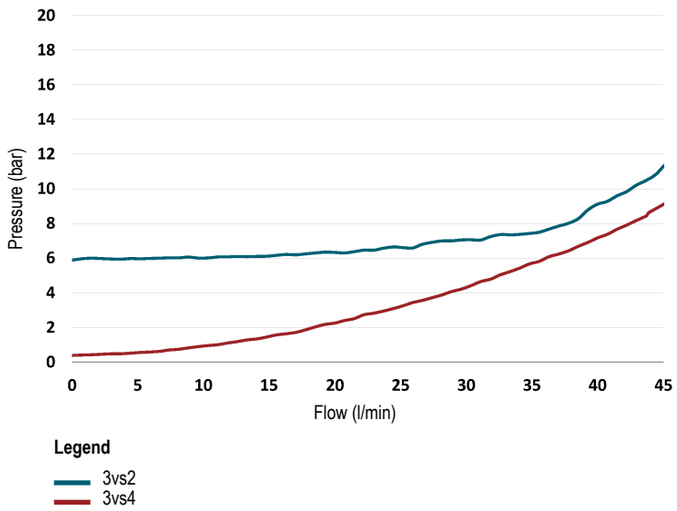
Spring model code	Static LS pressure (bar)	Note
Y	2,8	-
V	5,5	-
W	7,6	-
B	11	-
G	15,9	-
R	20,0	-
T	24	-
P	28	-

Specifications may change without notice.

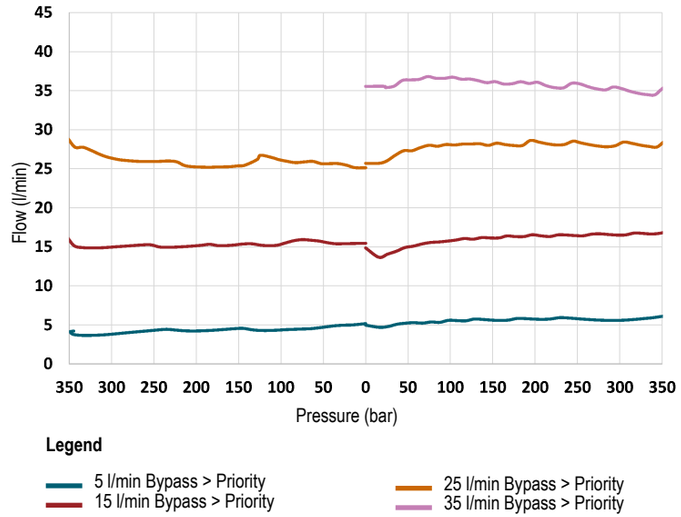
LSD0.S10

The performance chart illustrates flow handling capacity for significant spring options. pQ curves are recorded at TOil = 40°C and 46 cSt

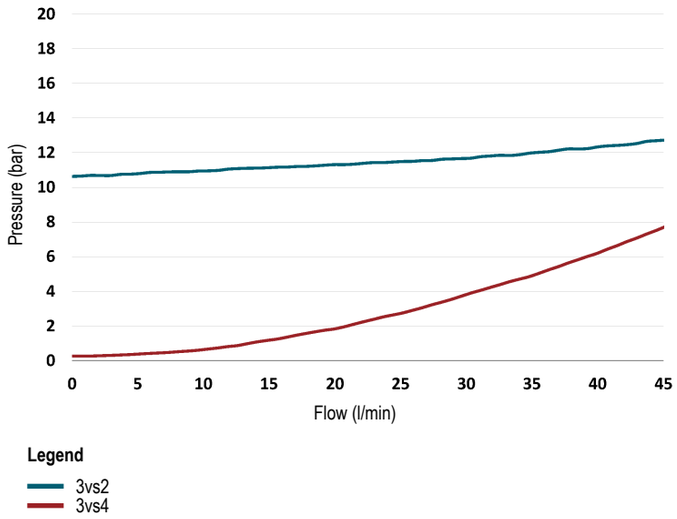
SPRING N



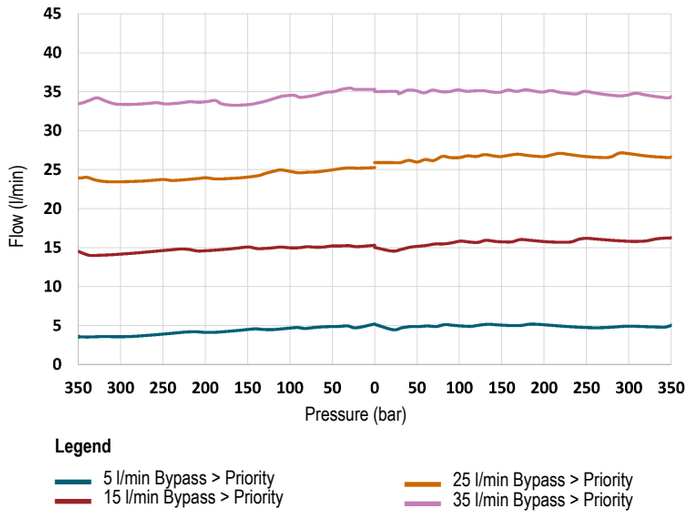
SPRING N



SPRING B



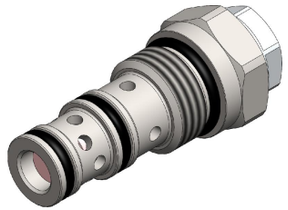
SPRING B



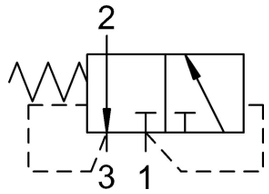
DVC0.S08 VALVE SERIES

Hybrid SAE Cartridge - 200 bar

Directional valve - 3/2 spool type



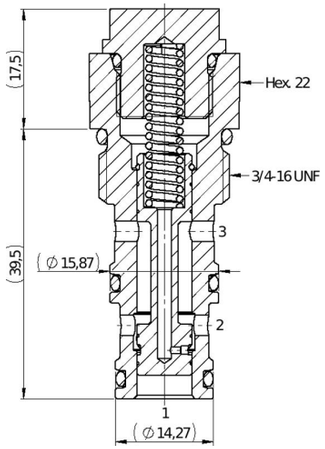
HYDRAULIC SYMBOL



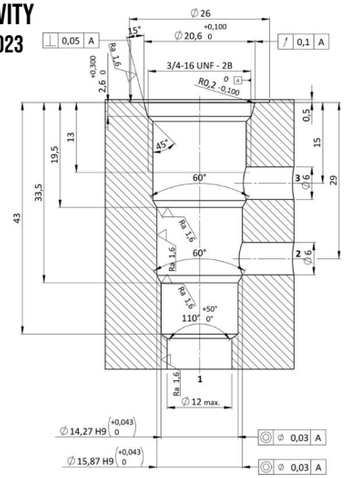
DESCRIPTION

A 3 way 2 positions, spool type, direct acting, screw-in hydraulic, directional cartridge valve. The DVC0.S08 allows flow from 2 to 3. Once sufficient pressure is applied on port 1, the spool lifts allowing free flow from 1 to 2 while blocking port 3. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

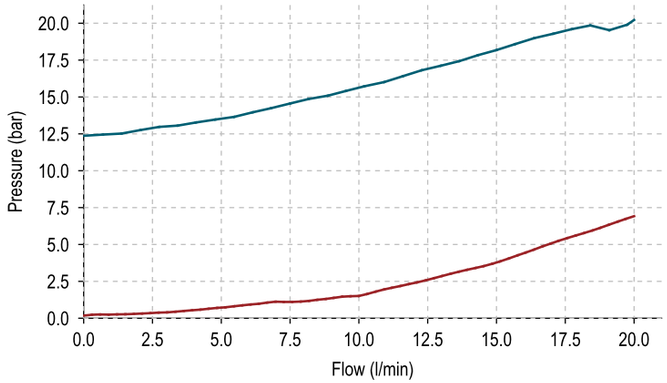
CROSS SECTION



CAVITY VH023



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity 2 to 3 and 1 to 2. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2
- 2vs3

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	200 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	200 cm^3 / min @ 200 bar
EXTERNAL COMPONENT TREATMENT	Oxide burnished
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.062 (standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg

ORDERING CODE

D	V	C	0	·	S	0	8	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø 15,87 and Ø 14,27 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SWITCHING PRESSURE

Spring model code	Switching pressure (bar)
1	2-5
2	5-10
0	12-15

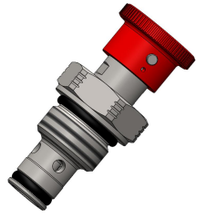
Specifications may change without notice.

MVDO.SO8 VALVE SERIES

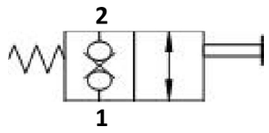
SAE08 Cartridge - 250 bar

NC Double Lock Manual Activation

Poppet Type



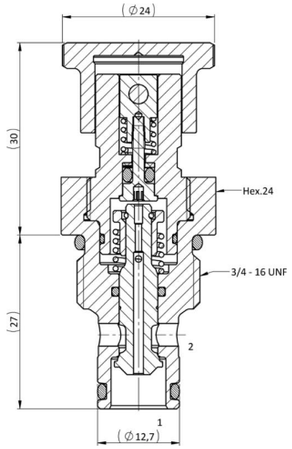
HYDRAULIC SYMBOL



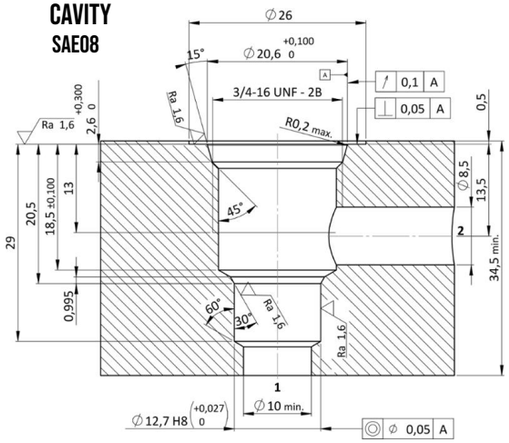
DESCRIPTION

A 2-way 2-positions, normally closed, direct acting poppet type, bi-directional blocking, screwin cartridge valve. Special design for low leakage in load holding applications. When the knob is not operated the flow is blocked in both directions. Once the knob is manually operated, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low manual override activation force thanks to optimized design.

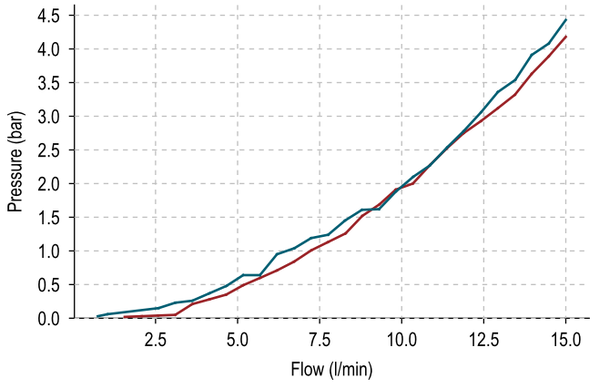
CROSS SECTION



CAVITY SAE08



PERFORMANCE DETAILS



NOTE

p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2 Activated
- 2vs1 Activated

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	15 l/min
MAXIMUM MANUAL OVERRIDE ACTIVATION FORCE	90 N (only 1vs2 configuration)
MAXIMUM INTERNAL LEAKAGE	0.25 cm³/min @ 30 bar and 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 (standard sealing NBR-BUNA-N)
WEIGHT	0,087 kg

ORDERING CODE

M	V	D	0	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with 12,7 nose size

MARKING
0= Standard factory marking.
Customized marking can be done upon request

000 = Nut with red anodizing.
100 = Nut with black anodizing.
Other colors can be available upon request

MANUAL OVERRIDE OPTIONS

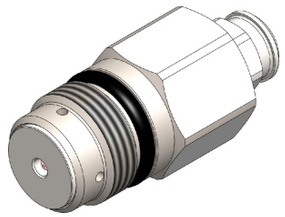
Model code	Type of override
0	Push manual override
1	Push and twist manual override
2	Twist and push manual override

Specifications may change without notice.

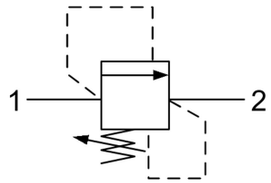
RVBO.M16 VALVE SERIES

METRIC Cartridge - 450 bar

Direct acting - Poppet type



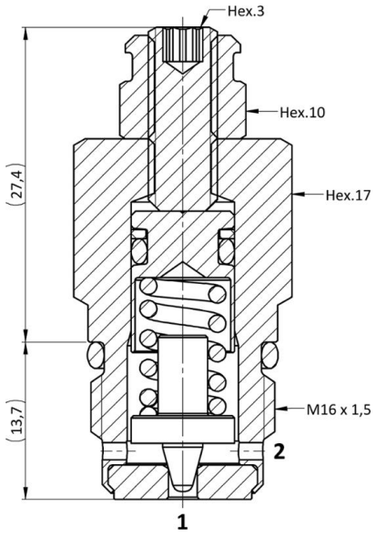
HYDRAULIC SYMBOL



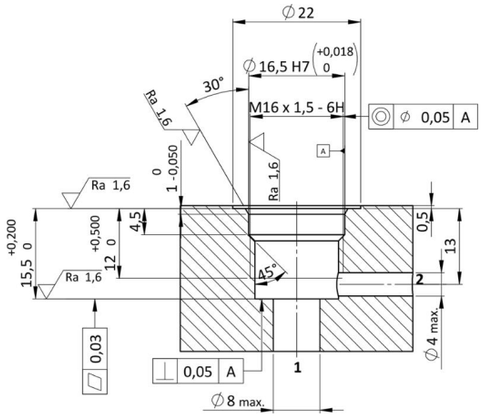
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) providing a limited pressure rise. The reduced dimensions and the excellent response time make this valve ideally suited for pilot circuits. Hysteresis is also extremely low.

CROSS SECTION



CAVITY
VH001



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	450 bar
MAXIMUM FLOW	1,5 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	1.5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.17
NUT TINGHTENING TORQUE	6,5-8,5 Nm Hex.10
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.004 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.002
WEIGHT	0,050 kg

ORDERING CODE

R	V	B	0	·	M	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M16x1,5 (No other cavity options available)

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	1-30	10
N	10-100	56
B	10-250	136
G	10-450	258

NOTE
Customized setting pressure adjustment can be done upon request. see

Specifications may change without notice.

Rev. 1

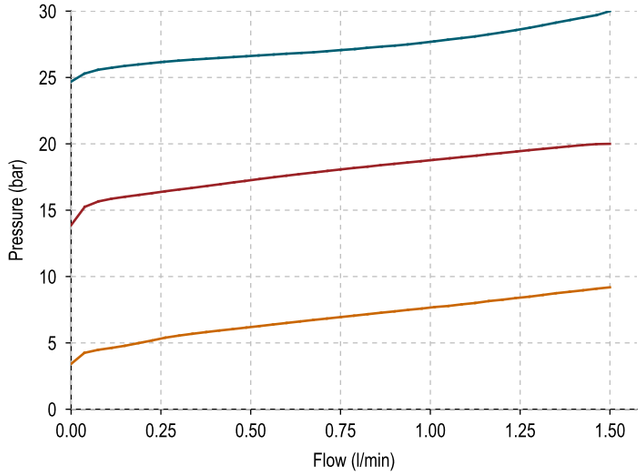
RVBO.M16 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

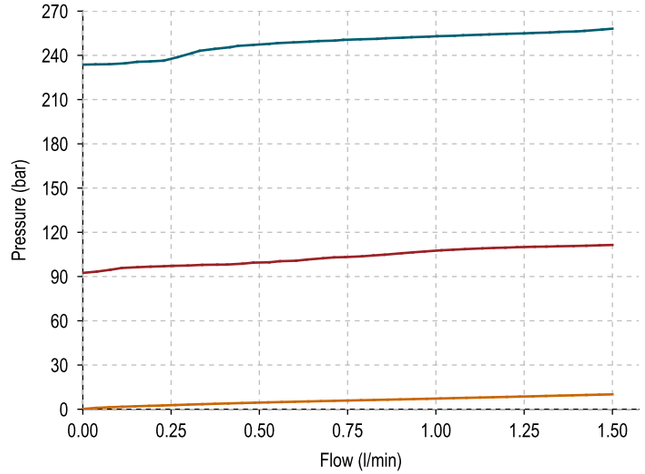
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

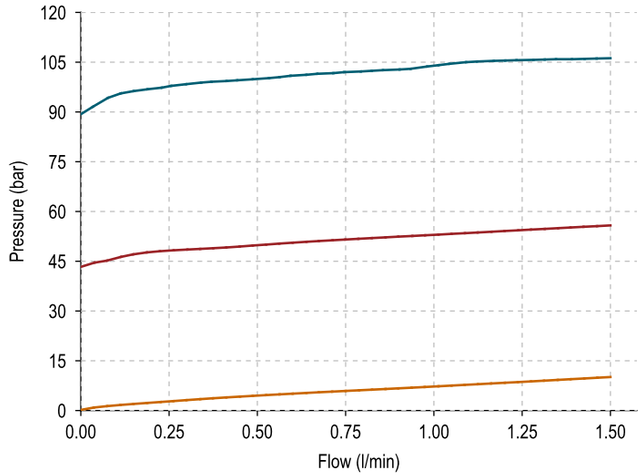
SPRING Y



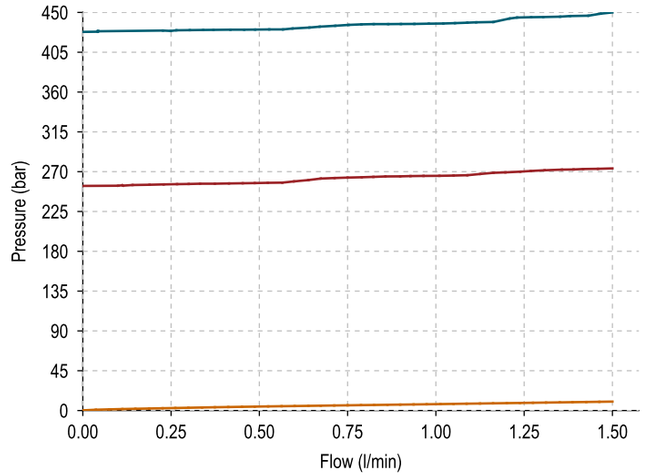
SPRING B



SPRING N



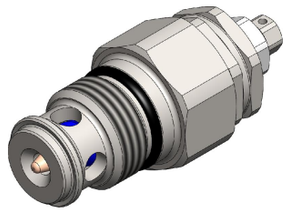
SPRING G



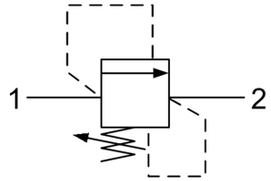
RVB2.M18 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



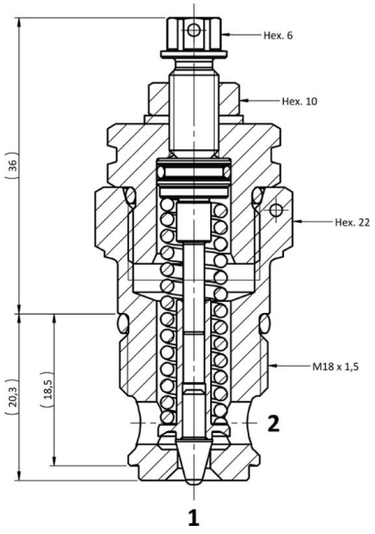
HYDRAULIC SYMBOL



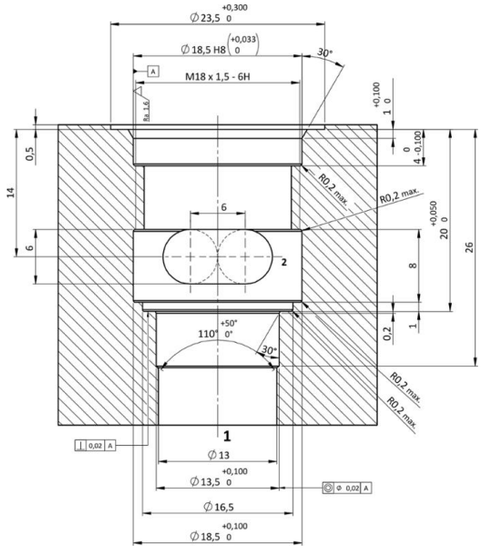
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) and thanks to the effect of the deflector integrated into the poppet it provides a limited pressure rise. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hyseresis. Innovative design on internal dampening part guarantees great stability.

CROSS SECTION



CAVITY VH160



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	5 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	2 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.22
NUT TINGHTENING TORQUE	5-10 Nm Hex.10
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.102 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,089 kg

ORDERING CODE

R	V	B	2	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M18x1,5 (No other cavity options available)

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	20-50	16
N	51-90	16
B	91-130	26
G	131-205	44
V	206-275	59
W	276-350	72

Specifications may change without notice.

Rev. 1

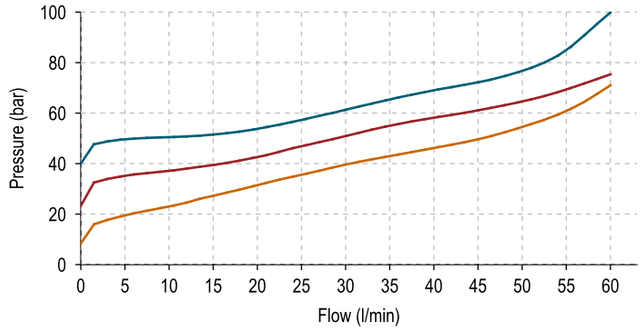
RVB2.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

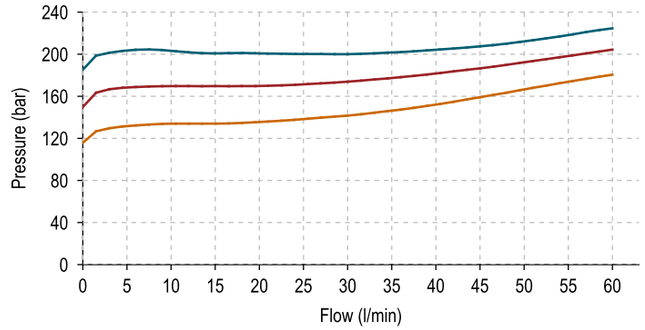
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

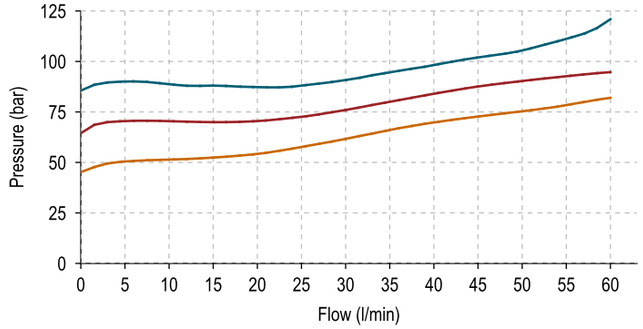
SPRING Y



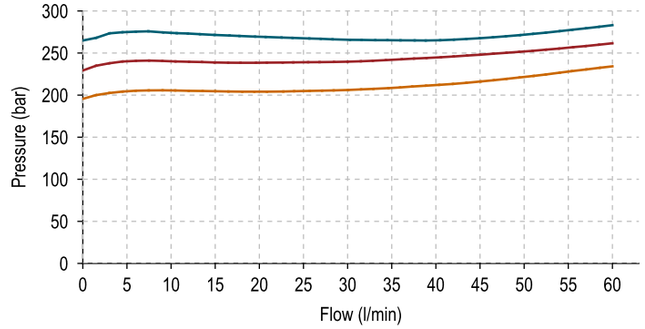
SPRING G



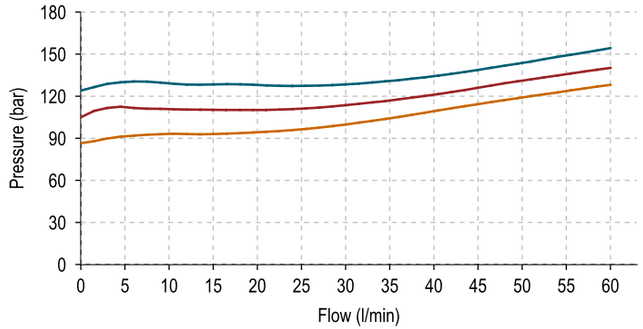
SPRING N



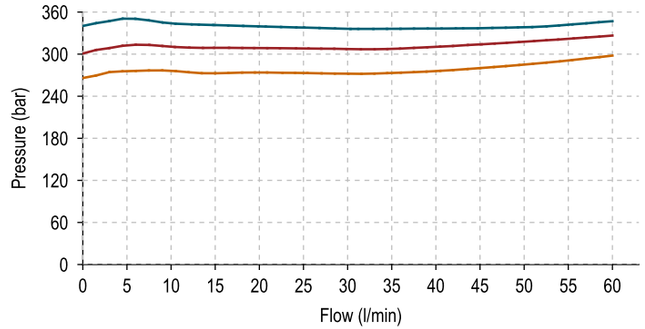
SPRING V



SPRING B



SPRING W

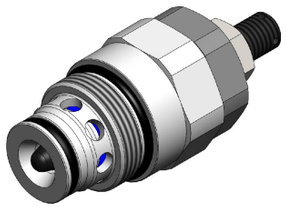


Rev. 1

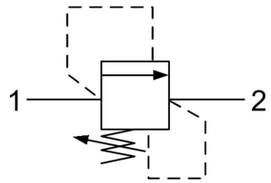
RVBO.M24 VALVE SERIES

METRIC Cartridge - 300 bar

Direct acting - Poppet type



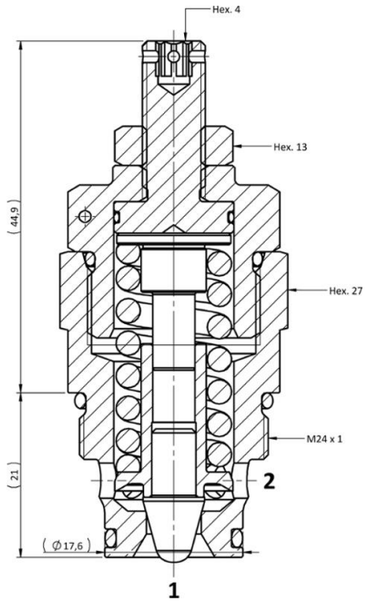
HYDRAULIC SYMBOL



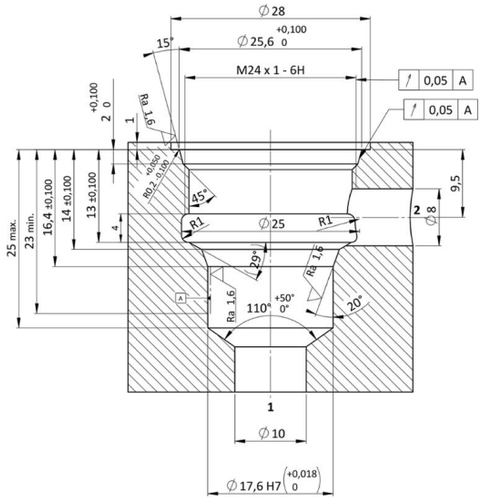
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) and thanks to the effect of the deflector integrated into the poppet it provides a limited pressure rise. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. Innovative design on internal dampening part guarantees great stability.

CROSS SECTION



CAVITY VH077



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	300 bar
MAXIMUM FLOW	85 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
NUT TINGHTENING TORQUE	10-12 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.054 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,160 kg

ORDERING CODE

R	V	B	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M24x1 with Ø17,6 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	20-70	18
N	71-150	22
B	151-215	28
G	216-265	42
V	266-300	49

Specifications may change without notice.

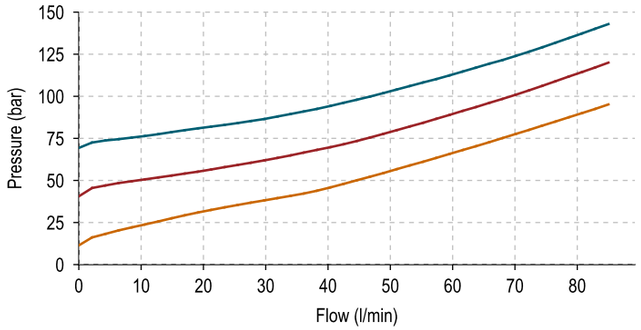
RVBO.M24 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

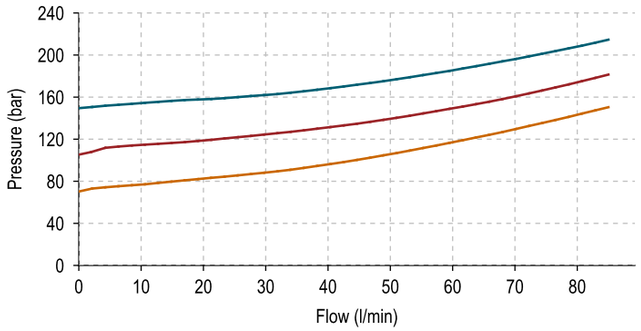
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

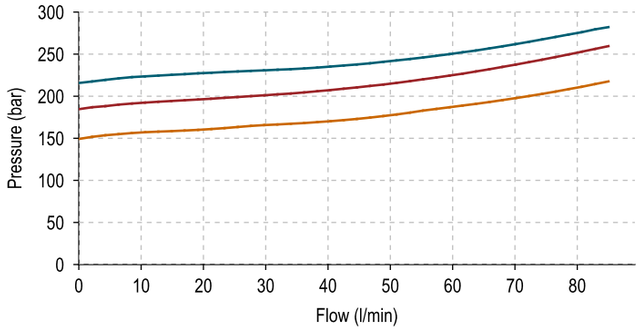
SPRING Y



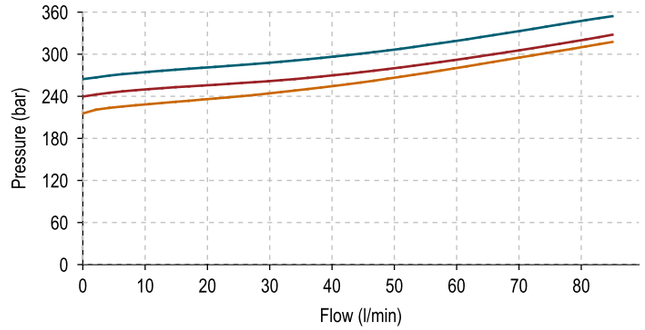
SPRING N



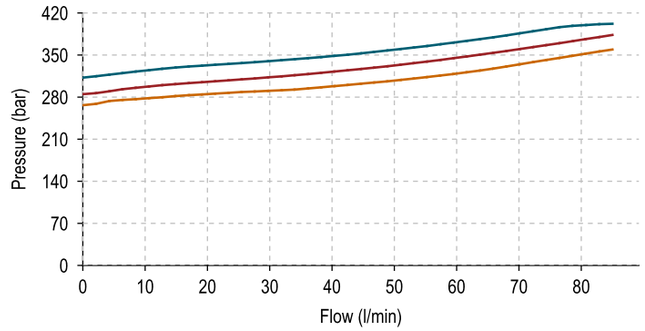
SPRING B



SPRING G



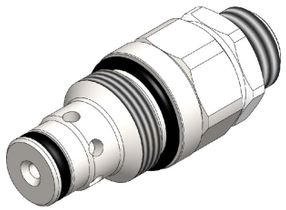
SPRING V



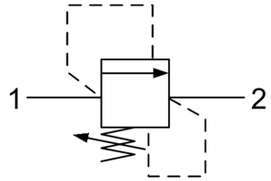
RVBO.S08 VALVE SERIES

SAE08 Cartridge - 420 bar

Direct acting - Poppet type



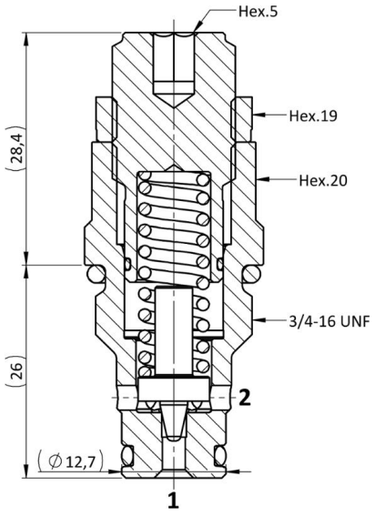
HYDRAULIC SYMBOL



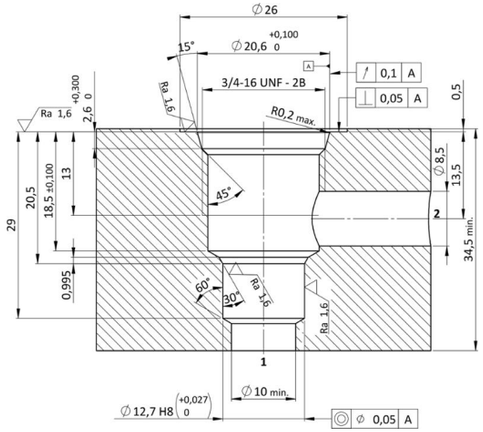
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) and thanks to the effect of the deflector integrated into the poppet it provides a limited pressure rise. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.
Warning: Adjustment screw doesn't have a positive stop wich prevents it from being backed out of the valve.

CROSS SECTION



CAVITY
SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	25 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.20
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,100 kg

ORDERING CODE

R	V	B	0	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
3/4-16 UNF with Ø12,7 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	20-70	9
N	50-180	23
S	10-160	36
B	100-290	48
G	130-350	63
V	170-420	83

Specifications may change without notice.

Rev. 1

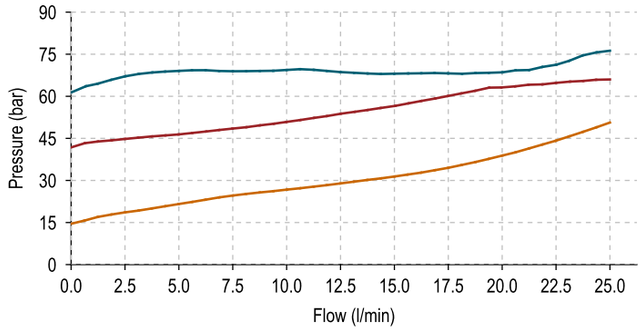
RVBO.SO8 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

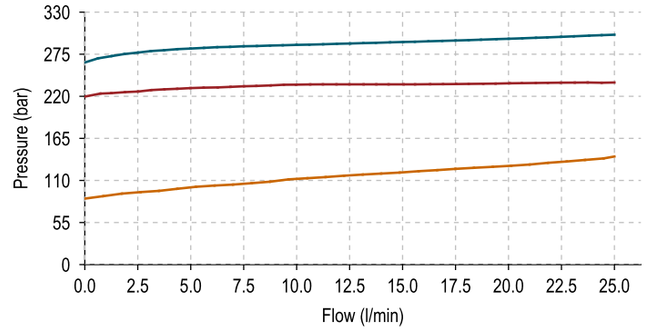
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

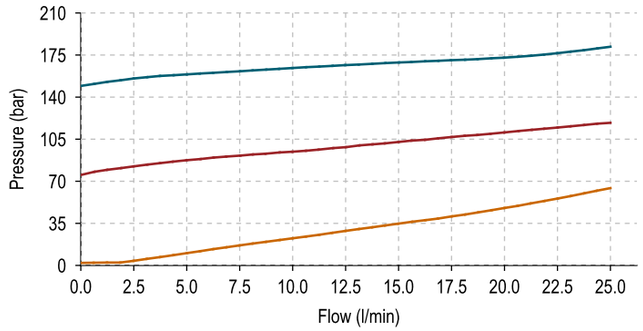
SPRING Y



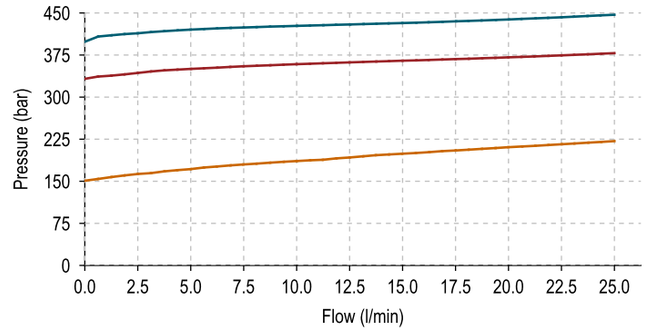
SPRING B



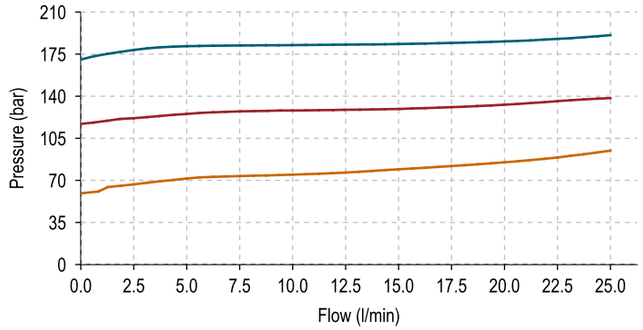
SPRING S



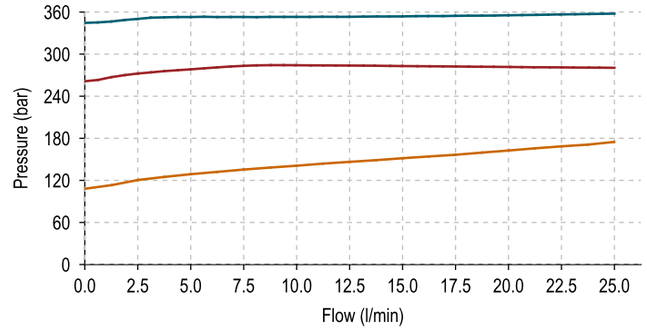
SPRING V



SPRING N



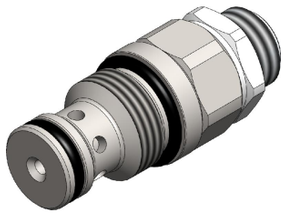
SPRING - G



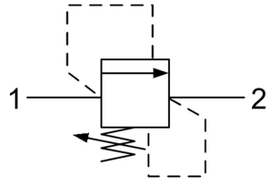
RVBO.S09 VALVE SERIES

Hybrid SAE Cartridge - 420 bar

Direct acting - Poppet type



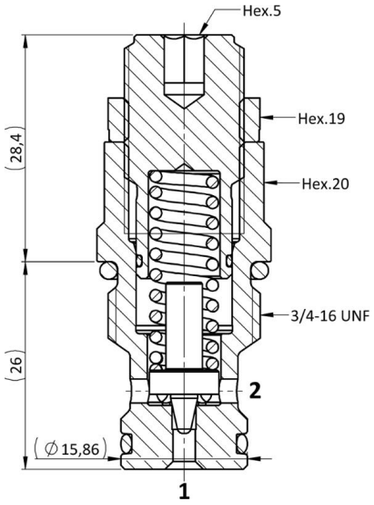
HYDRAULIC SYMBOL



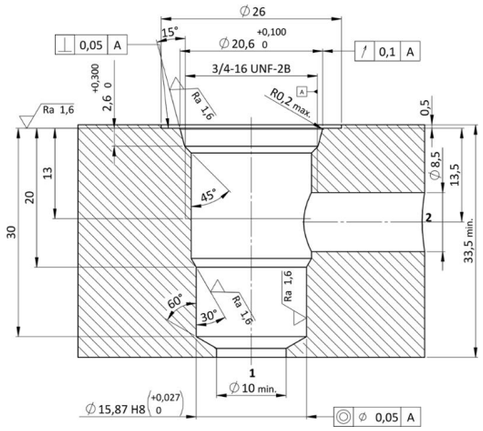
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) and thanks to the effect of the deflector integrated into the poppet it provides a limited pressure rise. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.
Warning: Adjustment screw doesn't have a positive stop wich prevents it from being backed out of the valve.

CROSS SECTION



CAVITY
SAE09



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	35 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.20
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,100 kg

ORDERING CODE

R	V	B	0	·	S	0	9	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
3/4-16 UNF with Ø15,86 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	20-70	9
N	50-180	23
S	10-160	36
B	100-290	48
G	130-350	63
V	170-420	83

Specifications may change without notice.

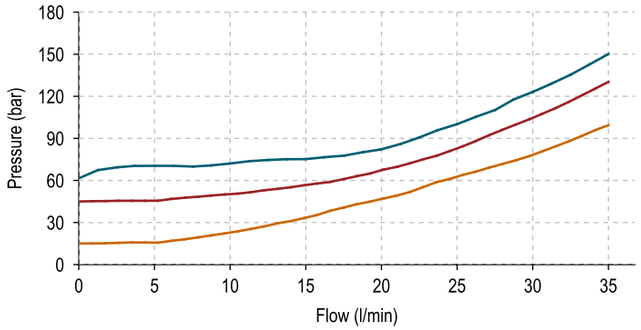
RVBO.S09 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

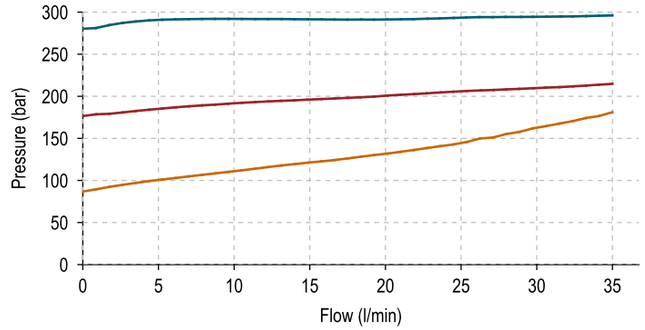
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

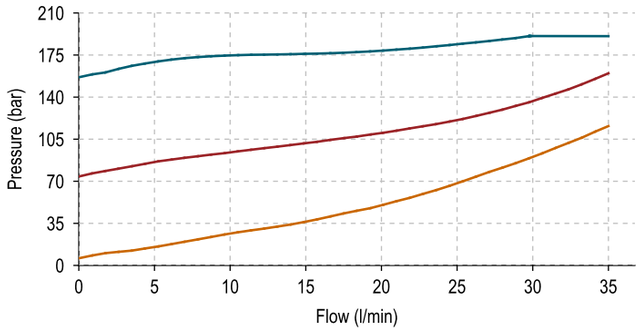
SPRING Y



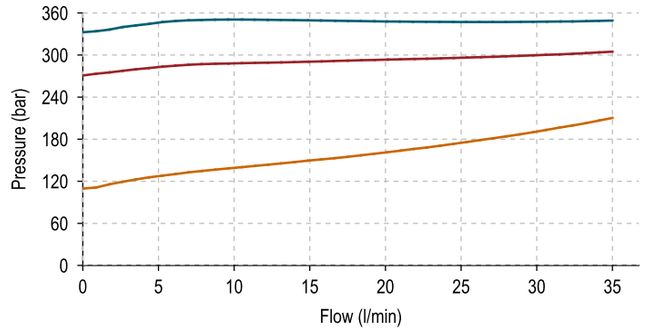
SPRING B



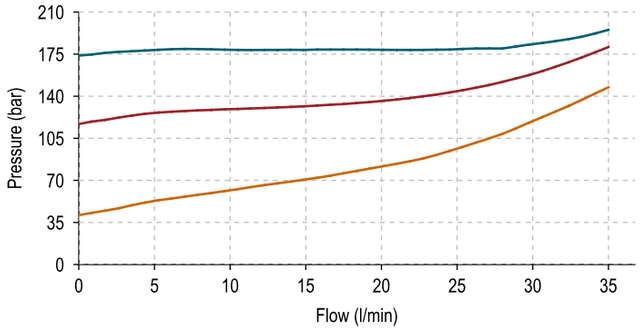
SPRING S



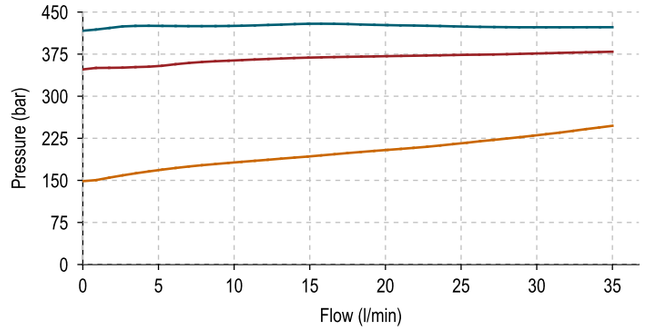
SPRING G



SPRING N



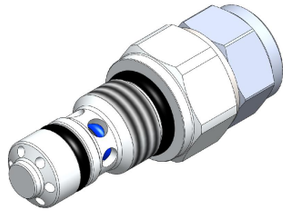
SPRING V



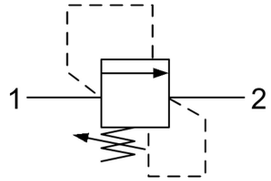
RVY0.S06 VALVE SERIES

Hybrid SAE06 Cartridge - 350 bar

Direct acting - Poppet type



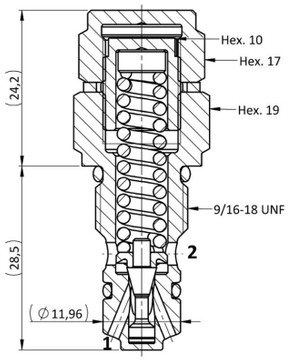
HYDRAULIC SYMBOL



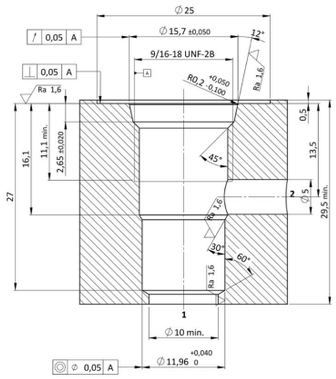
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVY0 in the standard configuration can be used in crossover relief applications.
Warning: Adjustment screw doesn't have a positive stop wich prevents it from being backed out of the valve.

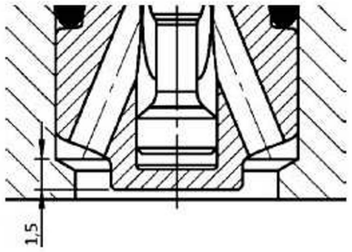
CROSS SECTION



CAVITY VH164



DESIGN NOTE



The nose of the valve protrudes by 1,5 mm into ID 10 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	15 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.19
NUT TINGHTENING TORQUE	12-15 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.085 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,063 kg

ORDERING CODE

R	V	Y	0	·	S	0	6	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
9/16-18 UNF with Ø11,96 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	30-75	13
N	76-120	35
B	121-200	58
G	201-350	73

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

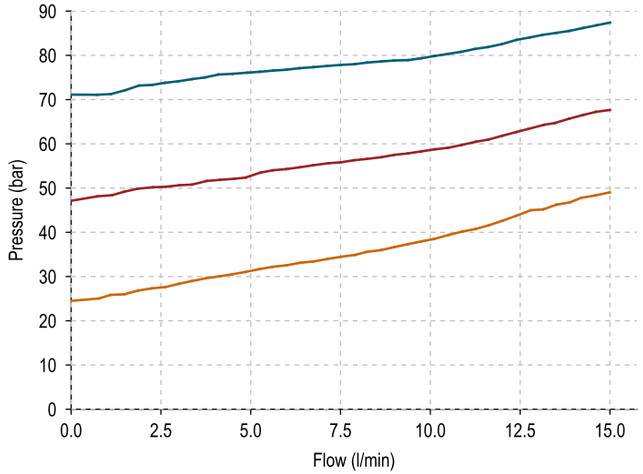
RVYO.SO6 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

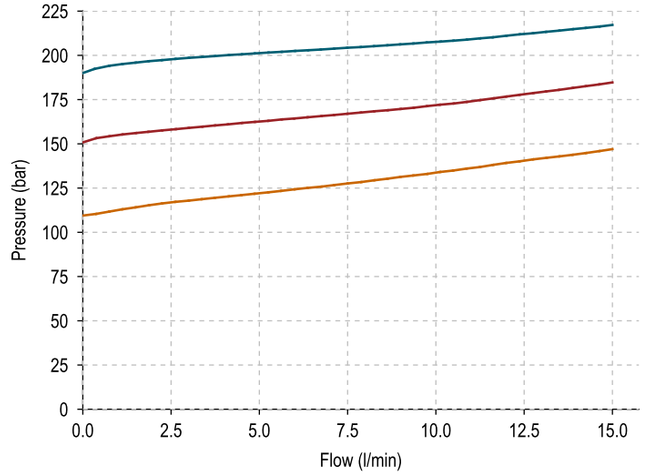
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

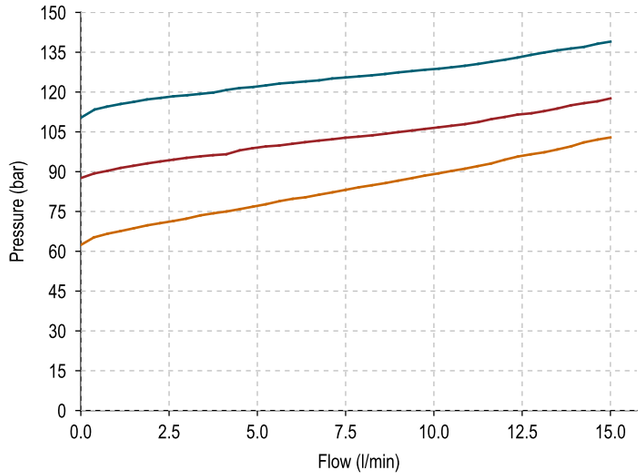
SPRING Y



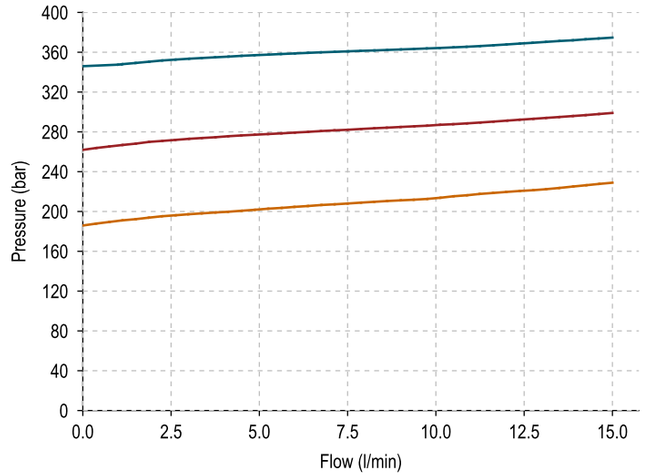
SPRING B



SPRING N



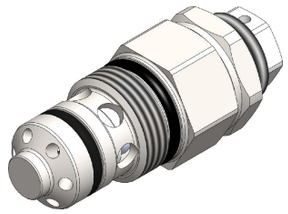
SPRING G



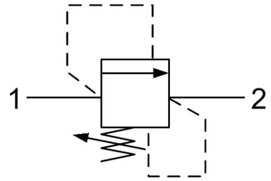
RVY0.M18 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



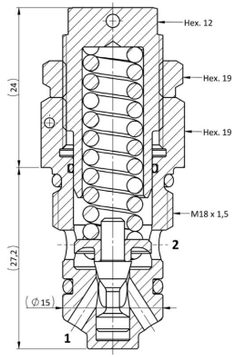
HYDRAULIC SYMBOL



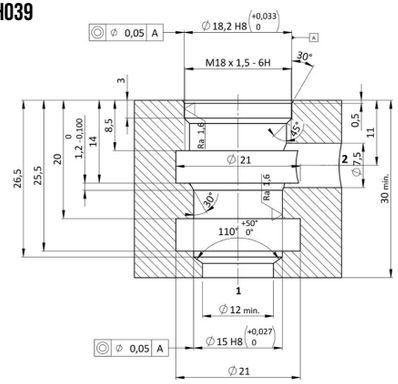
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. Note: the RVY0 in the standard configuration can be used in crossover relief applications.
Warning: Adjustment screw doesn't have a positive stop wich prevents it from being backed out of the valve.

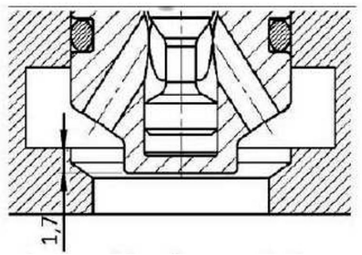
CROSS SECTION



CAVITY
VH039



DESIGN NOTE



The nose of the valve protrudes by 1,7 mm into ID 15 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.19
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.086 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,070 kg

ORDERING CODE

R V Y 0	·	M 1 8	·	0 *	·	* * *

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M18x1,5 with Ø15 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	81-150	28
Y	20-80	28
B	151-250	69
G	251-350	107

Specifications may change without notice.

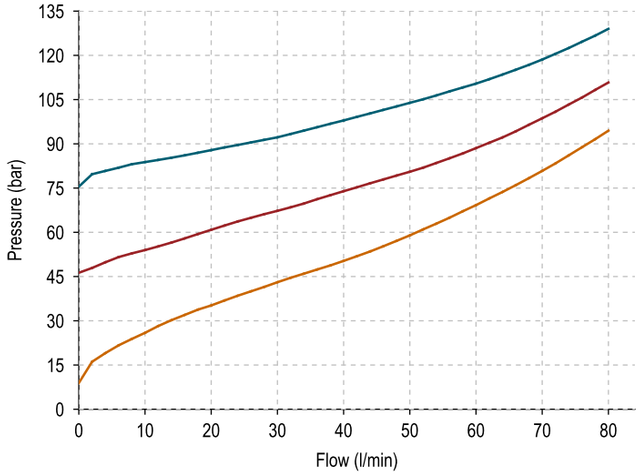
RVYO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

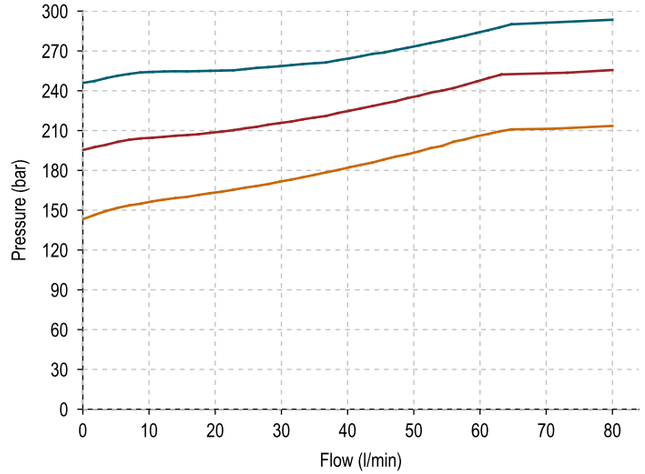
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

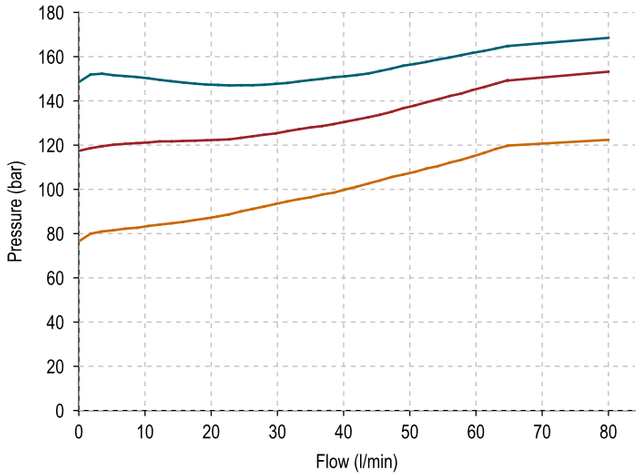
SPRING Y



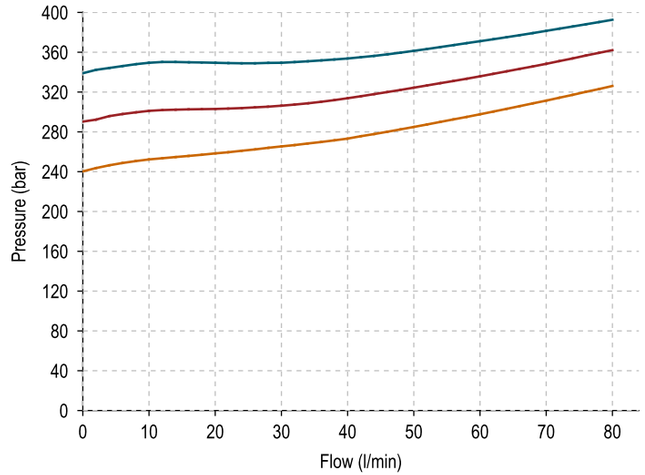
SPRING B



SPRING N



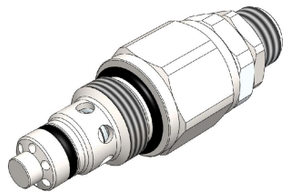
SPRING G



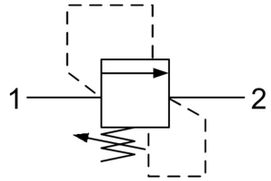
RVC0.S08 VALVE SERIES

SAE08 Cartridge - 350 bar

Direct acting - Poppet type



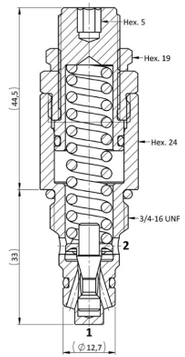
HYDRAULIC SYMBOL



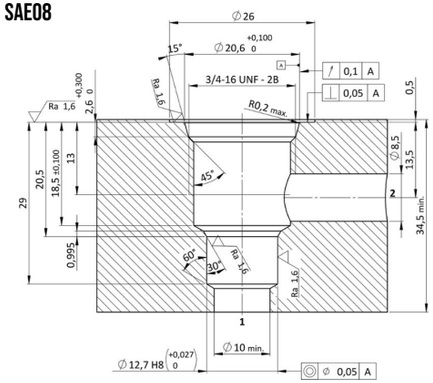
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC0 in the standard configuration can be used in crossover relief applications.

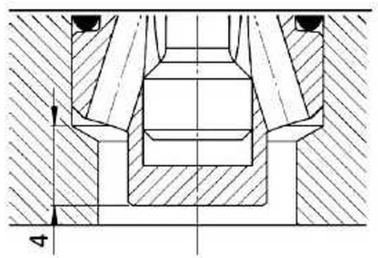
CROSS SECTION



CAVITY SAE08



DESIGN NOTE



The nose of the valve protrudes by 4 mm into ID 10 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point - 0,25 cm^3 / min at 65 % of nominal set point - with range 7-8.9bar (spring L) 0,25 cm^3 / min at 40 % of nominal set point - with range 4.6- 6.9bar (spring
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,145 kg

ORDERING CODE

R	V	C	0	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
3/4-16 UNF with Ø12,7 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
L	3,5-17	2,3
Y	15-60	8
N	25-135	20
B	50-220	34
G	120-350	59

NOTE
Customized adjusting knob can be selected see page 789

Specifications may change without notice.

Rev. 1

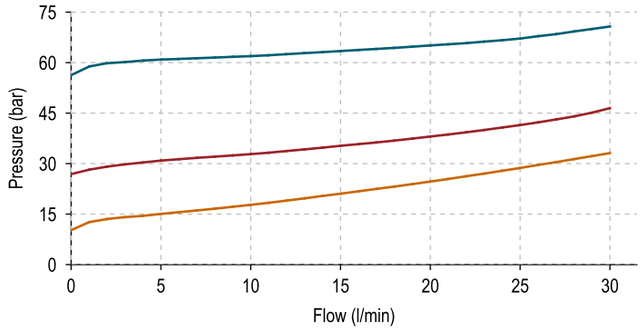
RVCO.S08 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

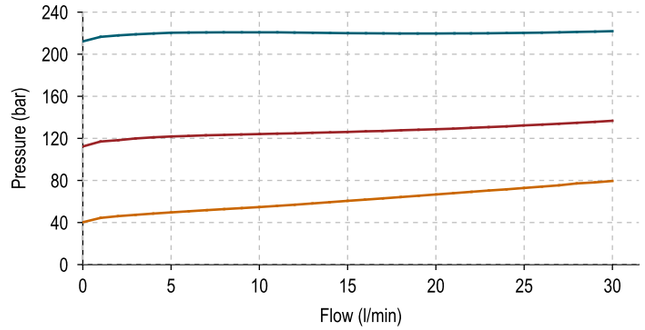
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

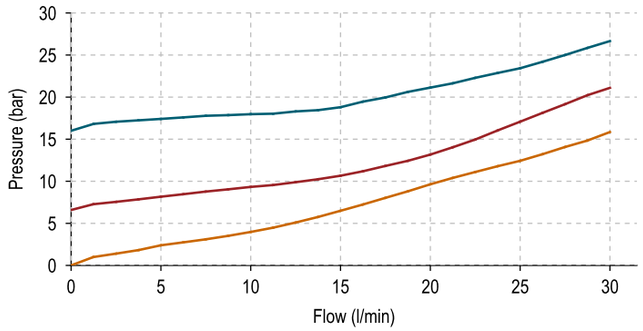
SPRING Y



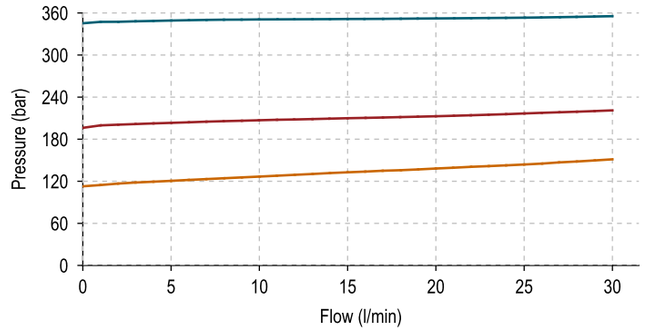
SPRING B



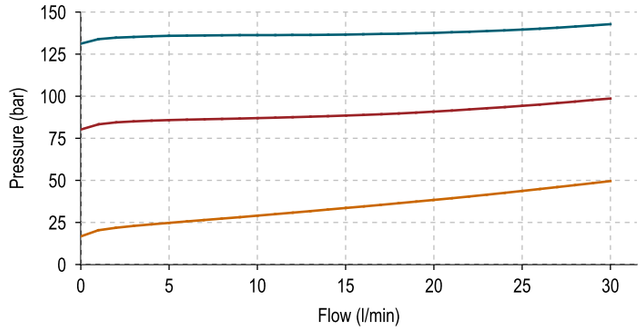
SPRING L



SPRING G



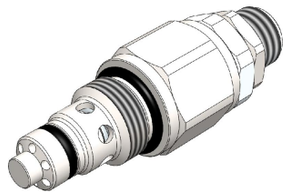
SPRING N



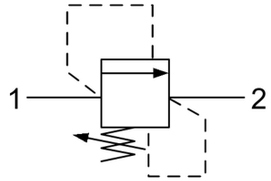
RVC0.S09 VALVE SERIES

Hybrid SAE Cartridge - 350 bar

Direct acting - Poppet type



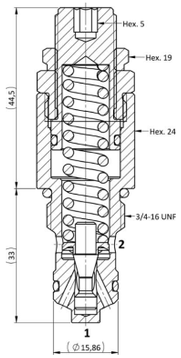
HYDRAULIC SYMBOL



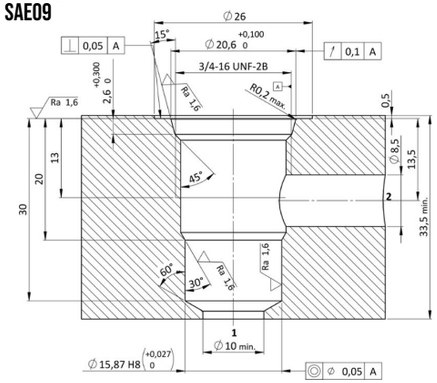
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC0 in the standard configuration can be used in crossover relief applications.

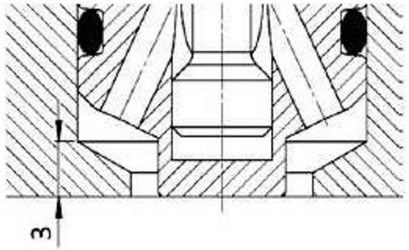
CROSS SECTION



CAVITY SAE09



DESIGN NOTE



The nose of the valve protrudes by 3 mm into ID 10 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point 0,25 cm^3 / min at 70 % of nominal set point - with range 10-17 bar (spring L) 0,25 cm^3 / min at 40 % of nominal set point - with range 5-10 bar (spring L)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.002 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,150 kg

ORDERING CODE

R	V	C	0	·	S	0	9	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
3/4-16 UNF with Ø15,86 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
L	3,5-17 (Maximum Flow 30l/min)	2,3
Y	15-60	8
N	25-135	20
B	50-220	34
G	120-350	59

NOTE
Customized adjusting knob can be selected see page 789

Specifications may change without notice.

Rev. 2

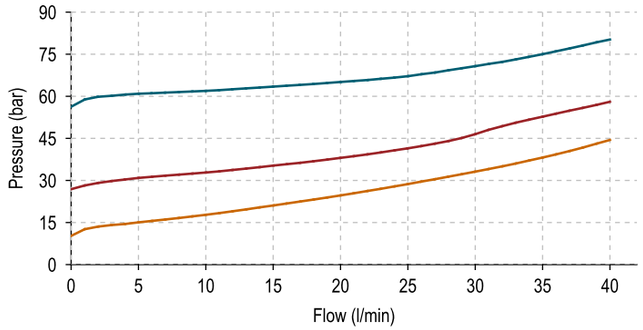
RVCO.S09 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

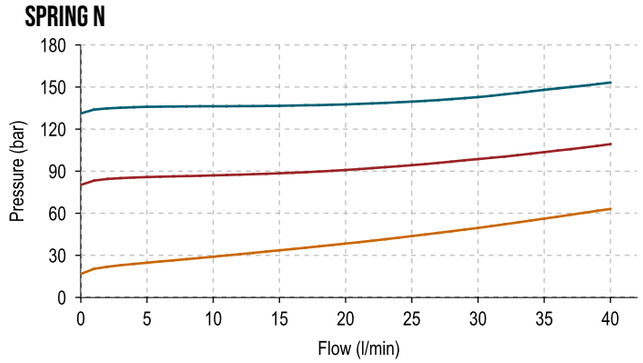
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

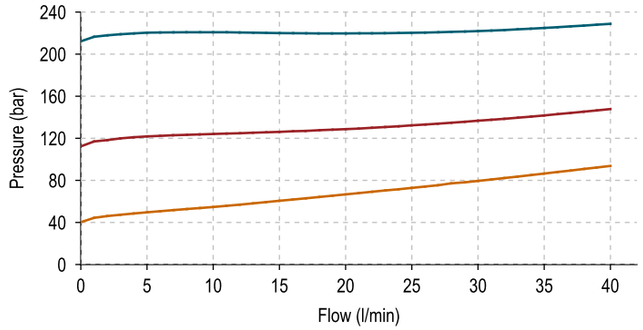
SPRING Y



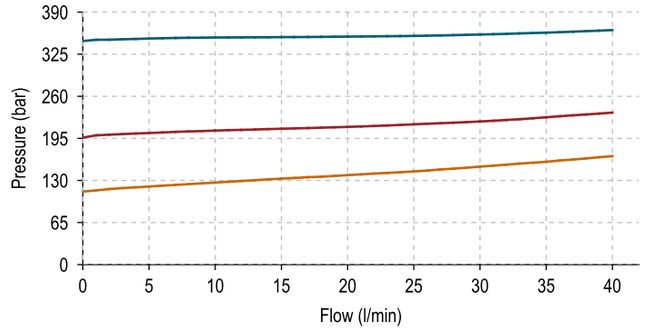
SPRING N



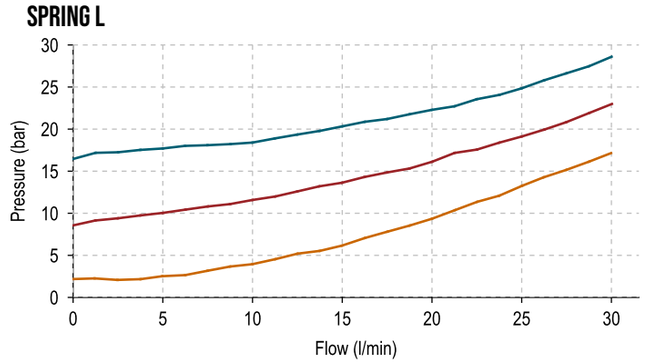
SPRING B



SPRING G



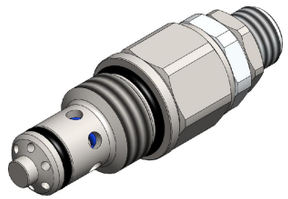
SPRING L



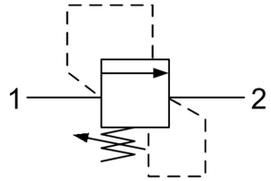
RVC0.S10 VALVE SERIES

SAE10 Cartridge - 350 bar

Direct acting - Poppet type



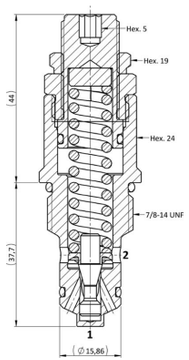
HYDRAULIC SYMBOL



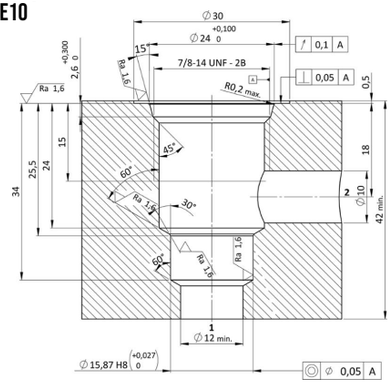
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC0 in the standard configuration can be used in crossover relief applications.

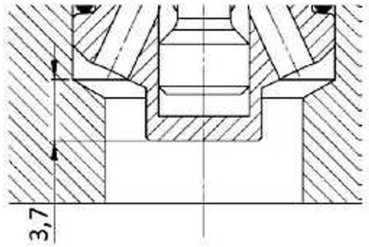
CROSS SECTION



CAVITY SAE10



DESIGN NOTE



The nose of the valve protrudes by 3,7 mm into ID 12 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	50 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point 0,25 cm^3 / min at 70 % of nominal set point - with range 10-17bar (spring L) 0,25 cm^3 / min at 40 % of nominal set point - with range 5-10bar (spring L)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.001 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,170 kg

ORDERING CODE

R	V	C	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
L	3,5-17 (Maximum Flow 30l/min)	2,3
Y	15-60	8
N	25-135	20
B	50-220	34
G	120-350	59

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

NOTE
Customized adjusting knob can be selected see page 789

Specifications may change without notice.

Rev. 2

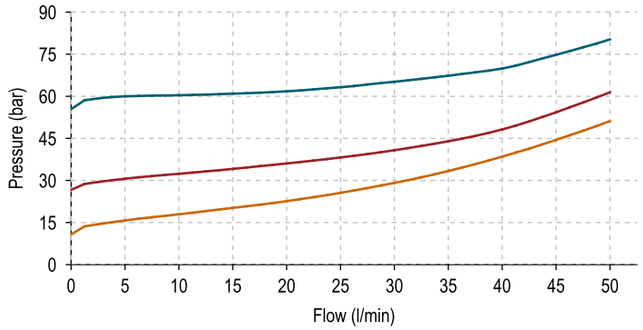
RVCO.S10 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

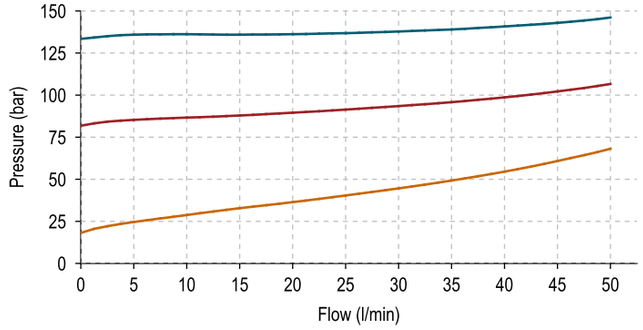
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

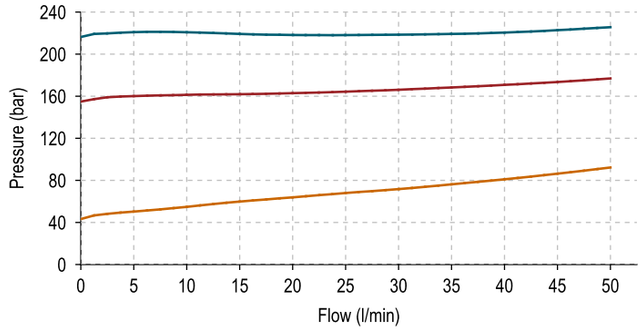
SPRING Y



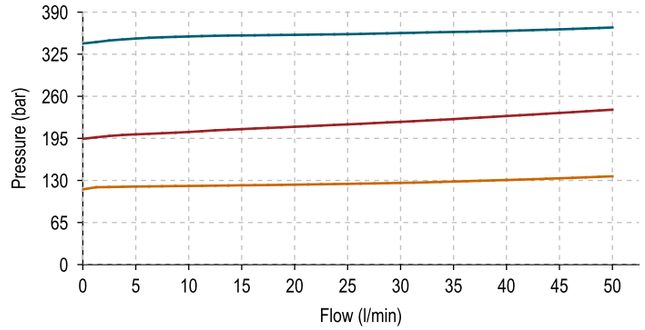
SPRING N



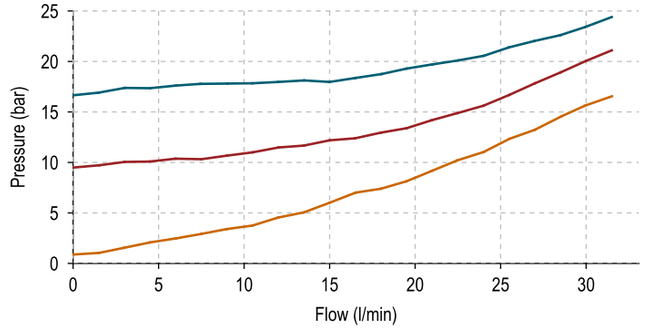
SPRING B



SPRING G



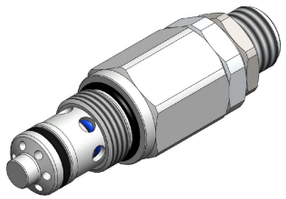
SPRING L



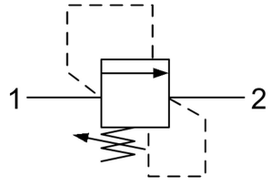
RVC0.M18 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



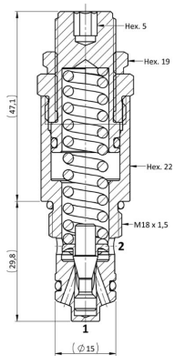
HYDRAULIC SYMBOL



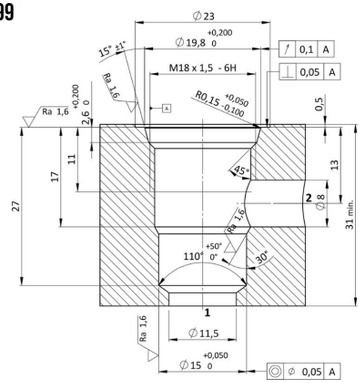
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC0 in the standard configuration can be used in crossover relief applications.

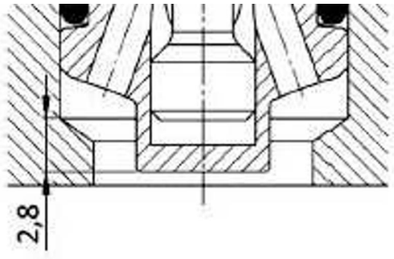
CROSS SECTION



CAVITY VH099



DESIGN NOTE



The nose of the valve protrudes by 2,8mm into ID 11,5 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point 0,25 cm^3 / min at 70 % of nominal set point - with range 10-17 bar (spring L) 0,25 cm^3 / min @ 40 bar - with range 5-10 bar (spring L)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	30-35 Nm Hex.22
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.006 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,140 kg

ORDERING CODE

R	V	C	0	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE
Costumized adjusting knob can be selected

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M18x1,5 with Ø15 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
L	3,5-17	2,3
Y	15-60	8
N	25-135	20
B	50-220	34
G	120-350	59

NOTE
Customized adjusting knob can be selected see page 789

Specifications may change without notice.

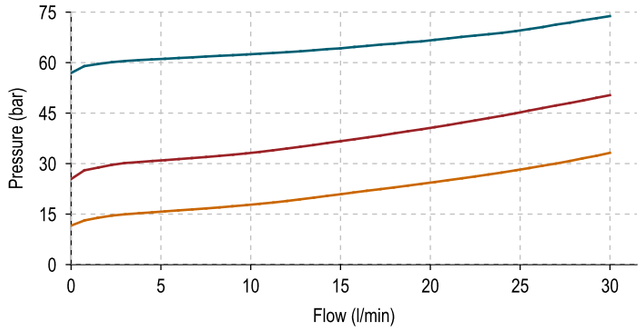
RVCO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

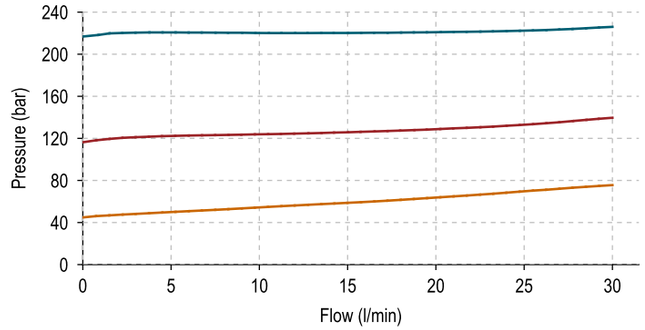
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

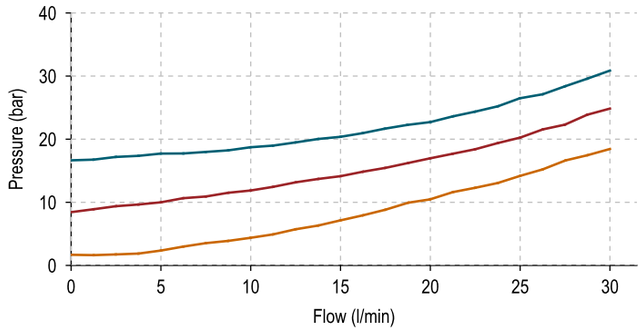
SPRING Y



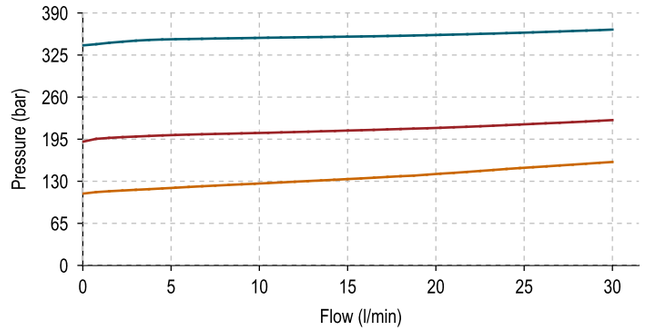
SPRING B



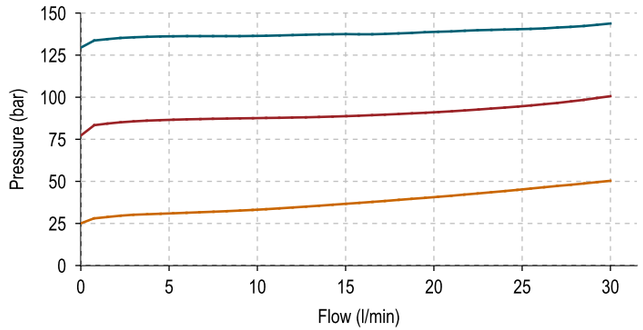
SPRING L



SPRING G



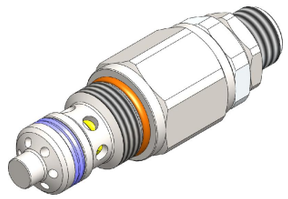
SPRING N



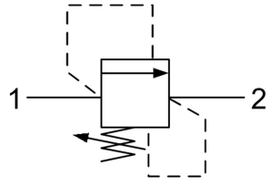
RVC3.M20 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



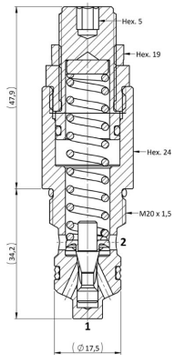
HYDRAULIC SYMBOL



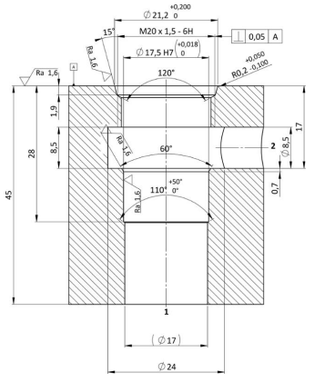
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC3 in the standard configuration can be used in crossover relief applications.

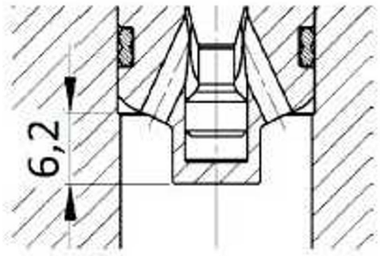
CROSS SECTION



CAVITY VH069



DESIGN NOTE



The nose of the valve protrudes by 6,2 mm into ID 17 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point 0,25 cm^3 / min at 70 % of nominal set point - with range 10-17bar (Spring L)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (standard sealing FKM)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	27-30 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.075 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,170 kg

ORDERING CODE

R	V	C	3	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M20x1,5 with Ø17,5 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
L	3,5-17 (maximum flow 30 l/min)	2,3
Y	15-60	8
N	25-135	20
B	50-220	34
G	120-350	59

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

NOTE
Customized adjusting knob can be selected see page 789

Specifications may change without notice.

Rev. 2

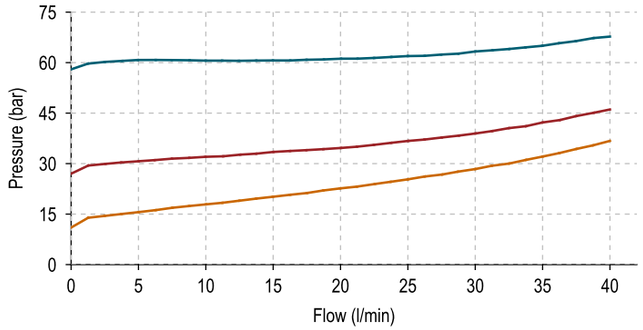
RVC3.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

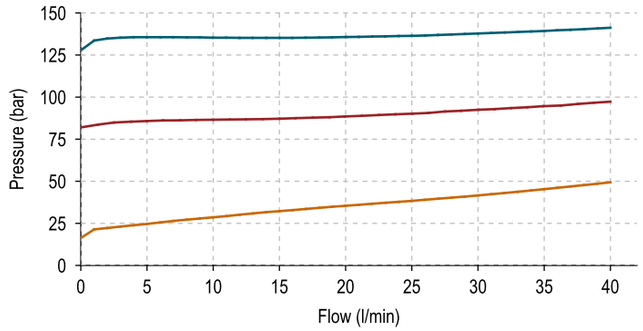
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

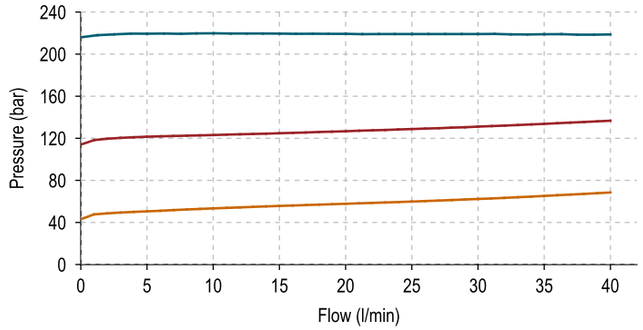
SPRING Y



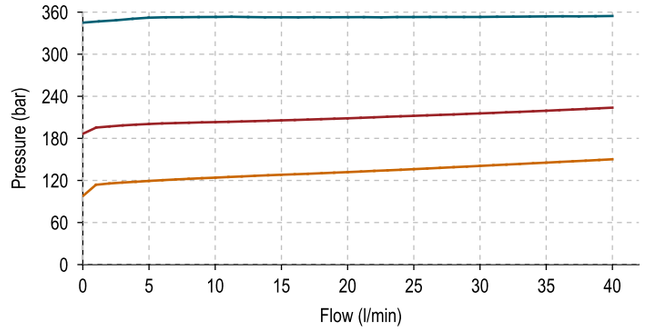
SPRING N



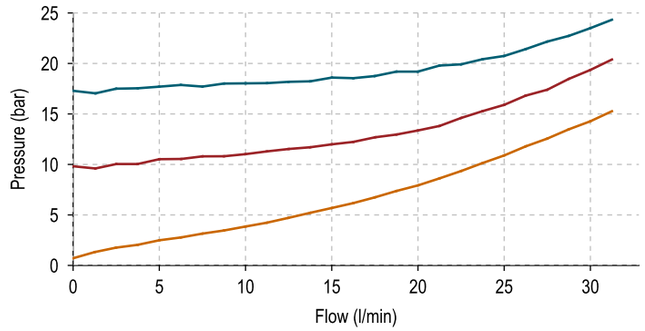
SPRING B



SPRING G



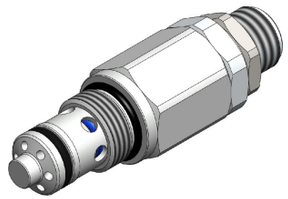
SPRING L



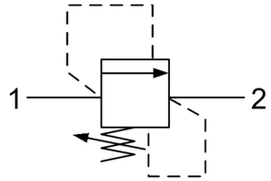
RVC0.M22 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



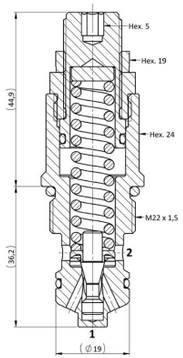
HYDRAULIC SYMBOL



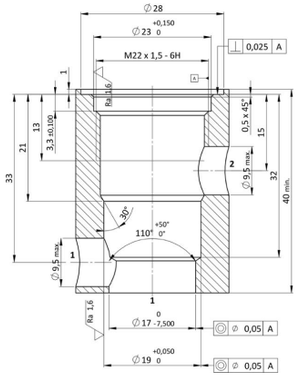
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVC0 in the standard configuration can be used in crossover relief applications.

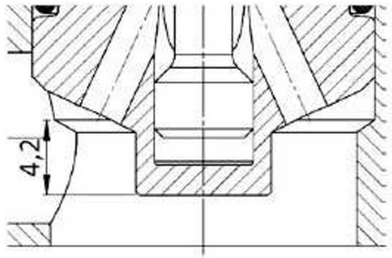
CROSS SECTION



CAVITY VH045



DESIGN NOTE



The nose of the valve protrudes by 4,2 mm into ID 17 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	50 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min at 80 % of nominal set point - 0,25 cm^3 / min at 70 % of nominal set point - with range 5 - 9 bar (spring L)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.019 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,176 kg

ORDERING CODE

R	V	C	0	·	M	2	2	·	0	*	·	*	*	*

VALVE BASIC CODE
Costumized adjusting knob can be selected

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M22x1,5 with Ø19 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
L	3,5-17 (maximum flow 30 l/min)	2,3
Y	15-60	8
N	25-135	20
B	50-220	34
G	120-350	59

NOTE
Customized adjusting knob can be selected see page 789

Specifications may change without notice.

Rev. 2

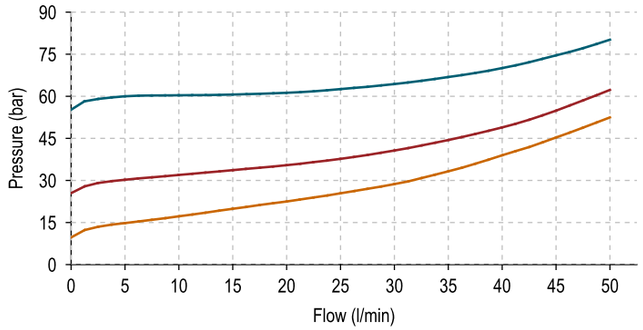
RVCO.M22 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

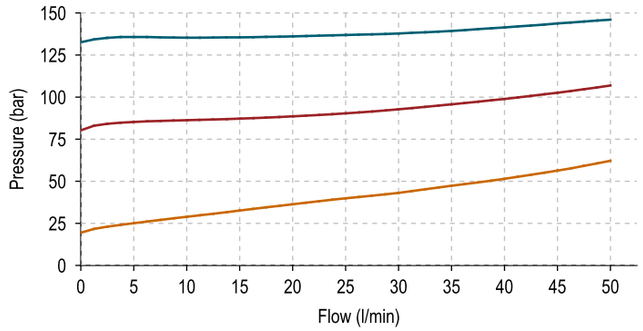
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

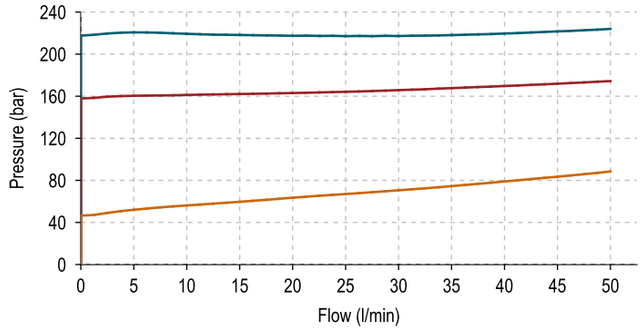
SPRING Y



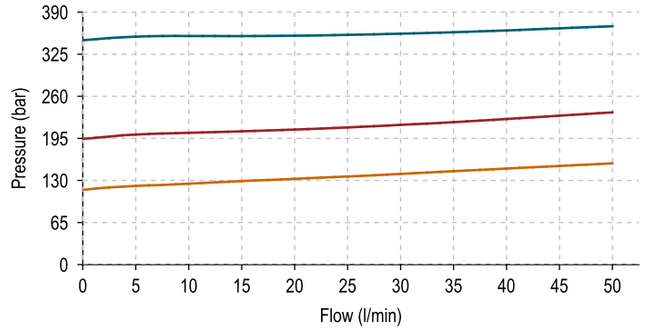
SPRING N



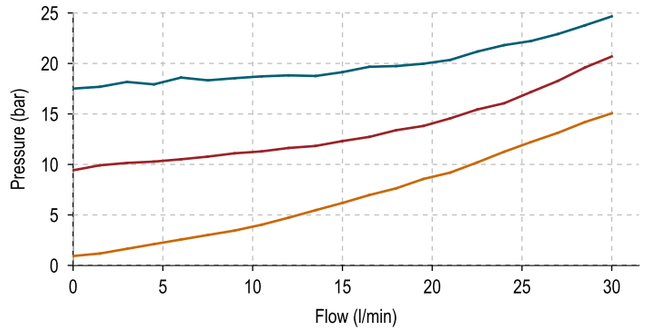
SPRING B



SPRING G



SPRING L

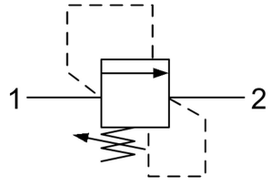


RVS0.S10 VALVE SERIES

SAE10 Cartridge - 350 bar

Direct acting - Poppet type

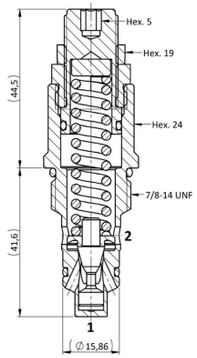
HYDRAULIC SYMBOL



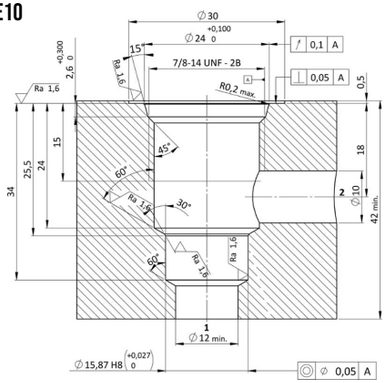
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVS0 in the standard configuration can be used in crossover relief applications.

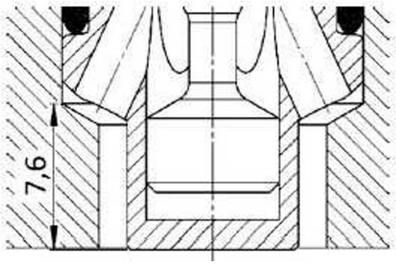
CROSS SECTION



CAVITY SAE10



DESIGN NOTE



The nose of the valve protrudes by 7,6 mm into ID 12 mm of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.001 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,170 kg

ORDERING CODE

R	V	S	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
7/8-14 UNF with Ø15,86 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	5-30	3
N	5-110	12
B	10-180	21
G	10-240	36
W	85-350	36

NOTE
Customized adjiusting knob can be selected see page 789

Specifications may change without notice.

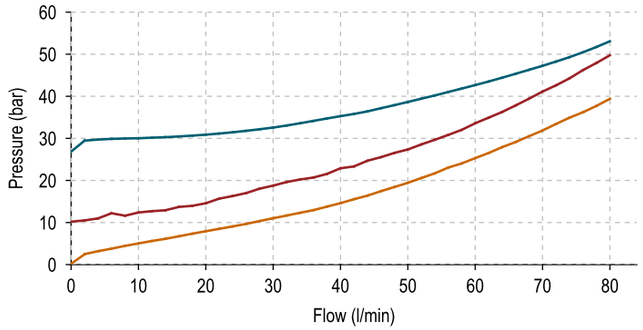
RVSO.S10 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

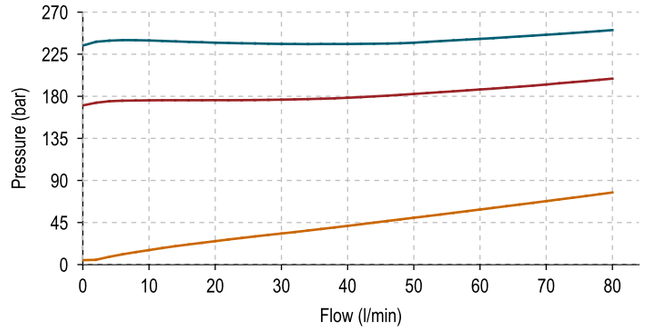
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

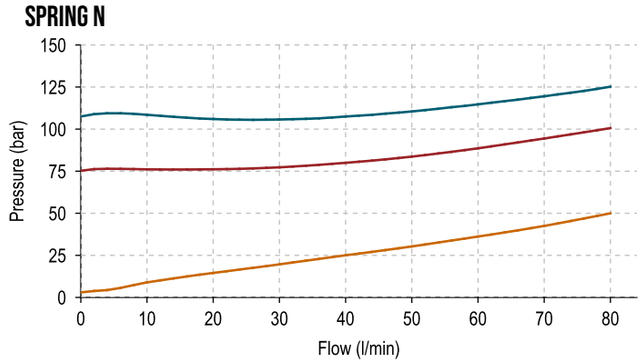
SPRING Y



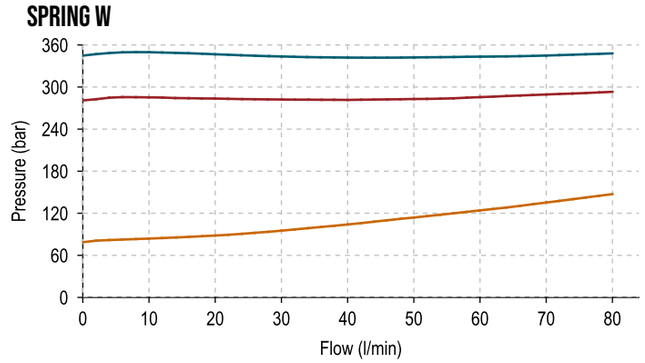
SPRING G



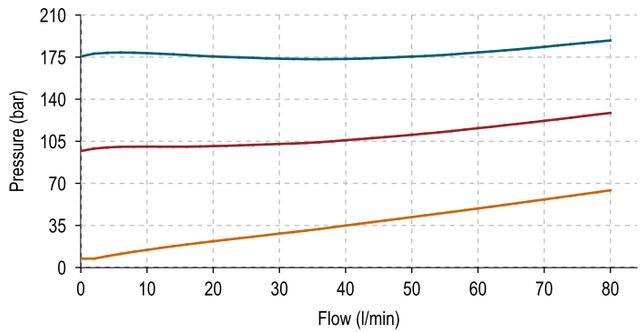
SPRING N



SPRING W



SPRING B

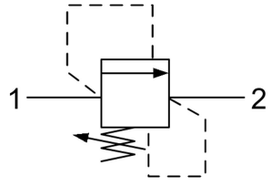


RVS0.M22 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type

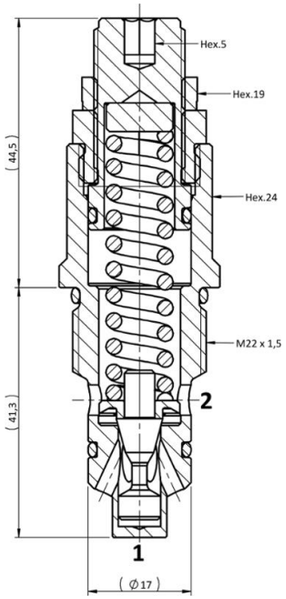
HYDRAULIC SYMBOL



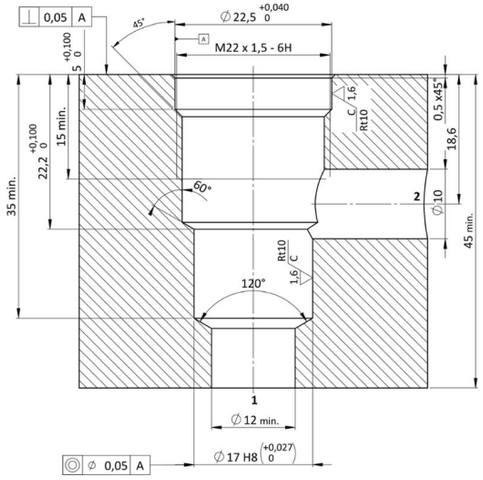
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVS0 in the standard configuration can be used in crossover relief applications.

CROSS SECTION



CAVITY
VH243



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.119 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,171 kg

ORDERING CODE

R	V	S	0	·	M	2	2	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M22x1,5 with Ø17 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	5-110	12
B	10-180	21
G	10-240	36
W	50-350	36

Specifications may change without notice.

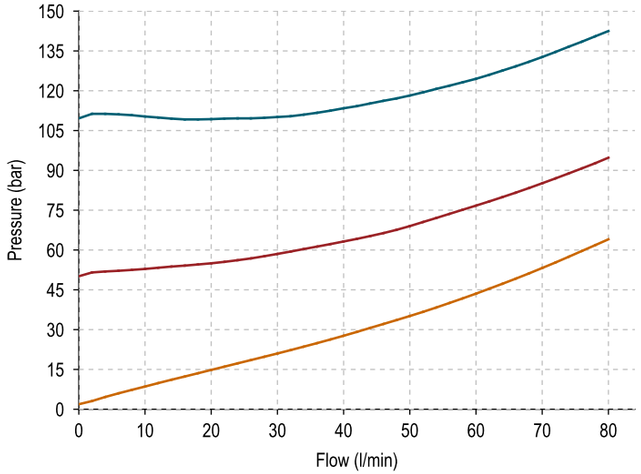
RVSO.M22 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

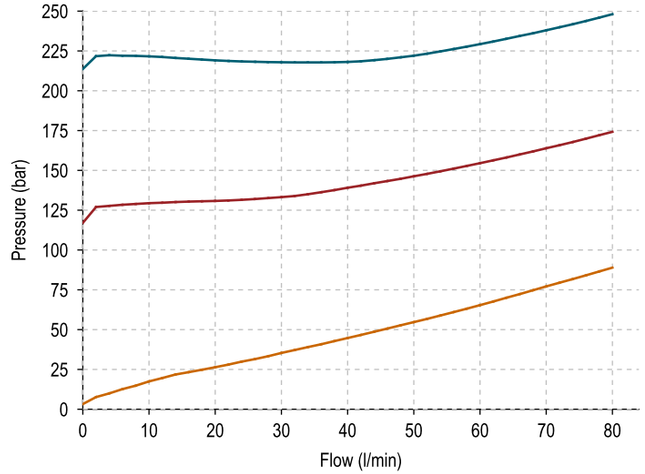
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

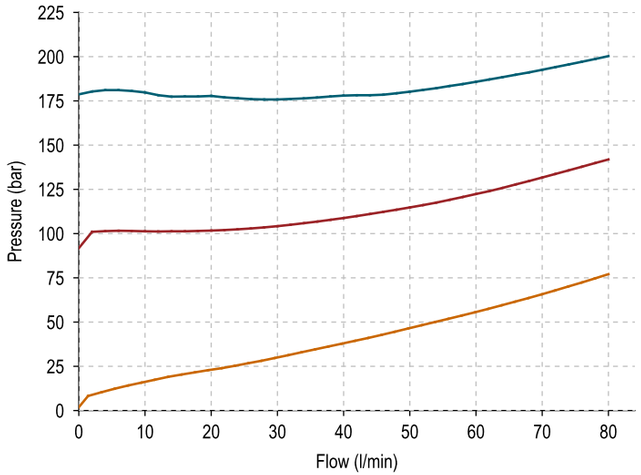
SPRING N



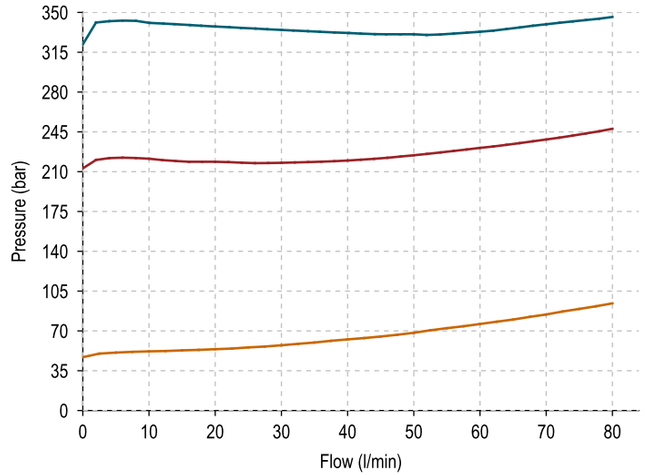
SPRING G



SPRING B



SPRING W

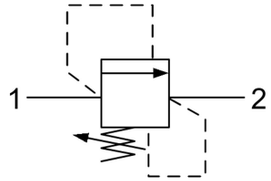


RVS0.M24 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type

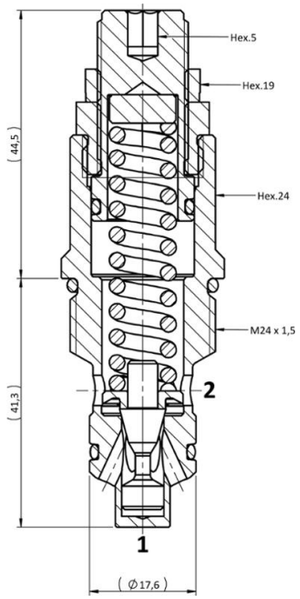
HYDRAULIC SYMBOL



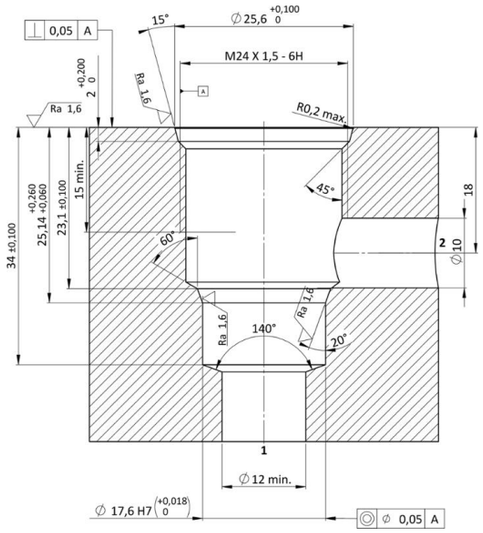
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. NOTE: the RVS0 in the standard configuration can be used in crossover relief applications.

CROSS SECTION



CAVITY VH244



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.120 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,175 kg

ORDERING CODE

R	V	S	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M24x1,5 with Ø17,6 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	5-110	12
B	10-180	21
G	10-240	36
W	50-350	36

Specifications may change without notice.

Rev. 1

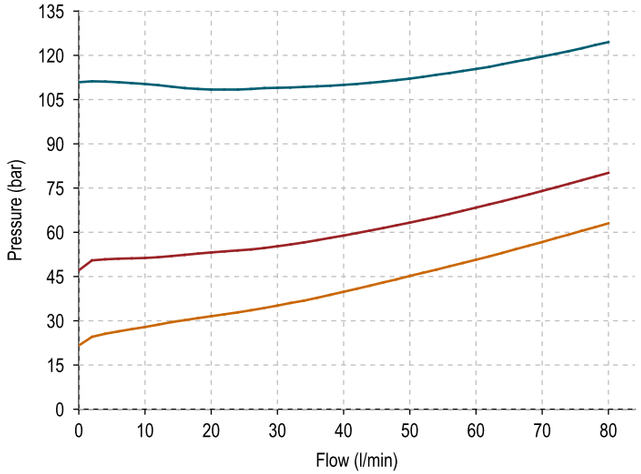
RVSO.M24 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

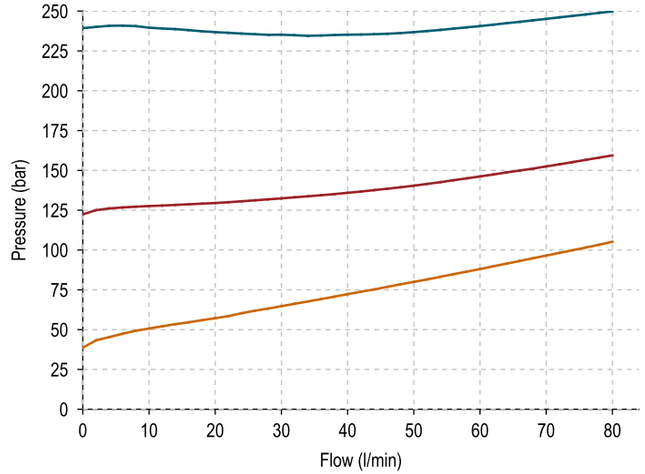
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

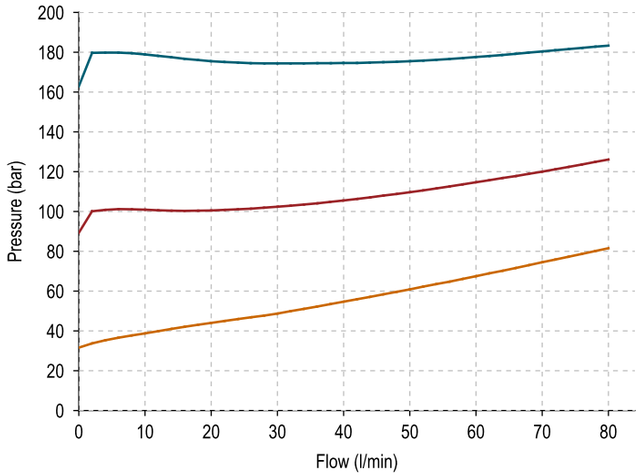
SPRING N



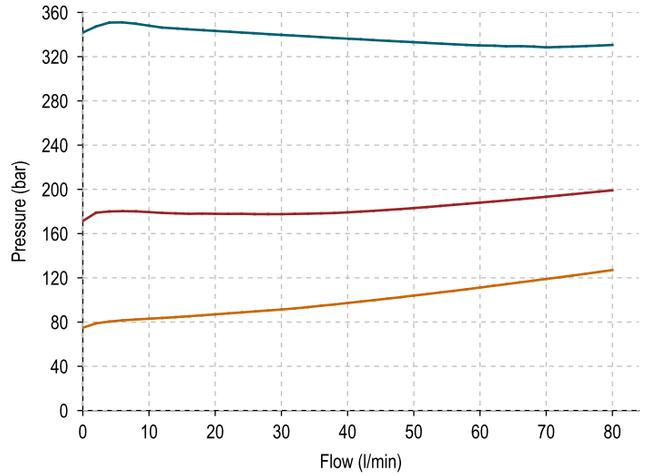
SPRING G



SPRING B



SPRING W

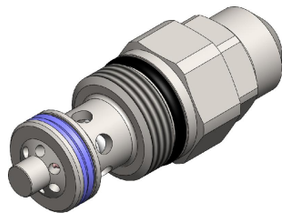


Rev. 1

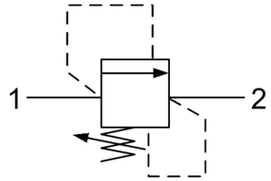
RVS4.M30 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Poppet type



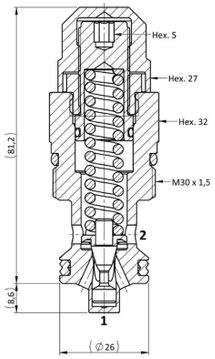
HYDRAULIC SYMBOL



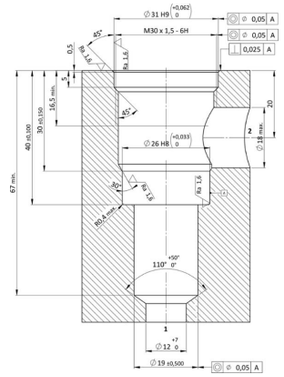
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



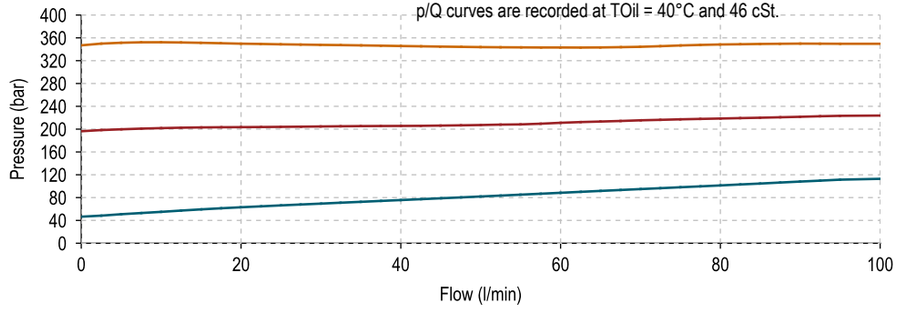
CAVITY VH065



PERFORMANCE DETAILS

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	100 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.32
NUT TINGHTENING TORQUE	25-30 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.051 (standard sealing NBR-BUNA-N)
WEIGHT	0,307 kg

ORDERING CODE

R	V	S	4	·	M	3	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M30x1,5 with Ø26 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
W	50-350	36

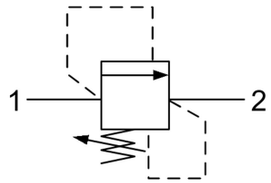
Specifications may change without notice.

RVDO.M20 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type

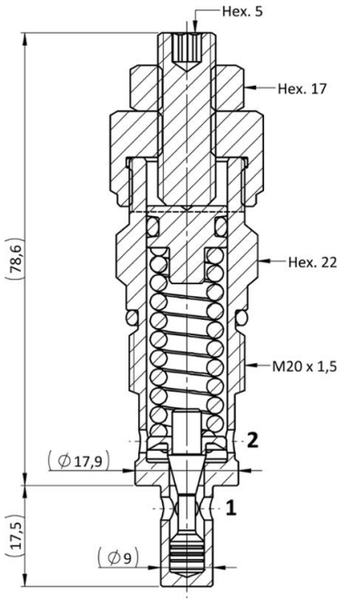
HYDRAULIC SYMBOL



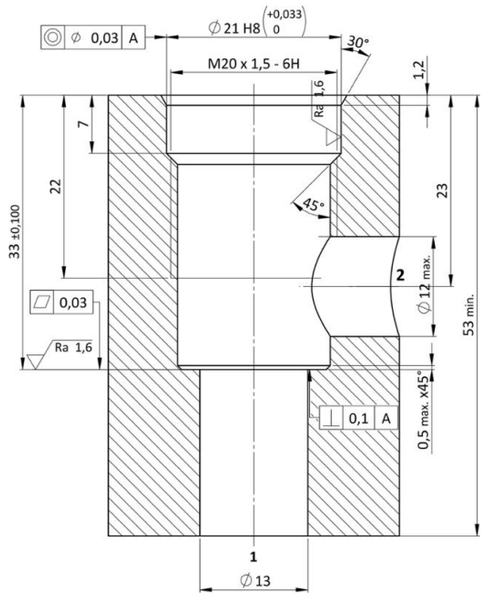
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



CAVITY
VH043



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	30 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 85% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.22
NUT TINGHTENING TORQUE	20-25 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.020 (standard sealing NBR-BUNA-N)
WEIGHT	0,145 kg

ORDERING CODE

R	V	D	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M20x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	5-55	14
N	25-110	24
B	50-215	48
G	100-350	89
V	100-420	106

Specifications may change without notice.

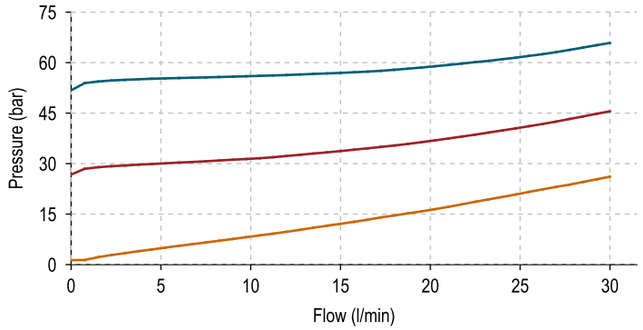
RVDO.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

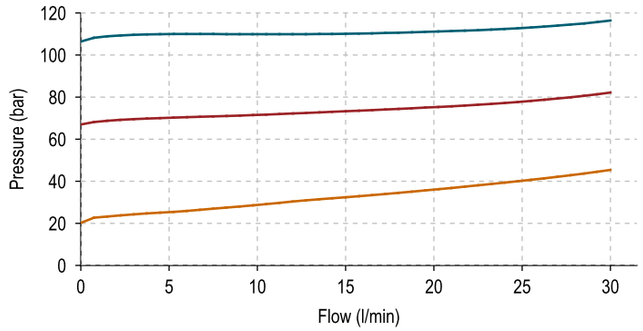
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

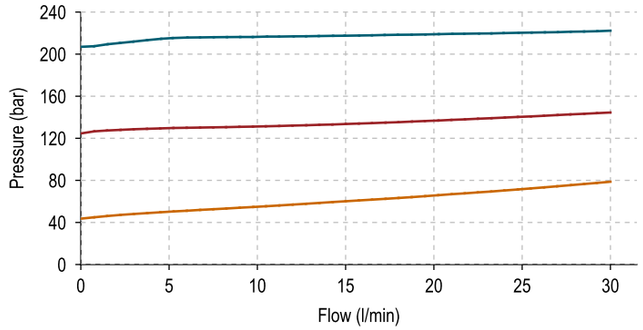
SPRING Y



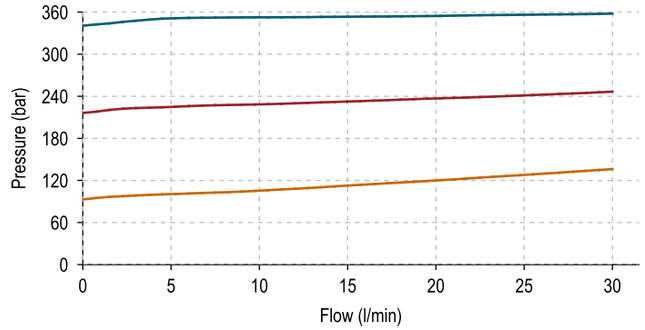
SPRING N



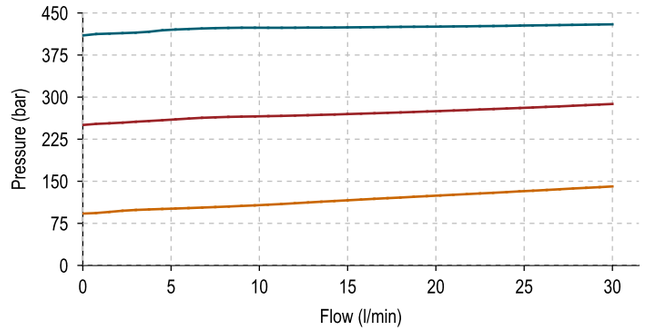
SPRING B



SPRING G



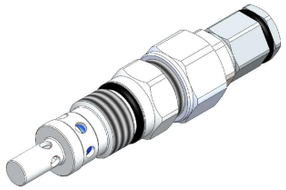
SPRING V



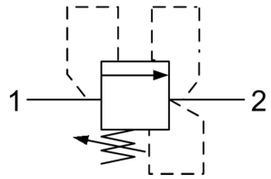
RVDC.M20 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type



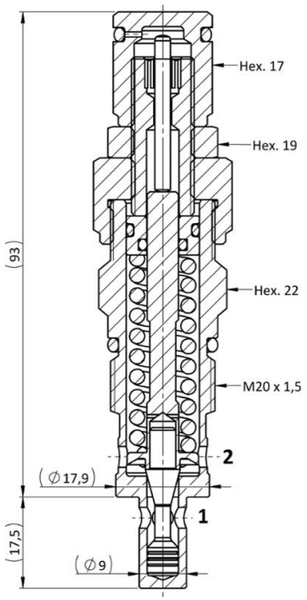
HYDRAULIC SYMBOL



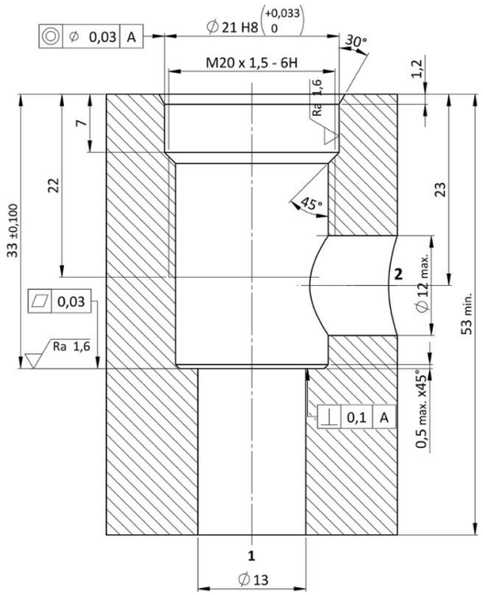
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



CAVITY
VH043



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	30 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 85% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-50 Nm Hex.22
NUT TINGHTENING TORQUE	20-25 Nm Hex.19
BLIND NUT TINGHTENING TORQUE	18-22 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.106 (standard sealing NBR-BUNA-N)
WEIGHT	0,210 kg

ORDERING CODE

R	V	D	C	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M20x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	5-55	9
N	56-110	16
B	111-215	37
G	216-350	65
V	351-420	75

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

Rev. 1

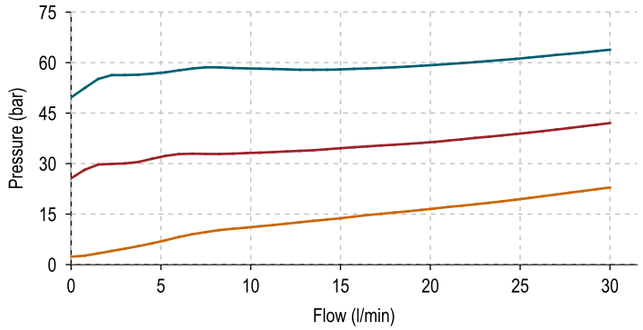
RVDC.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

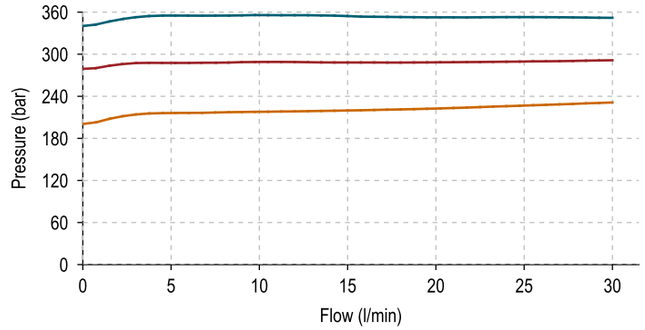
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

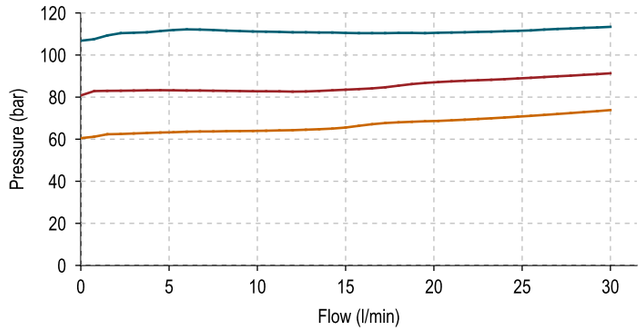
SPRING Y



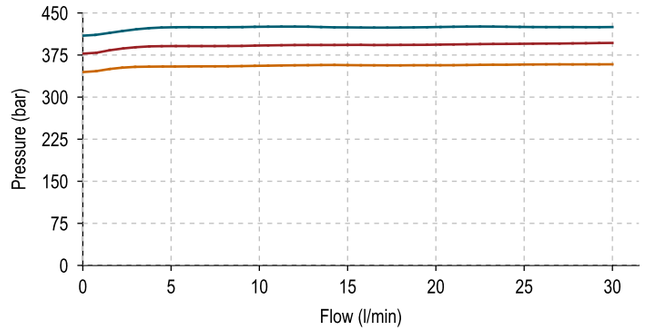
SPRING G



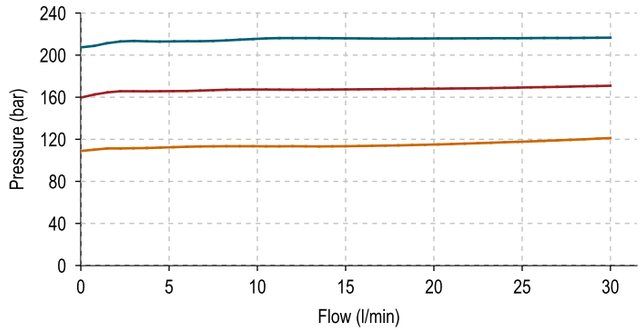
SPRING N



SPRING V



SPRING B

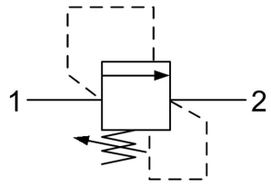


RVDO.M22 VALVE SERIES

METRIC Cartridge - 420 bar

Direct acting - Poppet type

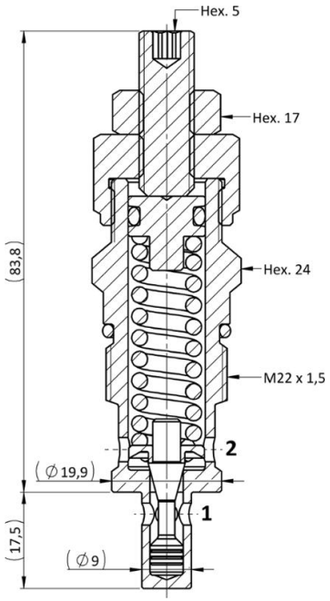
HYDRAULIC SYMBOL



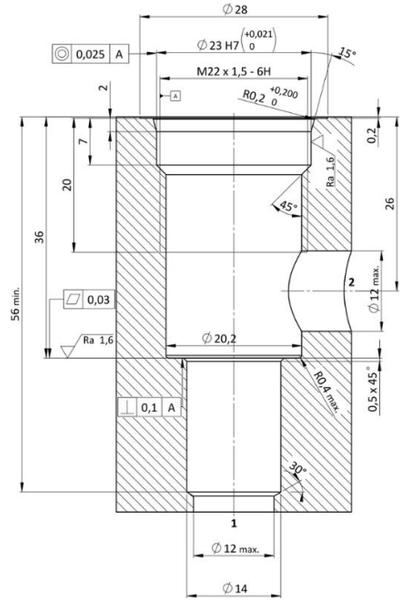
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



CAVITY
VH162



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	35 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 85% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
NUT TINGHTENING TORQUE	20-25 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.089 (standard sealing NBR-BUNA-N)
WEIGHT	0,192 kg

ORDERING CODE

R	V	D	0	·	M	2	2	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M22x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	5-55	9
N	25-110	16
B	50-215	32
G	100-350	59
V	100-420	71

Specifications may change without notice.

Rev. 1

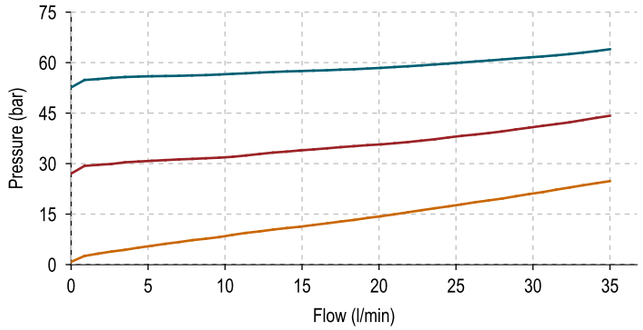
RVDO.M22 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

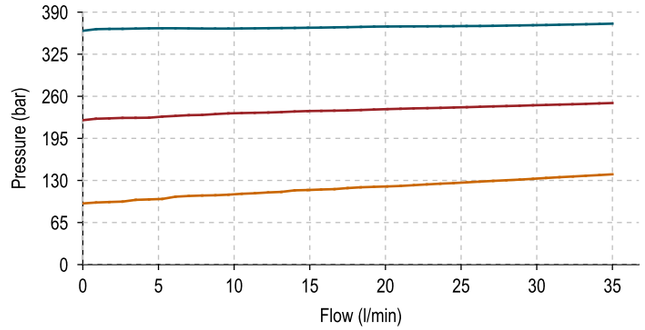
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

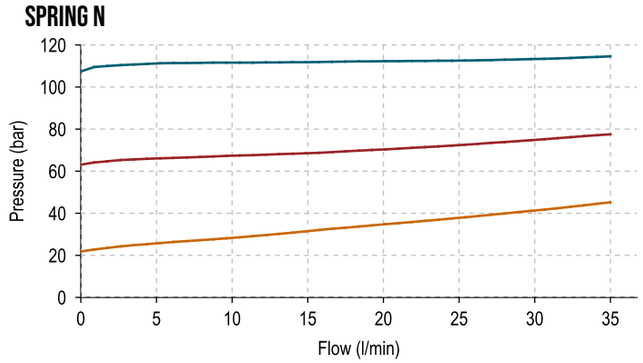
SPRING Y



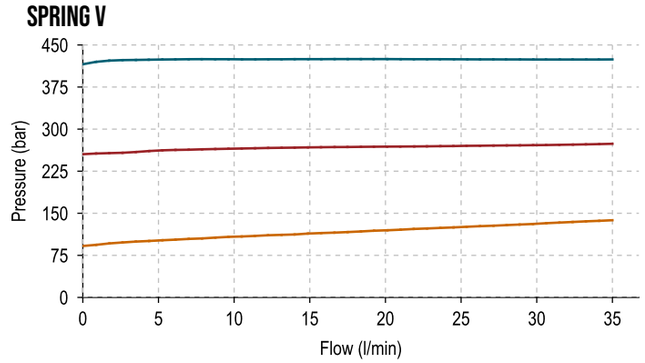
SPRING G



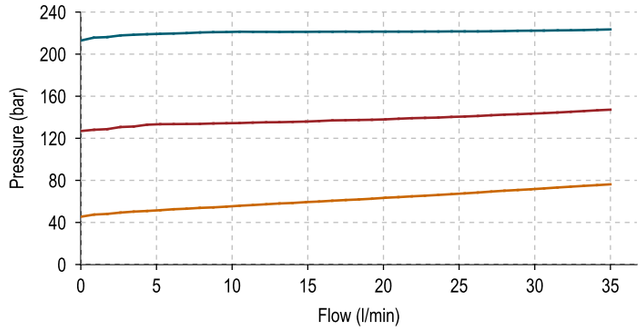
SPRING N



SPRING V



SPRING B

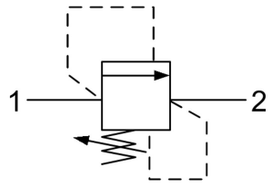


RVDO.M26 VALVE SERIES

METRIC Cartridge - 250 bar

Direct acting - Poppet type

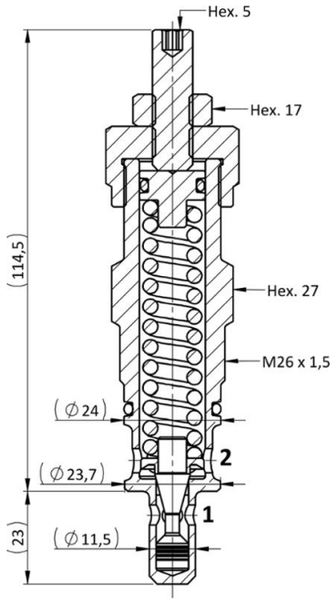
HYDRAULIC SYMBOL



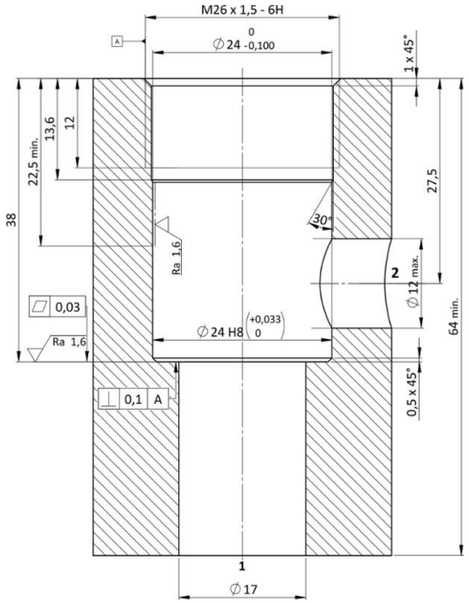
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, normally closed hydraulic relief valve. It's typically used to protect hydraulic components from pressure transients. When the pressure at the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) throttling flow to minimize the pressure rise. The innovative geometry of the deflector provides in fact a very low rise rate, and the poppet design guarantees great stability. The cartridge offers quick response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



CAVITY VH101



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	80 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 85% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	75-80 Nm Hex.27
NUT TINGHTENING TORQUE	20-25 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.022 (standard sealing NBR-BUNA-N)
WEIGHT	0,350 kg

ORDERING CODE

R	V	D	0	·	M	2	6	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M26x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	5-55	4
N	25-110	8
B	75-250	20

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

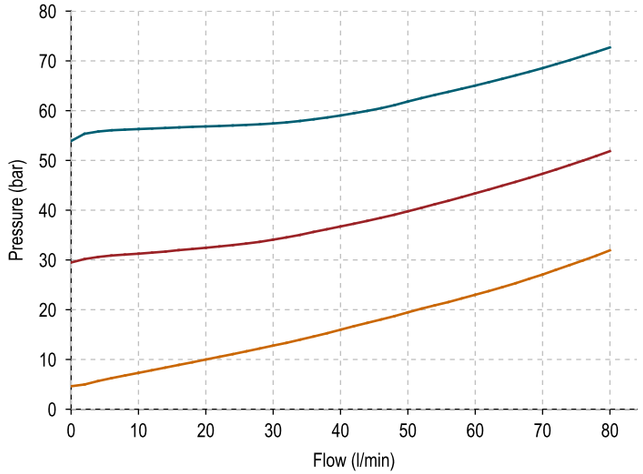
RVDO.M26 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

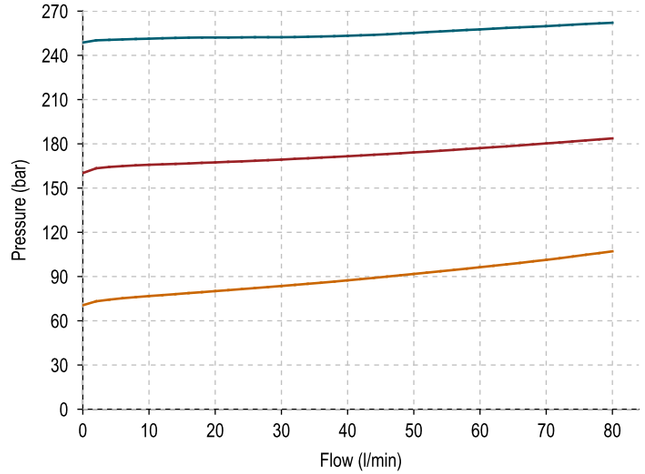
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

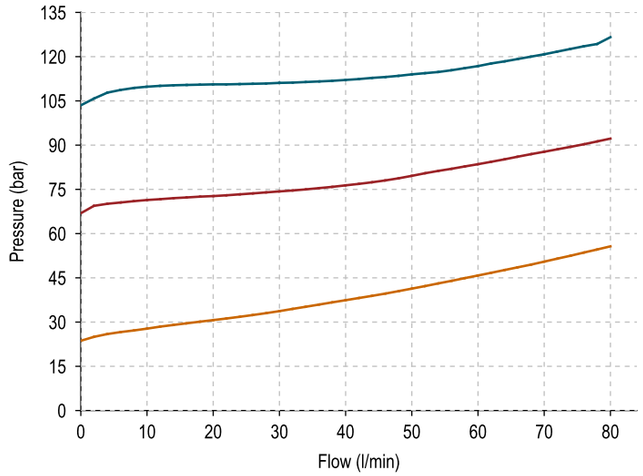
SPRING Y



SPRING B



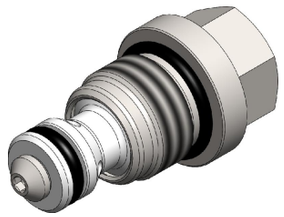
SPRING N



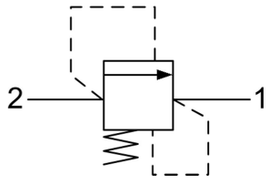
IRVO.M16 VALVE SERIES

METRIC Insert - 350 bar

Direct acting - Poppet type



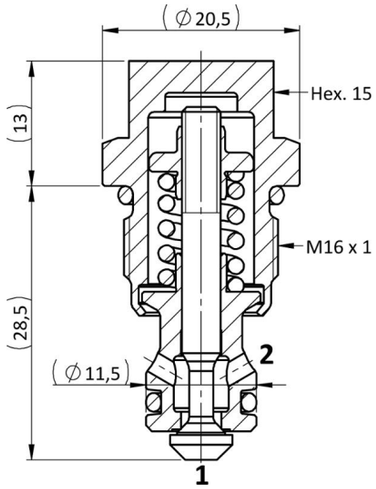
HYDRAULIC SYMBOL



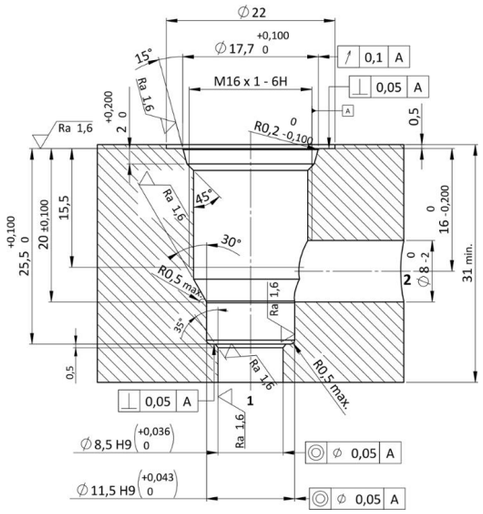
DESCRIPTION

The IRV valve provides in one compact insert cartridge the typical function of shock relief valve, side-in nose-exhaust. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked. High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal leakage.

CROSS SECTION



CAVITY
VH004



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.15
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.011 (standard sealing NBR-BUNA-N)
WEIGHT	0,040 kg

ORDERING CODE

I	R	V	0	·	M	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M16x1 with Ø11,5 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	10-50
B	51-100
G	101-150
V	151-250
W	251-350

Specifications may change without notice.

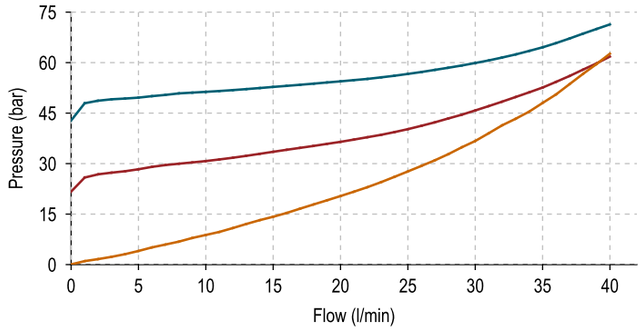
IRVO.M16 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

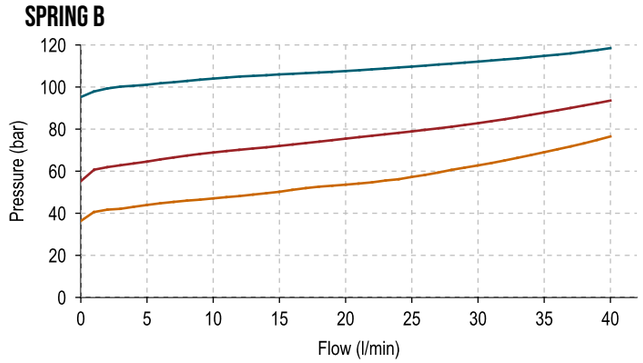
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

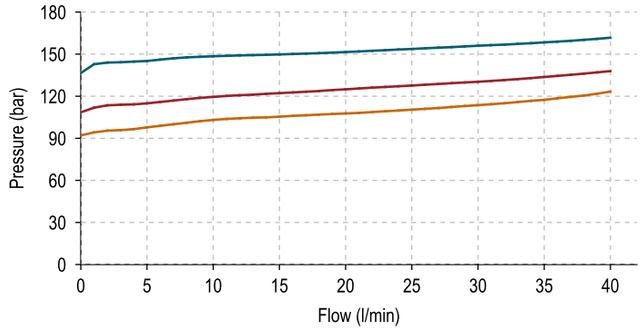
SPRING N



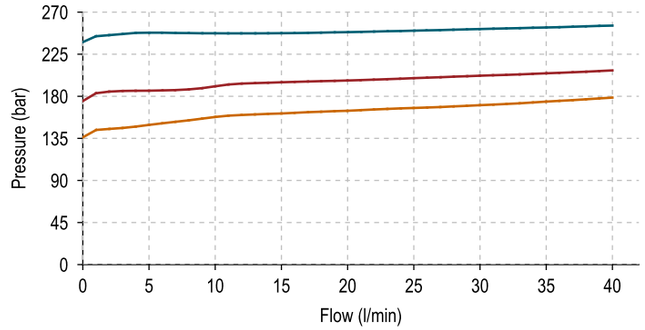
SPRING B



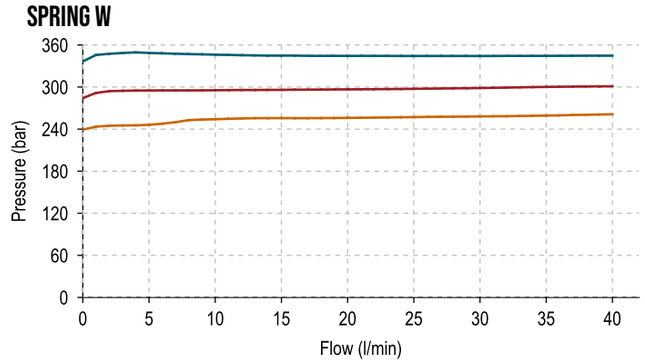
SPRING G



SPRING V



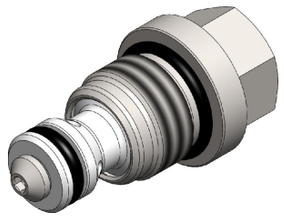
SPRING W



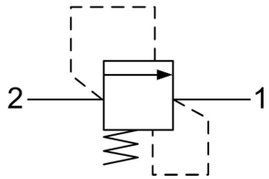
IRVO.M18 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type



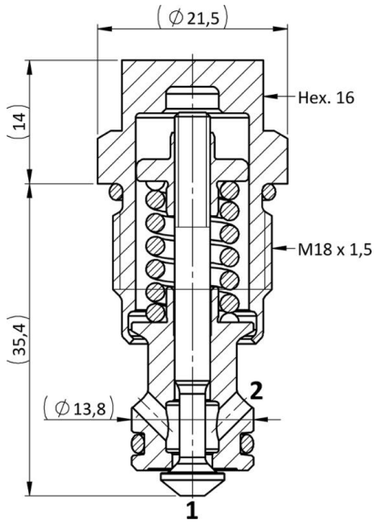
HYDRAULIC SYMBOL



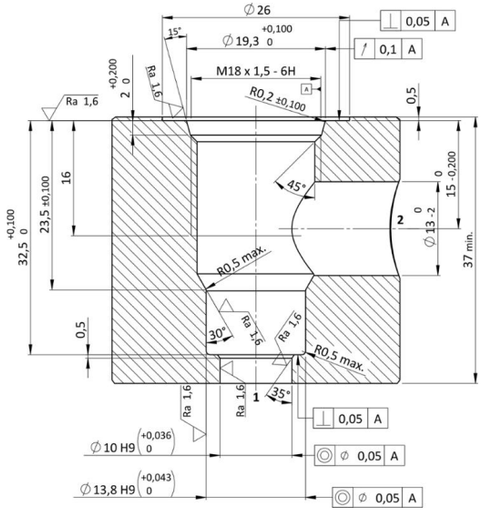
DESCRIPTION

The IRV valve provides in one compact insert cartridge the typical function of shock relief valve, side-in nose-exhaust. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked. High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal leakage.

CROSS SECTION



CAVITY
VH002



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.16
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.006 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

I	R	V	0	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M18x1,5 with Ø13,8 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-70
B	71-130
G	131-210
V	211-280
W	281-350
R	351-420

Specifications may change without notice.

Rev. 1

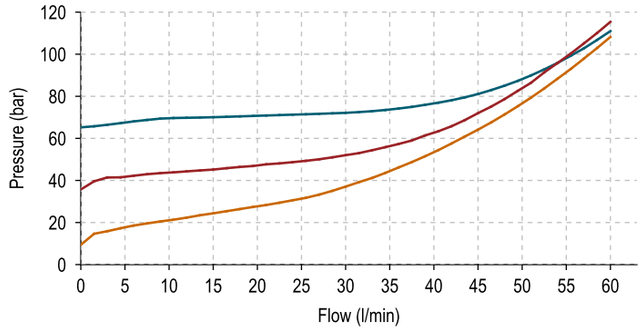
IRVO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

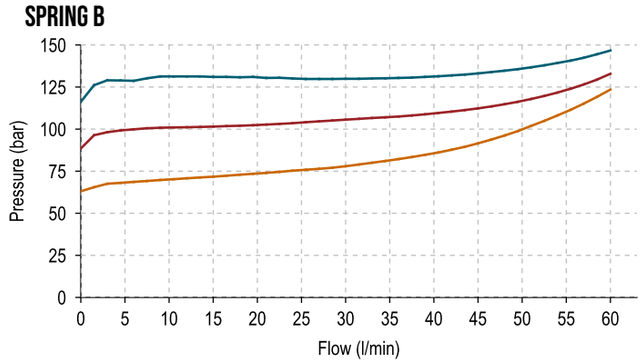
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

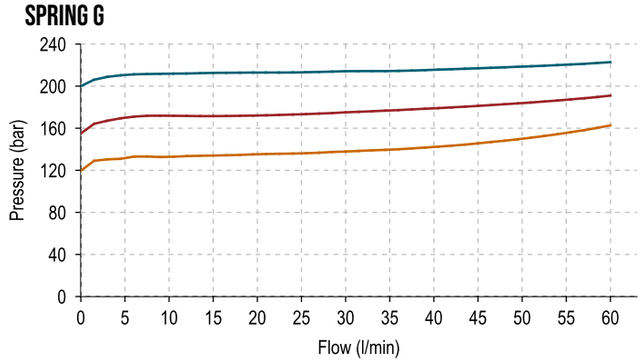
SPRING N



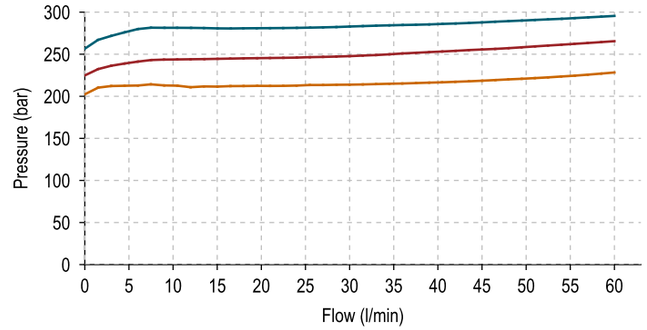
SPRING B



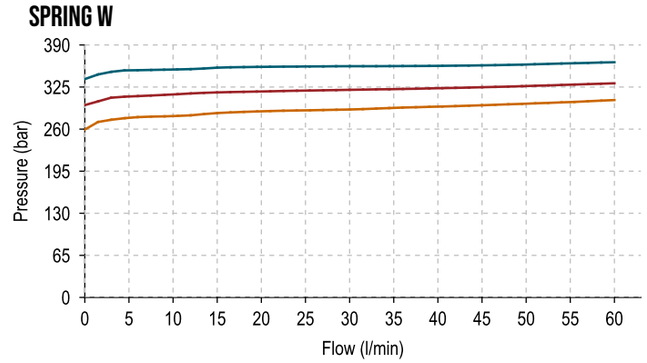
SPRING G



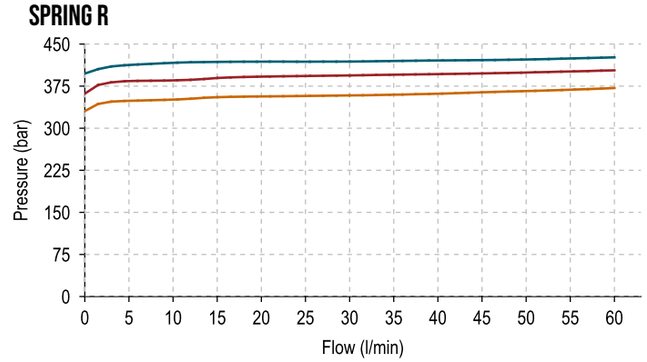
SPRING V



SPRING W



SPRING R

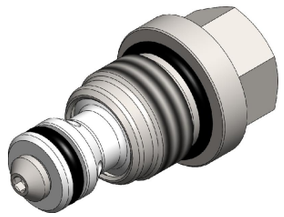


Rev. 1

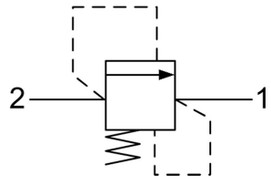
IRV0.M20 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type



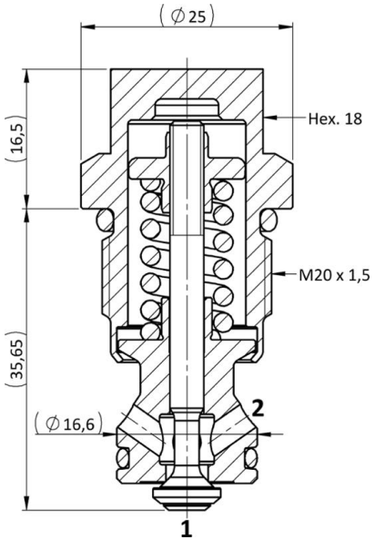
HYDRAULIC SYMBOL



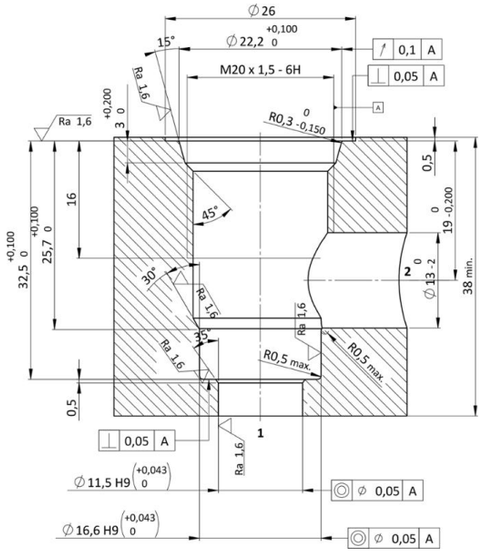
DESCRIPTION

The IRV valve provides in one compact insert cartridge the typical function of shock relief valve, side-in nose-exhaust. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked. High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal leakage.

CROSS SECTION



CAVITY VH003



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.18
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.012 (standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg

ORDERING CODE

I	R	V	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M20x1,5 with Ø16,6 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-170
G	171-250
V	251-350
W	351-420

Specifications may change without notice.

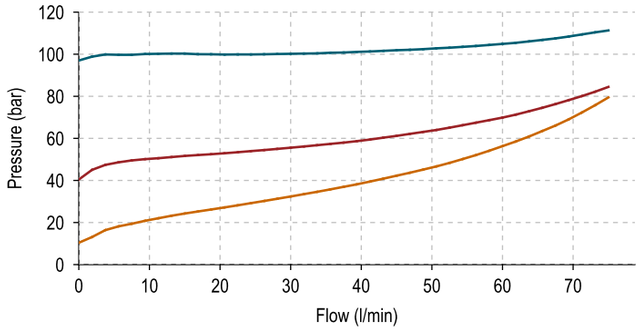
IRV0.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

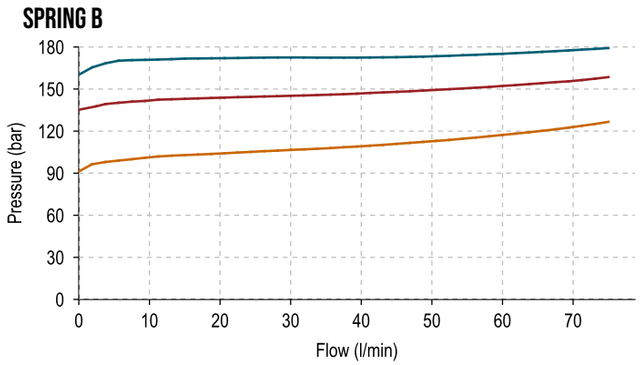
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

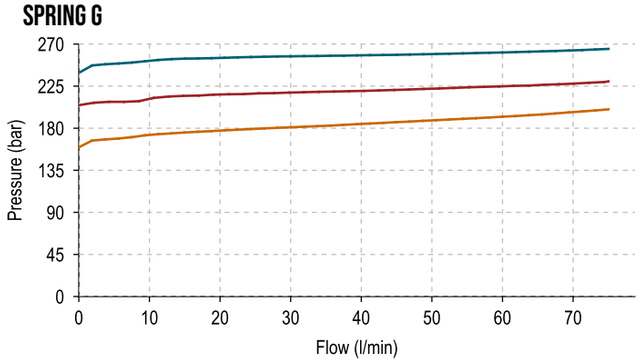
SPRING N



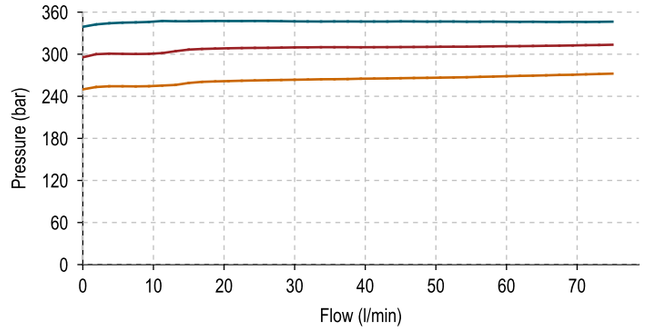
SPRING B



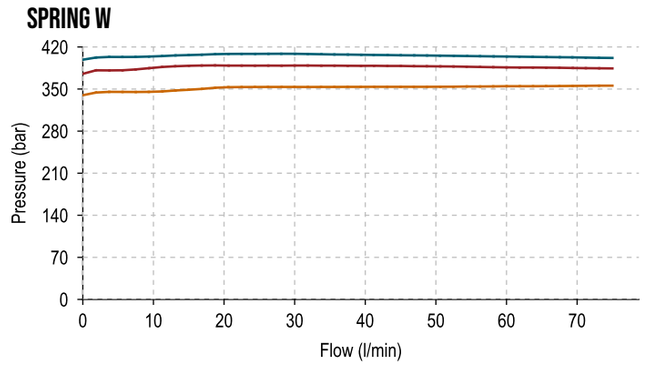
SPRING G



SPRING V



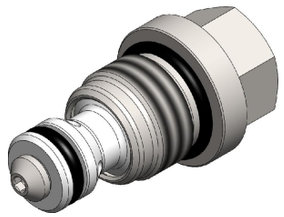
SPRING W



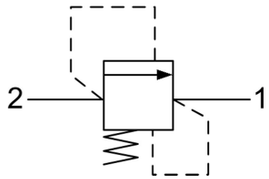
IRV0.M24 VALVE SERIES

METRIC Insert - 400 bar

Direct acting - Poppet type



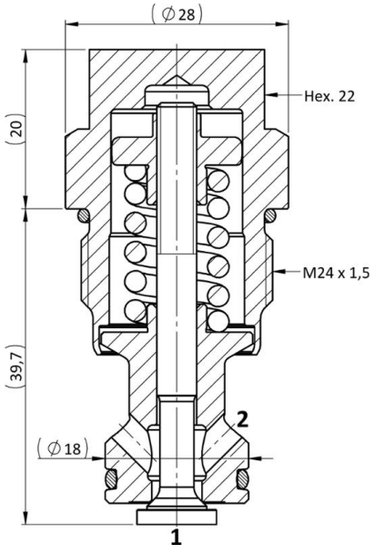
HYDRAULIC SYMBOL



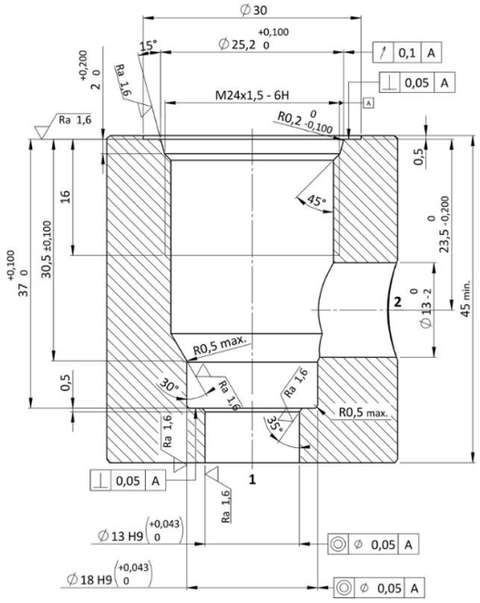
DESCRIPTION

The IRV valve provides in one compact insert cartridge the typical function of shock relief valve, side-in nose-exhaust. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked. High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal leakage.

CROSS SECTION



CAVITY VH005



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	100 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.010 (standard sealing NBR-BUNA-N)
WEIGHT	0,140 kg

ORDERING CODE

I	R	V	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M24x1,5 with Ø18 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	30-90
B	91-170
G	171-245
V	246-320
W	321-400

Specifications may change without notice.

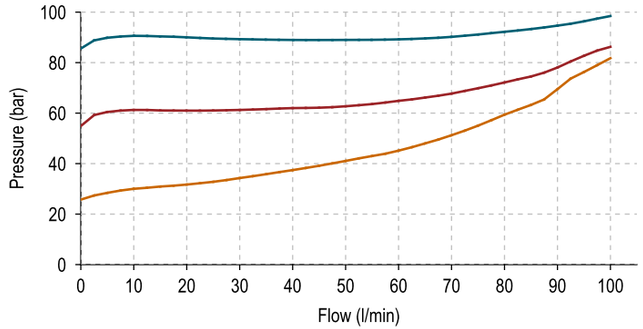
IRVO.M24 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

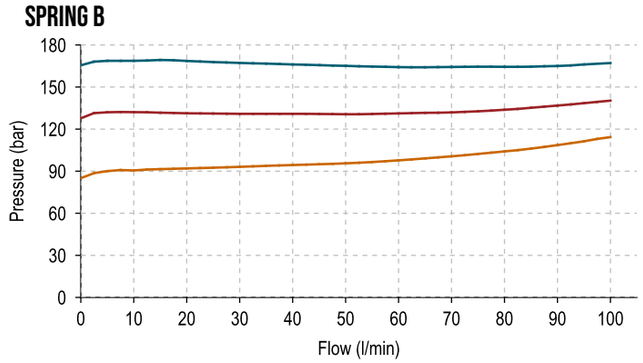
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

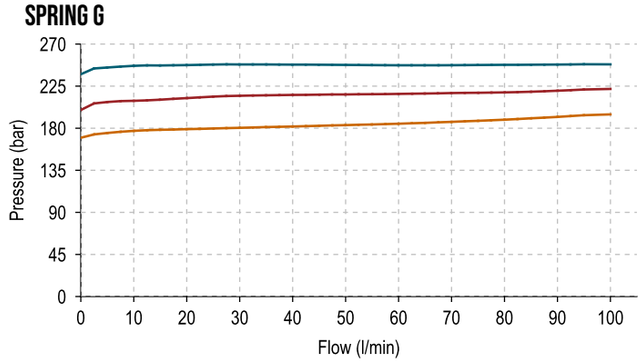
SPRING N



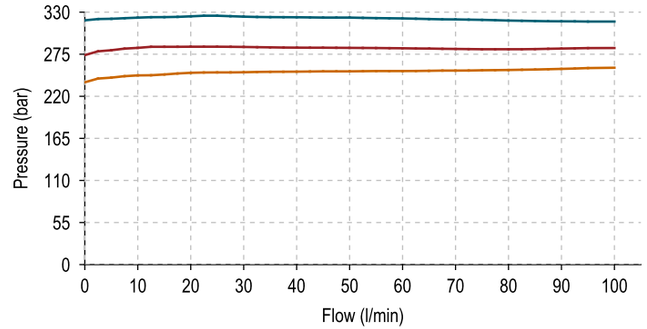
SPRING B



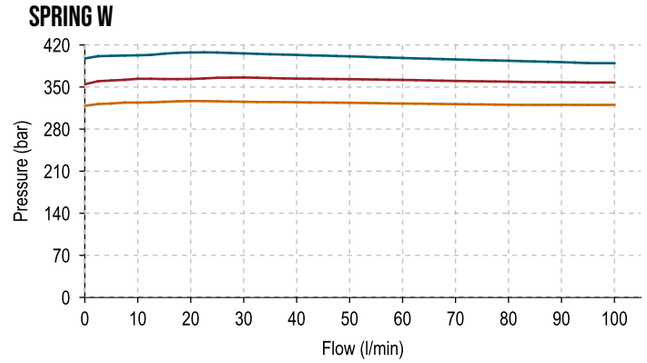
SPRING G



SPRING V



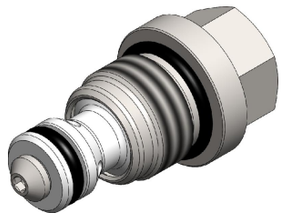
SPRING W



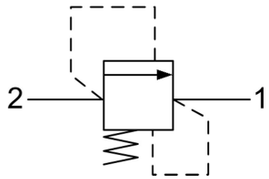
IRV0.M27 VALVE SERIES

METRIC Insert - 400 bar

Direct acting - Poppet type



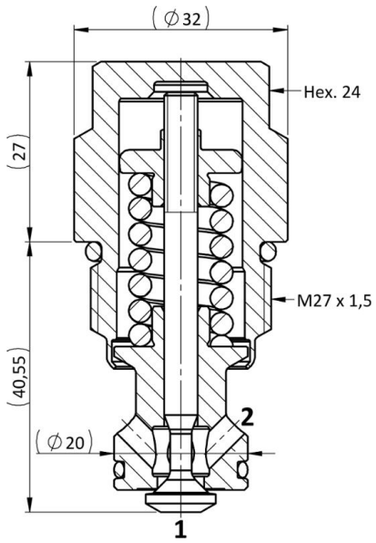
HYDRAULIC SYMBOL



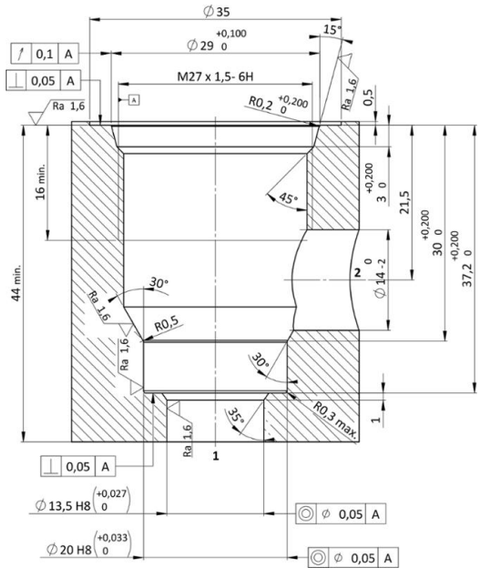
DESCRIPTION

The IRV valve provides in one compact insert cartridge the typical function of shock relief valve, side-in nose-exhaust. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked. High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal leakage.

CROSS SECTION



CAVITY
VH054



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	150 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	3 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70-80 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.021 (standard sealing NBR-BUNA-N)
WEIGHT	0,200 kg

ORDERING CODE

I	R	V	0	·	M	2	7	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M27x1,5 with Ø20 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-180
G	181-250
V	251-320
W	321-400

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

Rev. 1

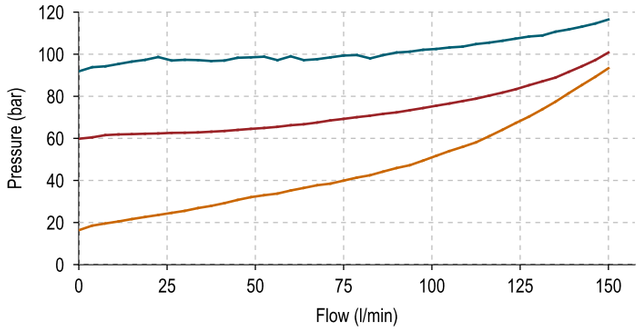
IRVO.M27 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

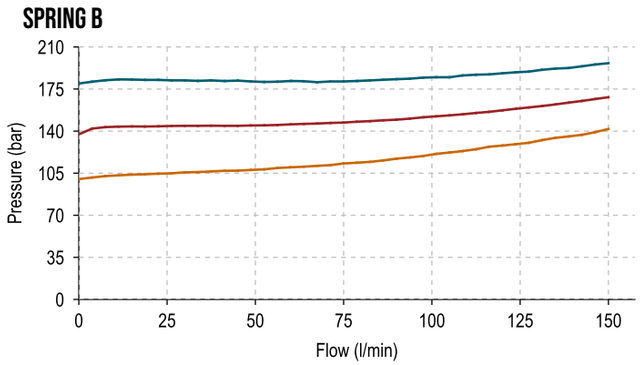
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

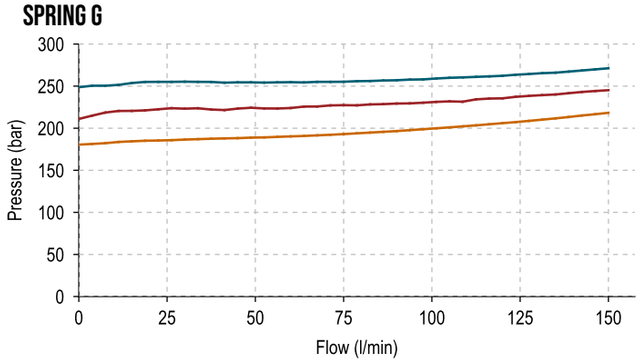
SPRING N



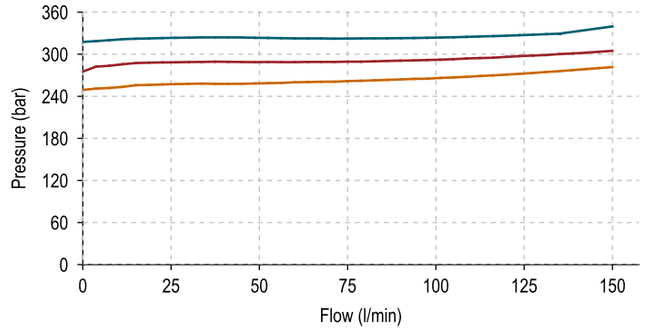
SPRING B



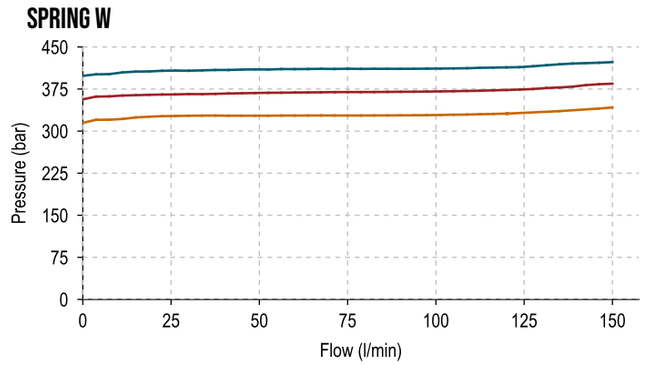
SPRING G



SPRING V



SPRING W

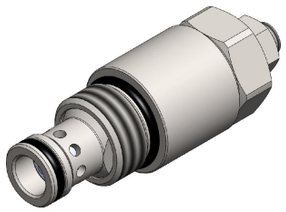


Rev. 1

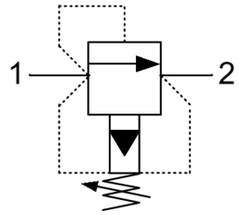
RVQ0.S10 VALVE SERIES

SAE10 Cartridge - 420 bar

Pilot Operated - Spool Type



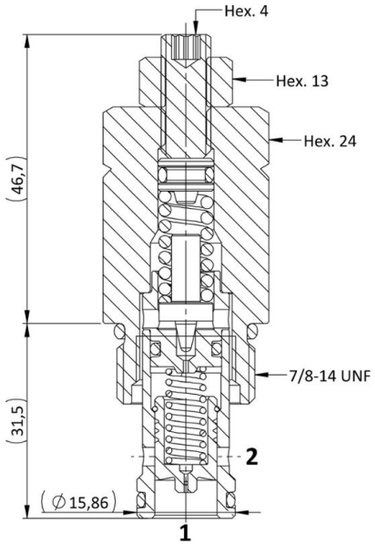
HYDRAULIC SYMBOL



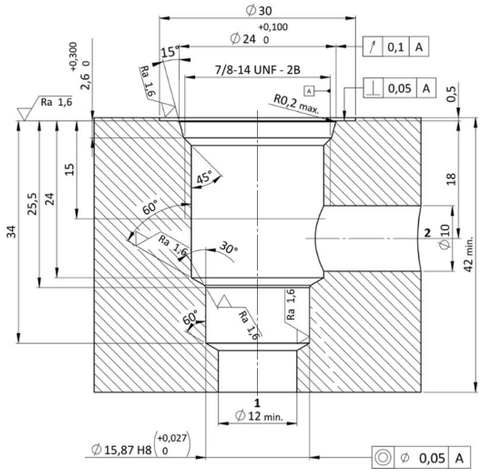
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), spool type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet (spool type) that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Fast, smooth response and limited hysteresis.

CROSS SECTION



CAVITY
SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	120 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	see table below
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	10-13 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.001 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.003
WEIGHT	0,165 kg

ORDERING CODE

R	V	Q	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
7/8-14 UNF with
Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Maximum internal leakage [cm³/min]	Pressure setting range [bar]	Pressure increment per turn adjusting ratio [bar/turn]
Y	100	20-280	80
N	100	141-280	130
B	200	281-420	160

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

Rev. 1

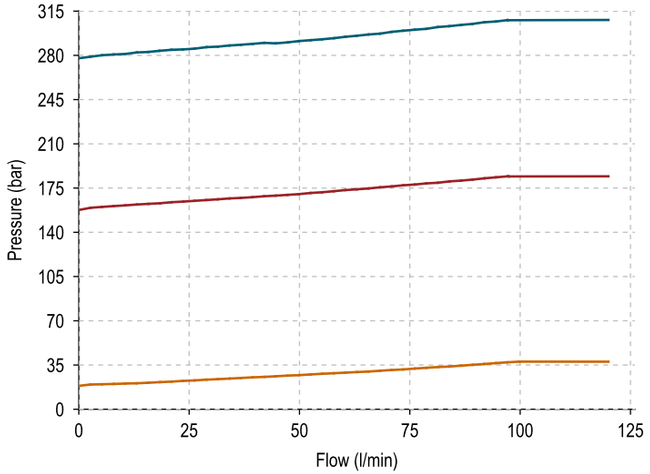
RVQO.S10 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

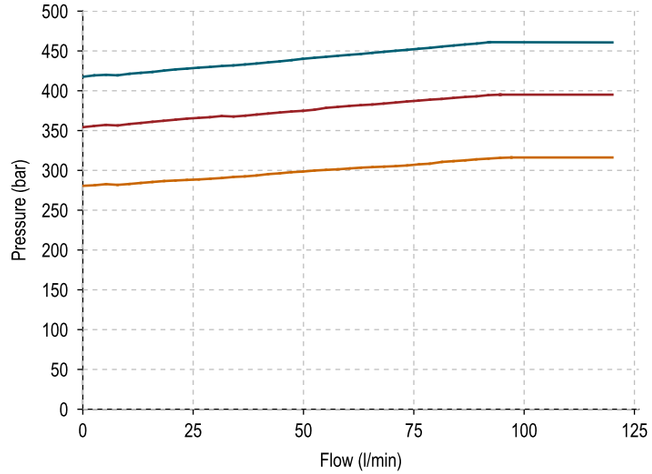
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

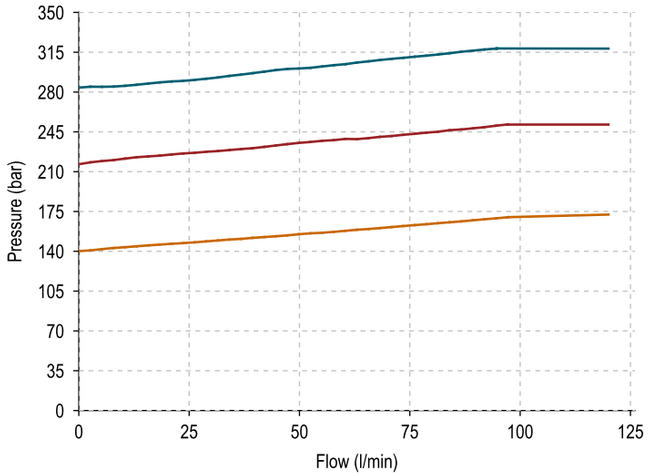
SPRING Y



SPRING B



SPRING N



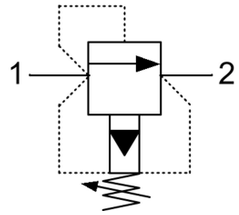
RVQ0.M20 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated -Spool Type

Special cavity

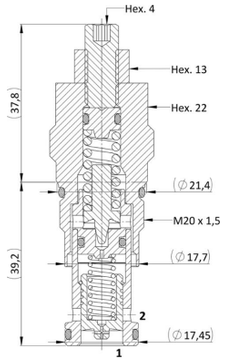
HYDRAULIC SYMBOL



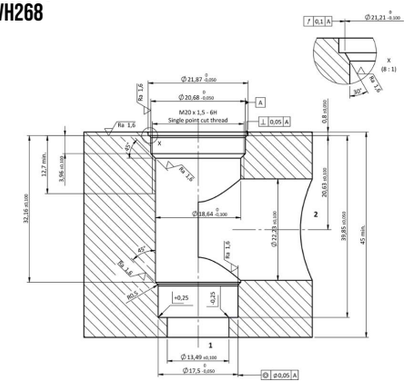
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), spool type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet (spool type) that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Fast, smooth response and limited hysteresis. Suitaible for SUN's cavity T10A.

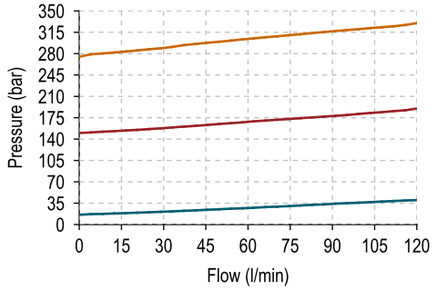
CROSS SECTION

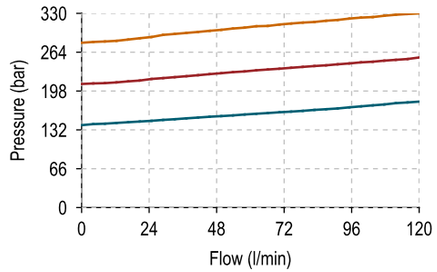


CAVITY VH268



PERFORMANCE DETAILS





Min nom. sett. pressure
Mean nom. sett. pressure
Max nom. sett. pressure

Min nom. sett. pressure
Mean nom. sett. pressure
Max nom. sett. pressure

NOTE

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	120 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	see table below
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	58-62 Nm Hex.22
NUT TINGHTENING TORQUE	10-13 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cst
SEAL KIT CODE	SK.053 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.003
WEIGHT	0,141 kg

ORDERING CODE

R	V	Q	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

1 = Pressure adjustment with hex allen head. 2 = Pressure adjusment with plastic knob

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]

000 = No specific setting required

SIZE

METRIC M20x1,5 with Ø17,5 nose size - Special Cavity VH268

BIAS SPRING OPTIONS

Spring model code	Maximum internal leakage [cm³/min]	Pressure setting range [bar]	Pressure increment per turn adjusting ratio [bar/turn]
Y	100	20-280	80
N	100	141-280	130
B	200	281-420	160

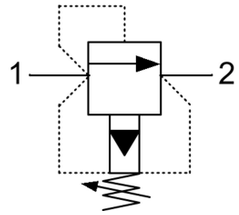
Specifications may change without notice.

RVQA.S10 VALVE SERIES

SAE10 Cartridge - 420 bar

Pilot Operated - Spool Type

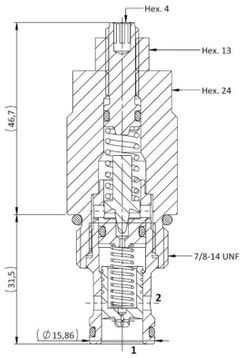
HYDRAULIC SYMBOL



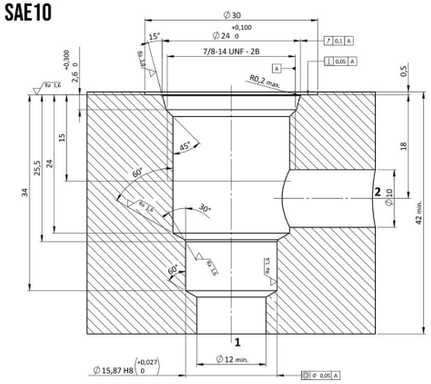
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), spool type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet (spool type) that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Fast, smooth response and limited hysteresis.

CROSS SECTION



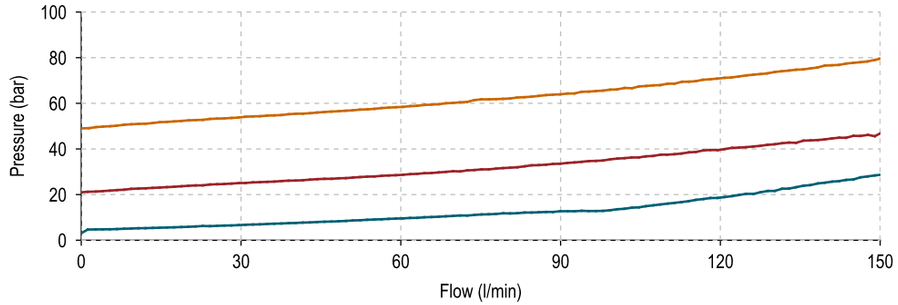
CAVITY SAE10



PERFORMANCE DETAILS

NOTE

The performance chart illustrates flow handling capacity at various settings. p/Q curves are recorded at TOil = 40°C and 46 cSt



Minimum nominal setting pressure — Maximum nominal setting pressure

Mean nominal setting pressure

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	150 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	see table below
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 80% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	10-13 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.186 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.003
WEIGHT	0,197 kg

ORDERING CODE

R	V	Q	A	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

The performance chart illustrates flow handling capacity at various settings. p/Q curves are recorded at TOil = 40°C and 46 cSt

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request

BIAS SPRING OPTIONS

Spring model code	Maximum internal leakage [cm³/min]	Pressure setting range [bar]	Pressure increment per turn adjusting ratio [bar/turn]
S	150	5-50	18

SETTING PRESSURE IN [BAR]

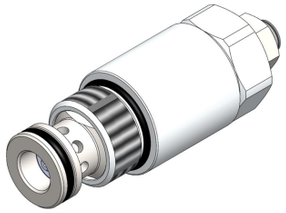
000 = No specific setting required

Specifications may change without notice.

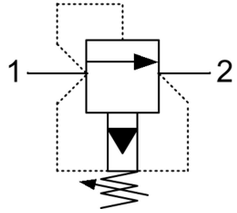
RVQO.M22 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated -Spool Type



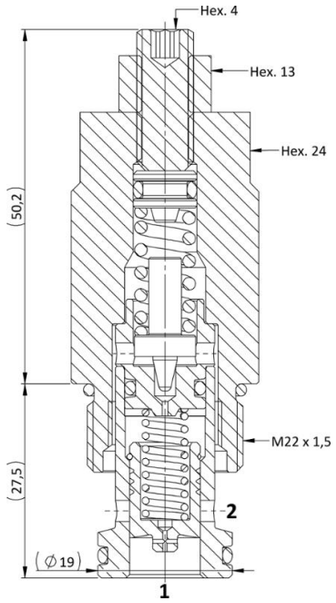
HYDRAULIC SYMBOL



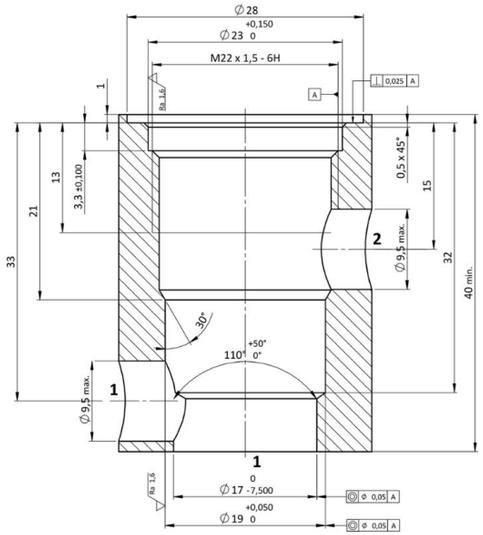
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), spool type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet (spool type) that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Fast, smooth response and limited hysteresis.

CROSS SECTION



CAVITY
VH045



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	120 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	see table below
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	10-13 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.052 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.003
WEIGHT	0,207 kg

ORDERING CODE

R	V	Q	0	·	M	2	2	·	0	*	·	0	0	0

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M22x1,5 with Ø19 nose sizes

BIAS SPRING OPTIONS

Spring model code	Maximum internal leakage [cm³/min]	Pressure setting range [bar]	Pressure increment per turn adjusting ratio [bar/turn]
Y	100	20-280	80
N	100	141-280	130
B	200	281-420	160

Specifications may change without notice.

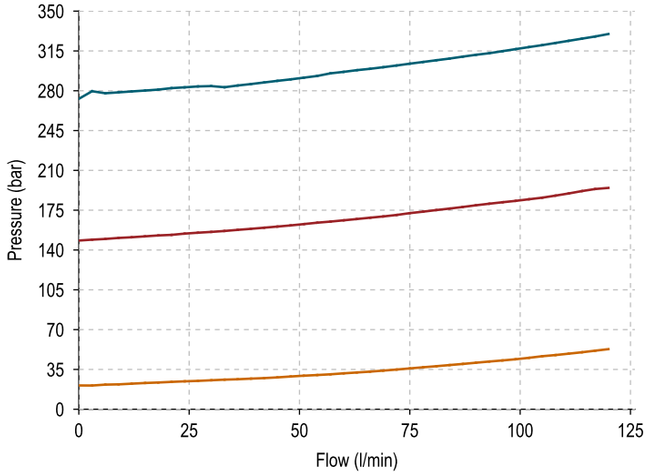
Rev. 1

RVQO.M22 SPRINGS' GRAPHS

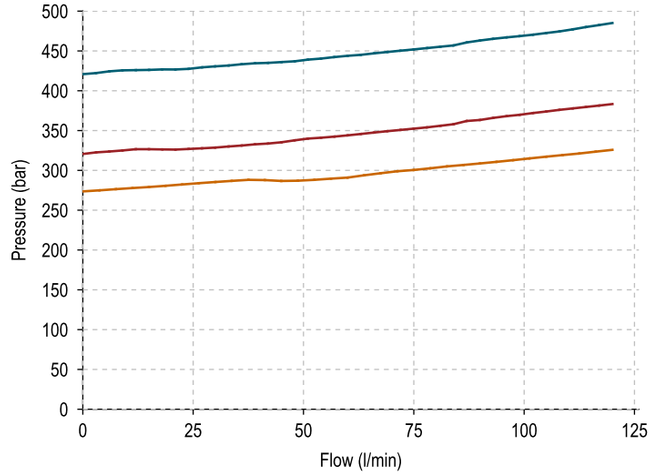
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

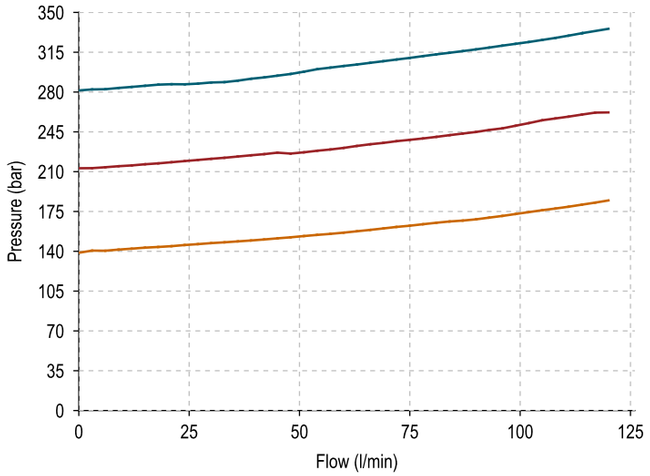
SPRING Y



SPRING B



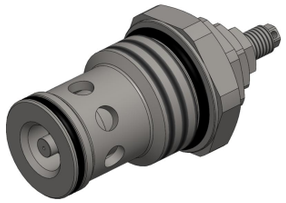
SPRING N



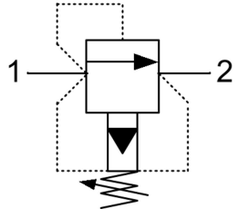
RVRO.S16 VALVE SERIES

SAE16 Cartridge - 300 bar

Pilot Operated - Poppet type



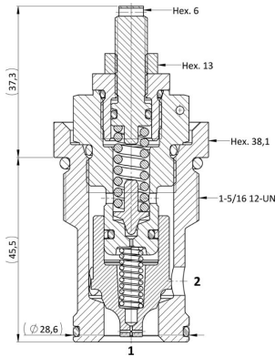
HYDRAULIC SYMBOL



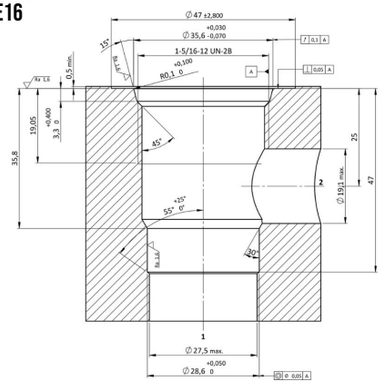
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), poppet type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION



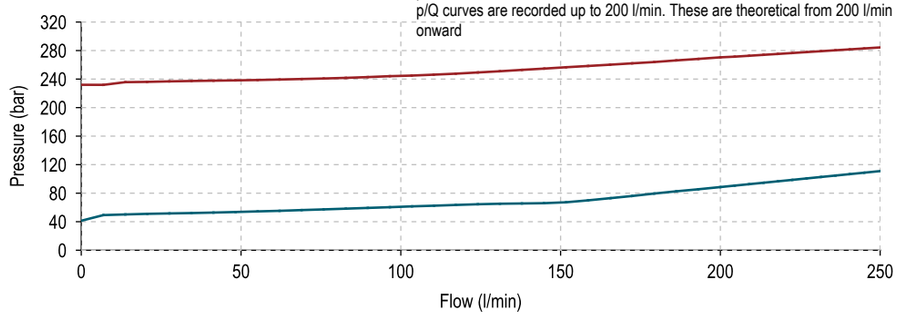
CAVITY SAE16



PERFORMANCE DETAILS

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward



Nominal setting pressure:50 bar @ 5 lpm
Nominal setting pressure:235 bar @ 5 lpm

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	300 bar
MAXIMUM FLOW	250 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	2 cm^3 / min @ 30 bar - pressure setting 235 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	165-170 Nm Hex.38,1
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.074 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,325 kg

ORDERING CODE

R	V	R	0	·	S	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
1-5/16-12 UN with Ø28,6 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-300	134

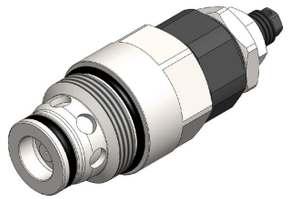
SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

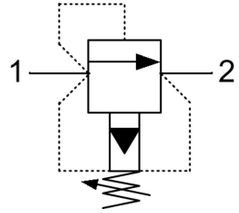
RVRO.M24 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated - Poppet type



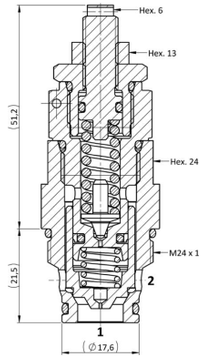
HYDRAULIC SYMBOL



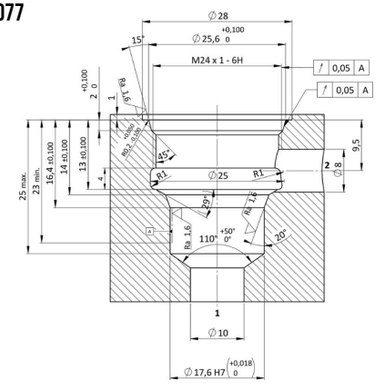
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), poppet type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION



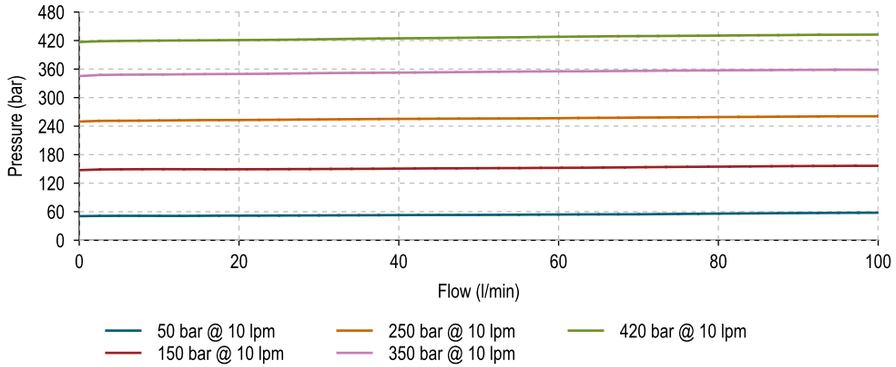
CAVITY VH077



PERFORMANCE DETAILS

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	60-80 Nm Hex.24
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.054 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,174 kg

ORDERING CODE

R	V	R	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M24x1 with Ø17,6 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	92

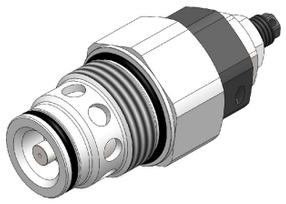
SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

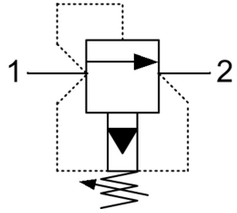
RVRO.M28 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated - Poppet type



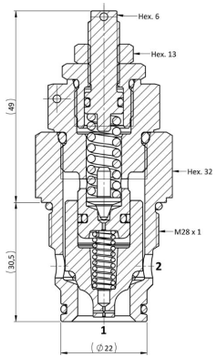
HYDRAULIC SYMBOL



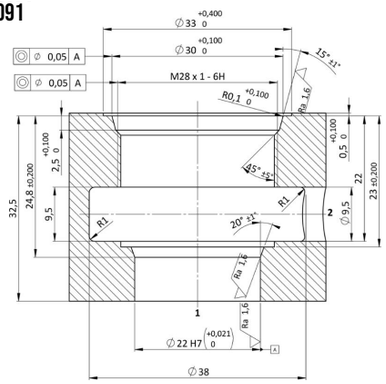
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), poppet type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION



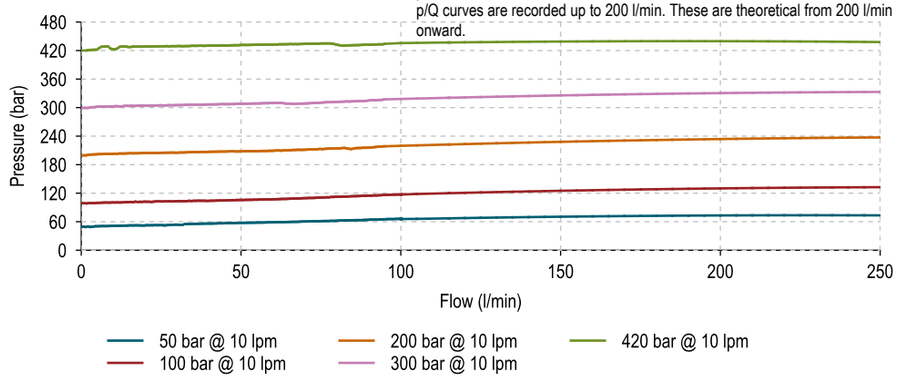
CAVITY VH091



PERFORMANCE DETAILS

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	250 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	2 cm^3 / min @ 30 bar - Pressure setting at 210 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	90-100 Nm Hex.32
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.050 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,265 kg

ORDERING CODE

R	V	R	0	·	M	2	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M28x1 with Ø22 nose size

BIAS SPRING OPTIONS

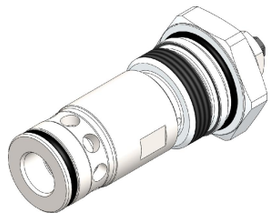
Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	134

Specifications may change without notice.

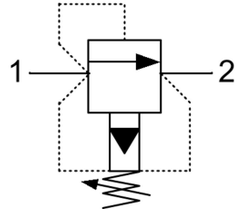
RVR4.M28 VALVE SERIES

METRIC Cartridge - 300 bar

Pilot Operated - Poppet type



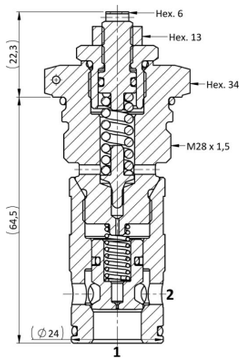
HYDRAULIC SYMBOL



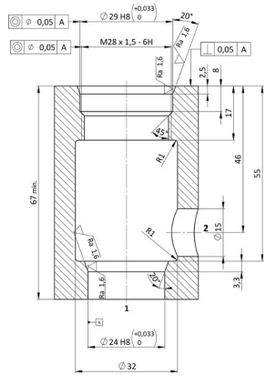
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), poppet type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION



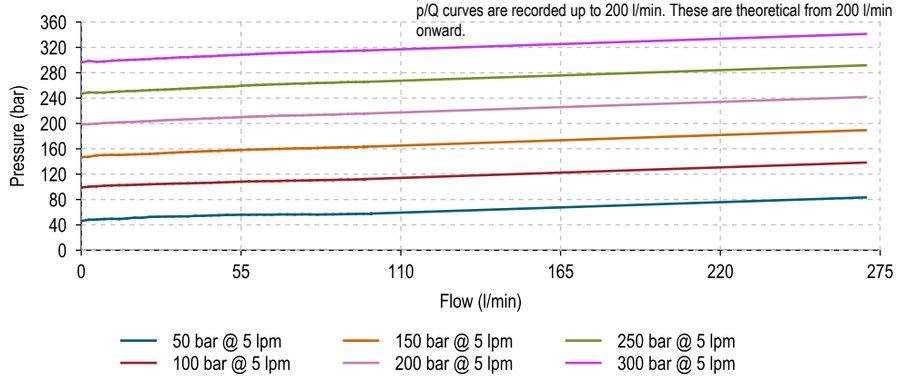
CAVITY VH092



PERFORMANCE DETAILS

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	300 bar
MAXIMUM FLOW	270 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	90-100 Nm Hex.34
NUT TINGHTENING TORQUE	13-15 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.057 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,293 kg

ORDERING CODE

R	V	R	4	·	M	2	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M28x1,5 with Ø24 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-300	283

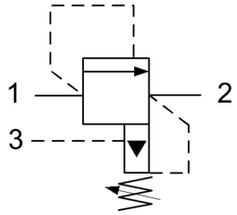
Specifications may change without notice.

RVQL.M27 VALVE SERIES

METRIC Cartridge - 400 bar

Pilot Operated - Spool type

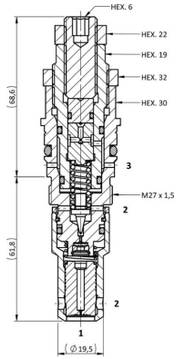
HYDRAULIC SYMBOL



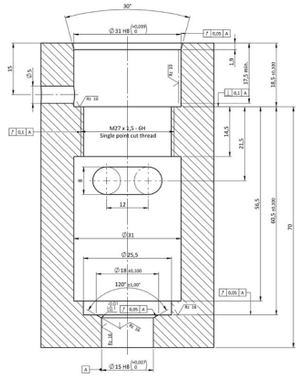
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), spool type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet (spool type) that throttles oil flow to tank (2).
There are options for two pressure setting.
One is Main stage pressure setting, that is called nominal setting. Second is Pilot stage pressure setting. It can be activated with esternal hydraulic pilot pressure on port 3.
The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Fast, smooth response and limited hysteresis. Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve. Metric cavity.

CROSS SECTION

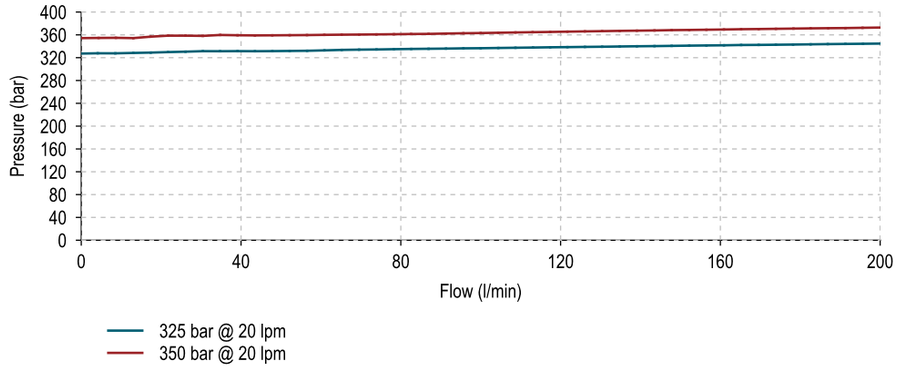


CAVITY
VH216



PERFORMANCE DETAILS

NOTE
The performance chart illustrates flow handling capacity at various settings. p/Q curves are recorded at TOil = 40°C and 46 cSt.



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	200 l/min
PRESSURE SETTING RANGE	100 - 400 bar
MAIN STAGE PRESSURE SETTING	See table below
PILOT STAGE PRESSURE SETTING	See table below
MAXIMUM INTERNAL LEAKAGE	100 cm^3 / min @ 69 bar
REQUIRED PRESSURE ON PORT 3	≤ 30 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) and Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-23 °C to 225 °C - (FKM) -30 °C to 110 °C - (NBR - BUNA - N - Upon customer request) -35 °C to 140 °C - (HNBR - Upon customer request)
OIL TEMPERATURE RANGE	-30 °C to 110 °C
PRESSURE SETTING ESTABLISHED	20 l/min
RESEAT PRESSURE	Nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65 - 75 Nm Hex.30
NUT TINGHTENING TORQUE	45 - 55 Nm Hex.32
NUT TINGHTENING TORQUE	54 - 66 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	See page X
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.222 (FKM)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,477 kg

ORDERING CODE

R	V	Q	L	·	M	2	7	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M27x1,5 with Ø19,5 nose size

BIAS SPRING OPTIONS

Spring model code	Maximum internal leakage [cm^3/min]	Pressure setting range [bar]	Pressure increment per turn adjusting ratio [bar/turn]
N	100	100-400	181,96

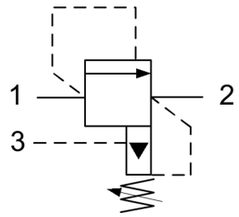
Specifications may change without notice.

RVQL.M33 VALVE SERIES

METRIC Cartridge - 400 bar

Pilot Operated - Spool type

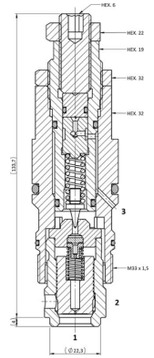
HYDRAULIC SYMBOL



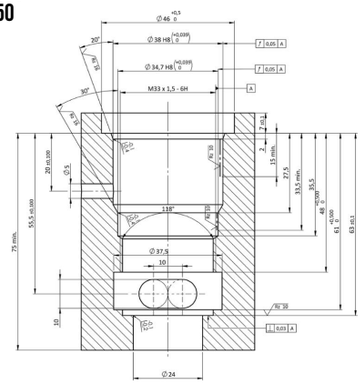
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), spool type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet (spool type) that throttles oil flow to tank (2).
There are options for two pressure setting.
One is Main stage pressure setting, that is called nominal setting. Second is Pilot stage pressure setting. It can be activated with esternal hydraulic pilot pressure on port 3.
The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Fast, smooth response and limited hysteresis. Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve. Metric cavity.

CROSS SECTION

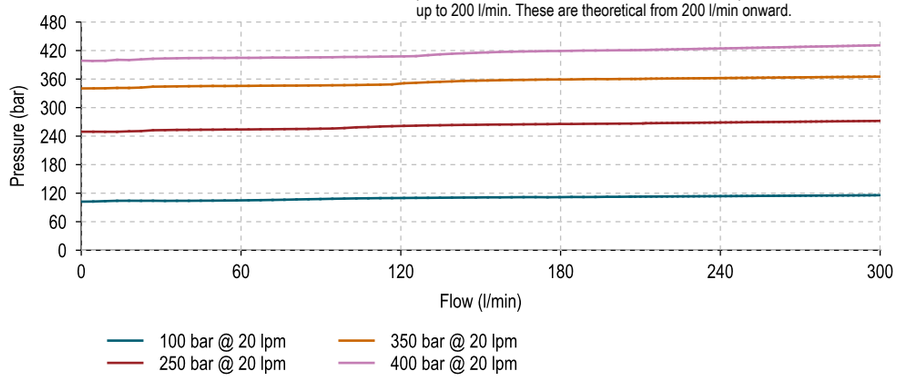


CAVITY
VH250



PERFORMANCE DETAILS

NOTE
The performance chart illustrates flow handling capacity at various settings. p/Q curves are recorded at TOil = 40°C and 46 cSt. p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	300 l/min
PRESSURE SETTING RANGE	100 - 400 bar
MAIN STAGE PRESSURE SETTING	See table below
PILOT STAGE PRESSURE SETTING	See table below
MAXIMUM INTERNAL LEAKAGE	100 cm^3 / min @ 69 bar
REQUIRED PRESSURE ON PORT 3	≤ 30 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) and Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30 °C to 110 °C - (NBR - BUNA - N) -23 °C to 225 °C - (FKM) -35 °C to 140 °C - (HNBR - Upon customer request)
OIL TEMPERATURE RANGE	-30 °C to 110 °C
PRESSURE SETTING ESTABLISHED	20 l/min
RESEAT PRESSURE	Nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	120 - 140 Nm Hex.32
NUT TINGHTENING TORQUE	45 - 55 Nm Hex.32
NUT TINGHTENING TORQUE	54 - 66 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	See page X
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.223 (NBR-BUNA-N and FKM)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,747 kg

ORDERING CODE

R	V	Q	L	·	M	3	3	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M33x1,5 with Ø22,3 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Maximum internal leakage [cm^3/min]	Pressure setting range [bar]	Pressure increment per turn adjusting ratio [bar/turn]
N	100	100-400	181,96

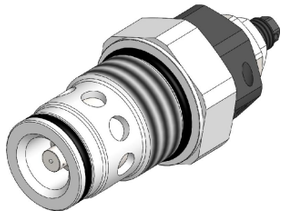
SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

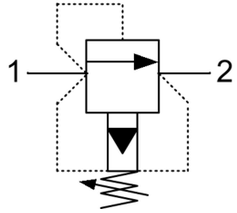
RVRO.116 VALVE SERIES

Hybrid SAE Cartridge - 420 bar

Pilot Operated - Poppet type



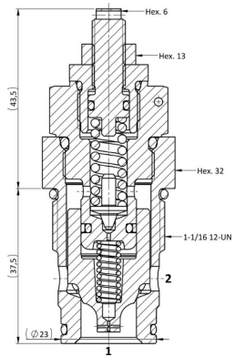
HYDRAULIC SYMBOL



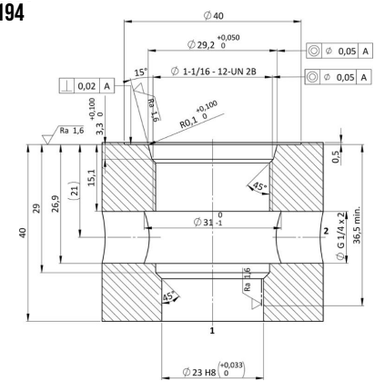
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), poppet type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

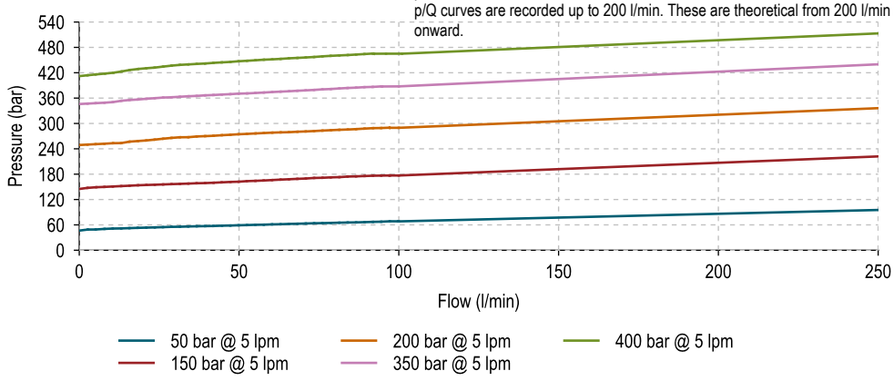
CROSS SECTION



CAVITY VH194



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	250 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	2 cm^3 / min @ 30 bar - Pressure setting at 210 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	90-100 Nm Hex.32
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.100 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,260 kg

ORDERING CODE

R	V	R	0	·	1	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
1-1/16-12 UN with Ø23 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	134

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

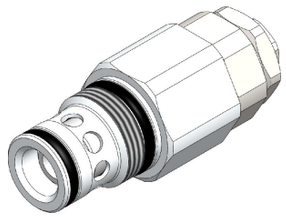
Specifications may change without notice.

RVP0.M20 VALVE SERIES

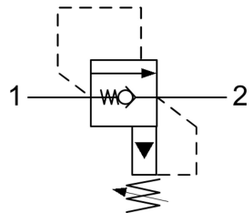
METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type



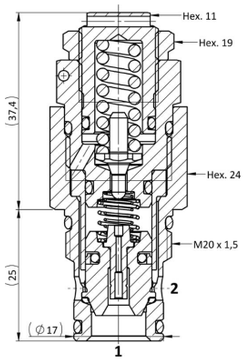
HYDRAULIC SYMBOL



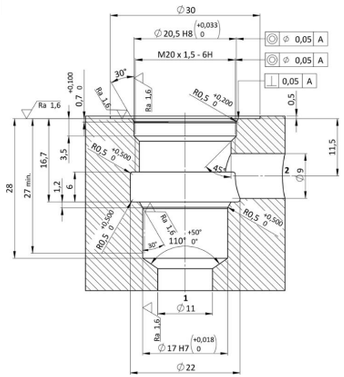
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.
Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve.

CROSS SECTION

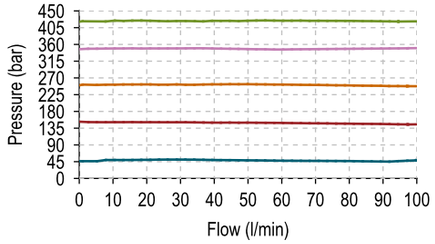


CAVITY
VH041

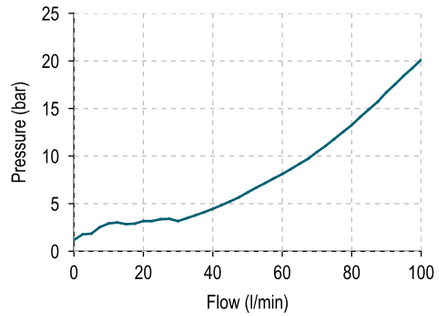


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
150 bar @ 10 lpm
250 bar @ 10 lpm
350 bar @ 10 lpm
425 bar @ 10 lpm



2vs1(Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-55 Nm Hex.24
NUT TINGHTENING TORQUE	25-30 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.053 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,139 kg

ORDERING CODE

R V P 0	·	M 2 0	·	0 *	·	* * *
VALVE BASIC CODE		SIZE METRIC M20x1,5 with Ø17 nose size		MARKING 0 = Standard factory marking. Customized marking can be done upon request. BIAS SPRING OPTIONS		SETTING PRESSURE IN [BAR] 000 = No specific setting required.

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

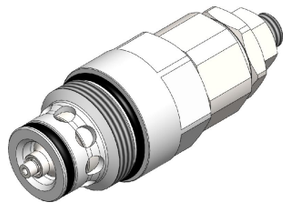
Specifications may change without notice.

RVP0.M24 VALVE SERIES

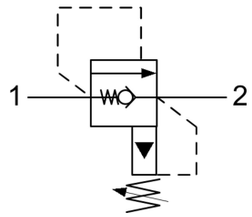
METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type



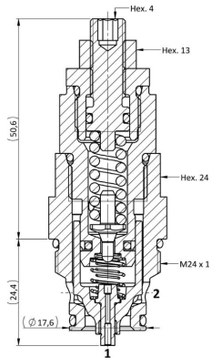
HYDRAULIC SYMBOL



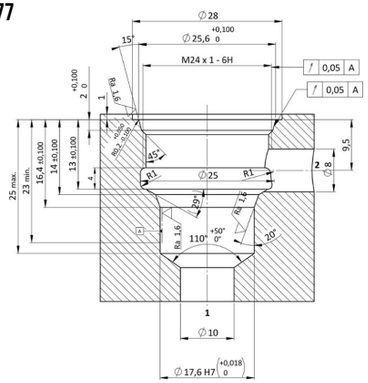
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

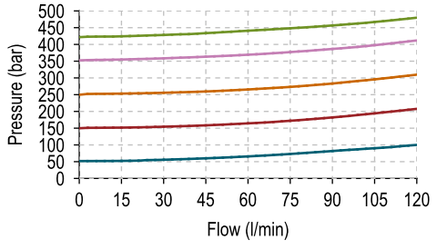


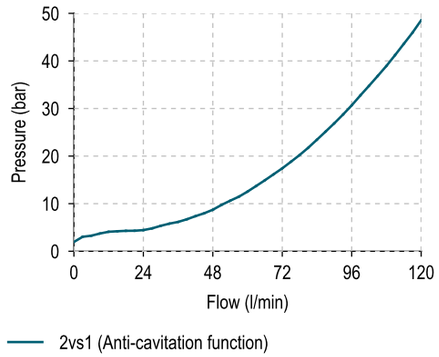
CAVITY VH077



PERFORMANCE DETAILS

(Nominal setting pressure)





NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	120 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	60-80 Nm Hex.24
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.054 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,177 kg

ORDERING CODE

R	V	P	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M24x1 with Ø17,6 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

Specifications may change without notice.

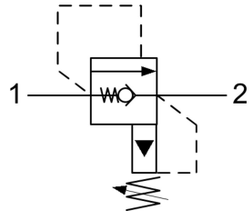
RVPD.M24 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated with Anti-cavitation

Compact size

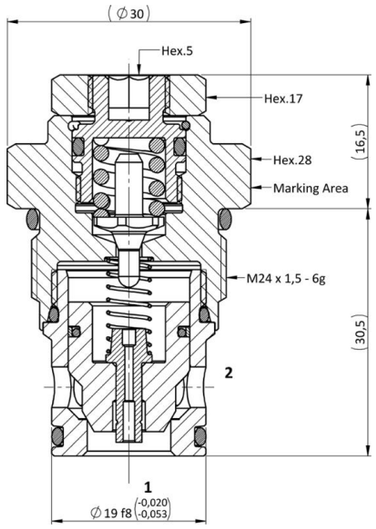
HYDRAULIC SYMBOL



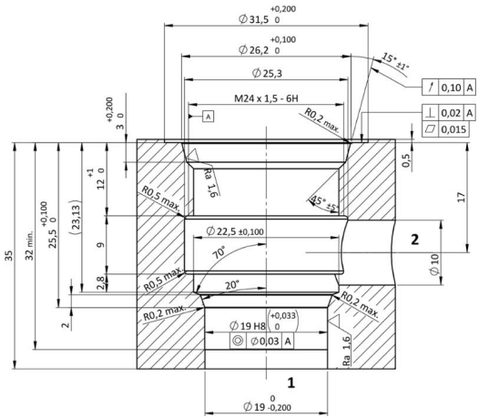
DESCRIPTION

This valve combines in one very compact style the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated, poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION



CAVITY VH341



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	130 l/min
PRESSURE SETTING RANGE	190 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restriction
INSTALLATION TORQUE	60-80 Nm Hex.28
NUT TINGHTENING TORQUE	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.224 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Upon customer request
WEIGHT	0,121 kg

ORDERING CODE

R	V	P	D	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M24x1,5 with Ø19 nose size

MARKING
0 = standard factory marking. Customized marking can be done upon request

BIAS SPRING OPTIONS

SETTING PRESSURE IN [BAR]
000 = No specific setting required

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
B	190-320	237
N	270-420	300

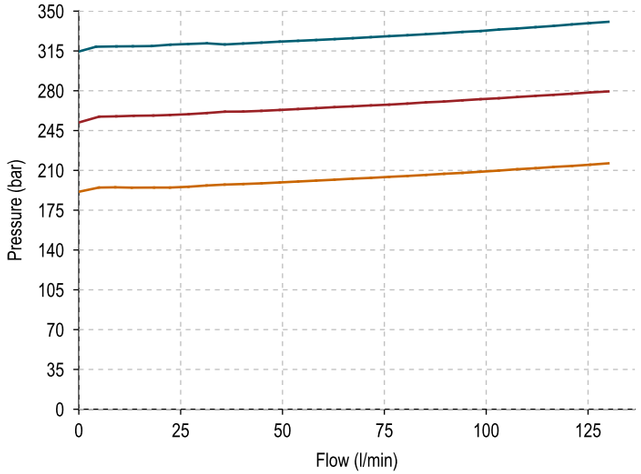
Specifications may change without notice.

RVPD.M24 SPRINGS' GRAPHS

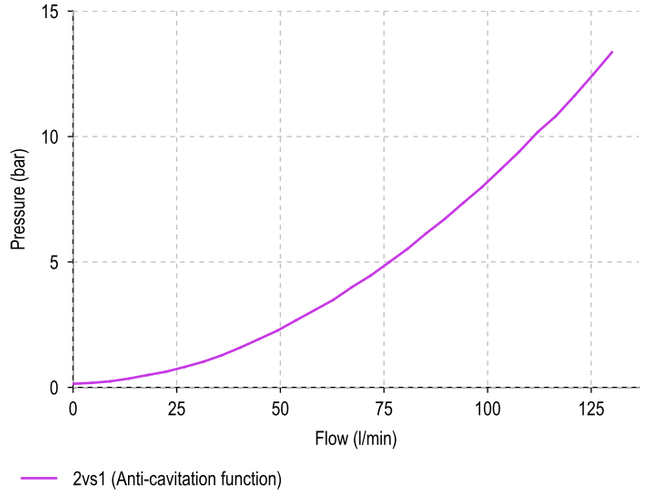
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

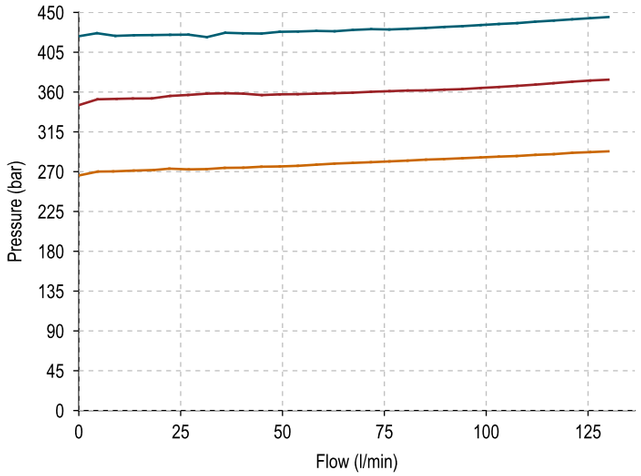
SPRING B



ANTI-CAVITATION FUNCTION



SPRING N

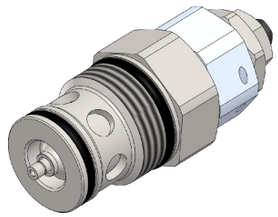


RVP0.M26 VALVE SERIES

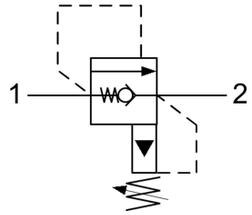
METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type



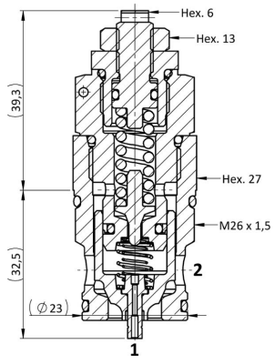
HYDRAULIC SYMBOL



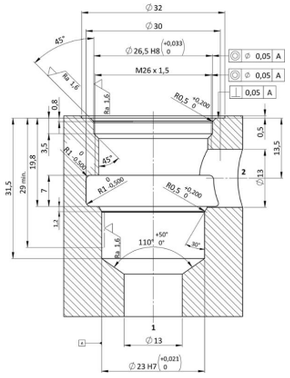
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

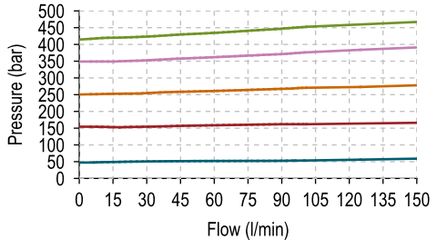


CAVITY VH024

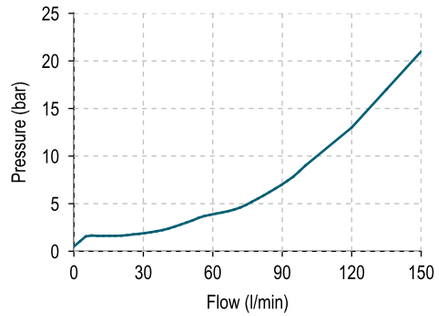


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
150 bar @ 10 lpm
250 bar @ 10 lpm
350 bar @ 10 lpm
420 bar @ 10 lpm



2vs1 (Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	150 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<1,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	60-80 Nm Hex.27
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.145 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,195 kg

ORDERING CODE

R	V	P	0	·	M	2	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M26x1,5 with Ø23 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

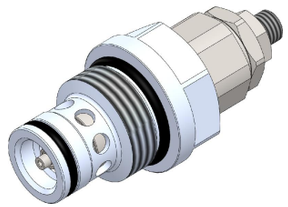
Specifications may change without notice.

RVP0.M27 VALVE SERIES

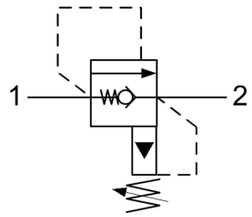
METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type



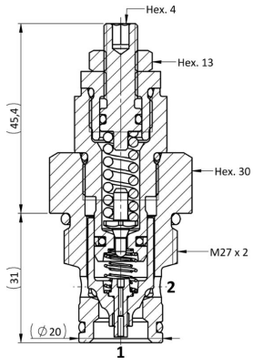
HYDRAULIC SYMBOL



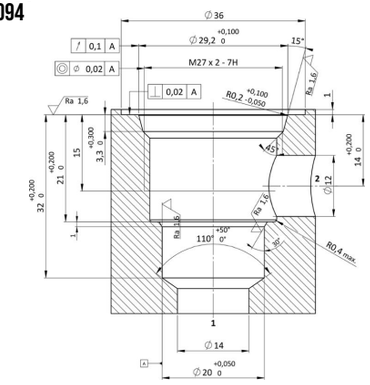
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

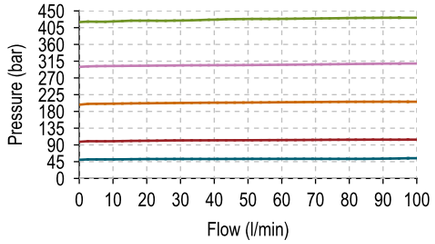


CAVITY VH094

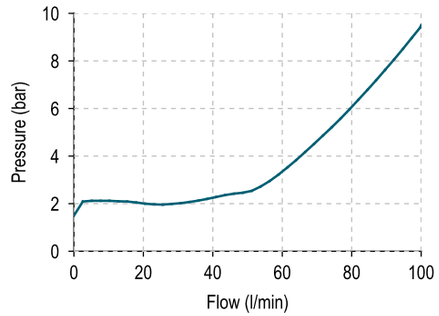


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
100 bar @ 10 lpm
200 bar @ 10 lpm
300 bar @ 10 lpm
420 bar @ 10 lpm



2vs1 (Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70-80 Nm Hex.30
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.056 (standard sealing NBR-BUNA-N)
WEIGHT	0,205 kg

ORDERING CODE

R	V	P	0	·	M	2	7	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M27x2 with Ø20 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

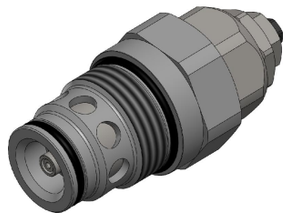
Specifications may change without notice.

RVP4.M28 VALVE SERIES

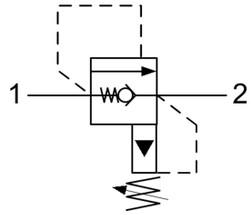
METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type



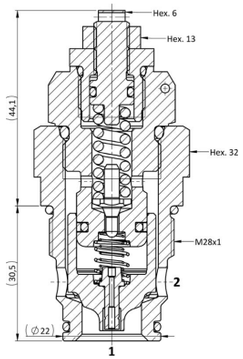
HYDRAULIC SYMBOL



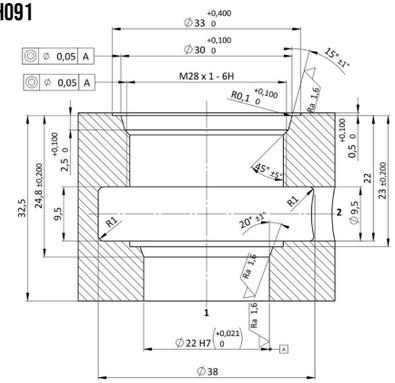
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

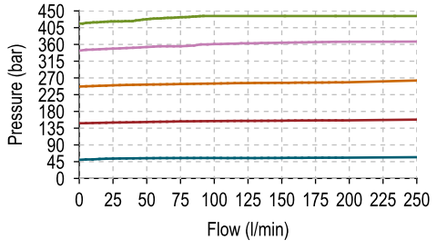


CAVITY VH091

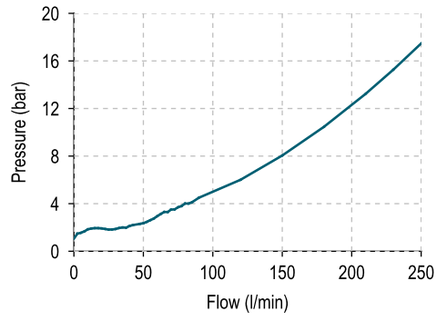


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
150 bar @ 10 lpm
250 bar @ 10 lpm
350 bar @ 10 lpm
420 bar @ 10 lpm



2vs1 (Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	250 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -30° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	90-100 Nm Hex.32
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.050 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,258 kg

ORDERING CODE

R	V	P	4	·	M	2	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M28x1 with Ø22 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

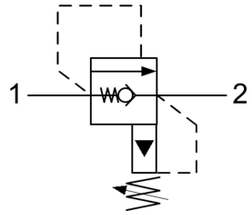
RVP0.M30 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type

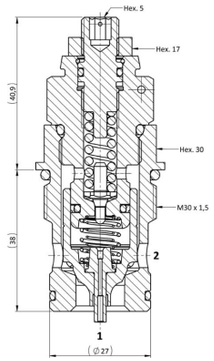
HYDRAULIC SYMBOL



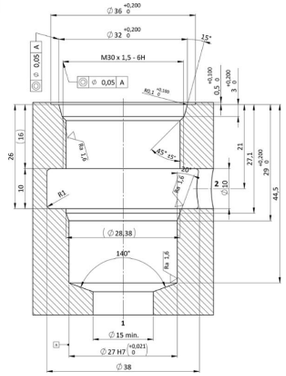
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

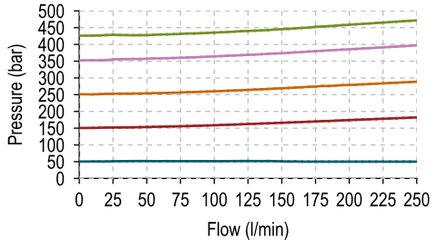


CAVITY VH242-01

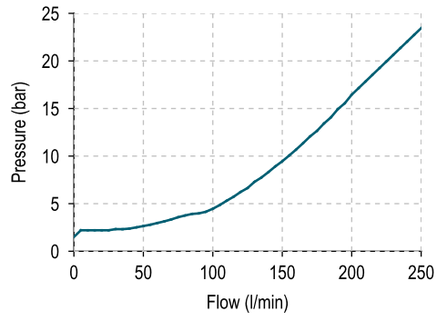


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
150 bar @ 10 lpm
250 bar @ 10 lpm
350 bar @ 10 lpm
420 bar @ 10 lpm



2vs1(Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	250 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	100-120 Nm Hex.30
NUT TINGHTENING TORQUE	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.130 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,267 kg

ORDERING CODE

R	V	P	0	·	M	3	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M30x1,5 with Ø27 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

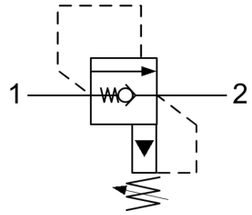
RVP0.M36 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type

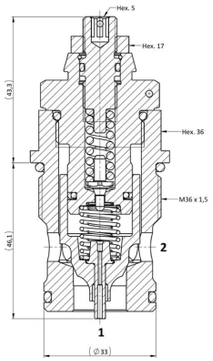
HYDRAULIC SYMBOL



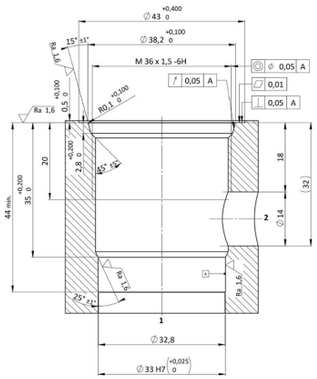
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

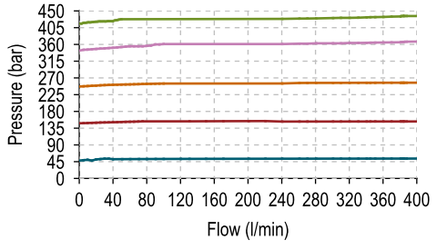


CAVITY VH208

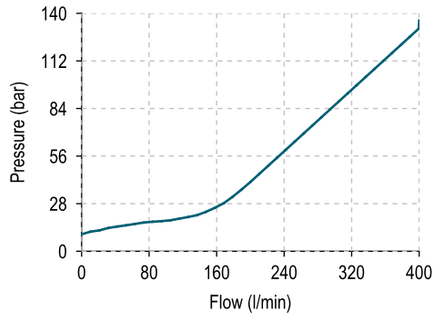


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
150 bar @ 10 lpm
250 bar @ 10 lpm
350 bar @ 10 lpm
420 bar @ 10 lpm



2vs1 (Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	400 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	150-160 Nm Hex.36
NUT TINGHTENING TORQUE	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.152 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,460 kg

ORDERING CODE

R	V	P	0	·	M	3	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M36x1,5 with Ø33 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

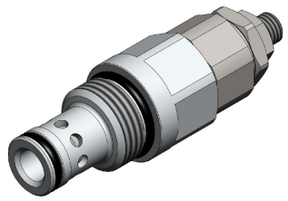
Specifications may change without notice.

RVPO.S10 VALVE SERIES

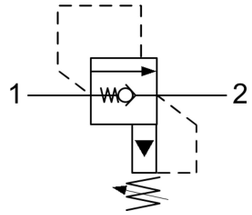
SAE Cartridge - 420 bar

Pilot Operated with anti-cavitation

Poppet type



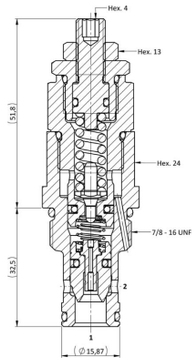
HYDRAULIC SYMBOL



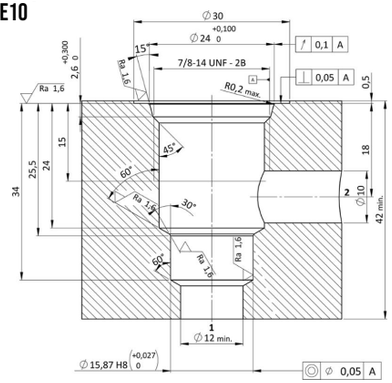
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

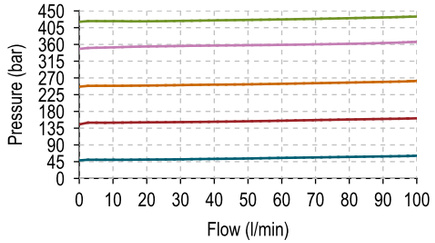


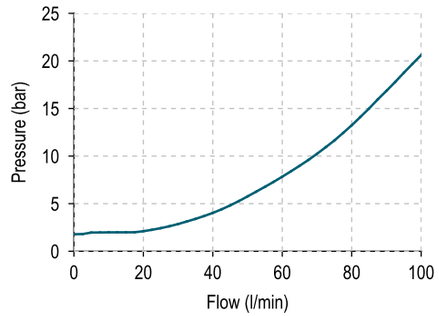
CAVITY SAE10



PERFORMANCE DETAILS

(Nominal setting pressure)





NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
PRESSURE SETTING RANGE	50 - 420
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.001 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WEIGHT	0,195 kg

ORDERING CODE

R	V	P	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
7/8-14 UNF with Ø15,87 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	283

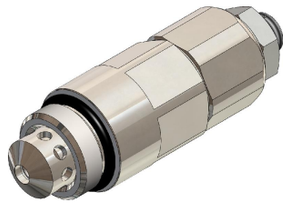
Specifications may change without notice.

RVP4.S10 VALVE SERIES

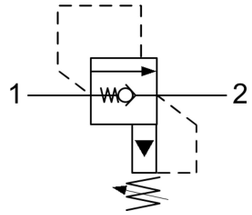
Hybrid SAE Cartridge - 350 bar

Pilot Operated with anti-cavitation

Poppet type



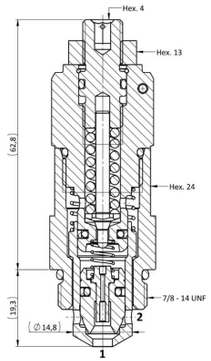
HYDRAULIC SYMBOL



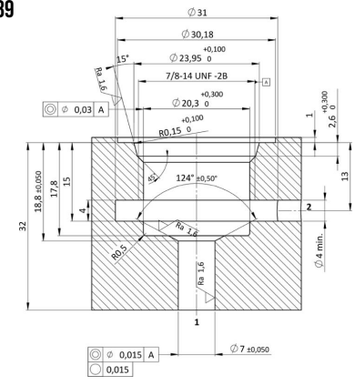
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

CROSS SECTION

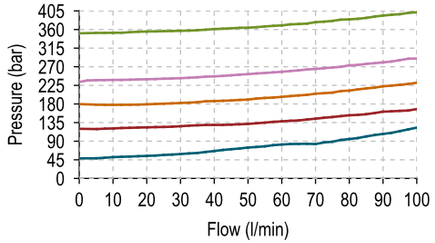


CAVITY VH189

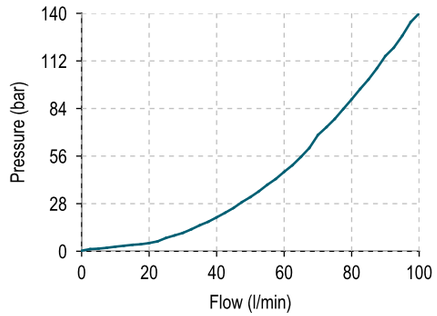


PERFORMANCE DETAILS

(Nominal setting pressure)



50 bar @ 10 lpm
120 bar @ 10 lpm
180 bar @ 10 lpm
240 bar @ 10 lpm
350 bar @ 10 lpm



2vs1 (Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings. p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	100 l/min
PRESSURE SETTING RANGE	50 - 350
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<2,0 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.157 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,224 kg

ORDERING CODE

R	V	P	4	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
7/8-14 UNF with Ø14,8 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-350	283

Specifications may change without notice.

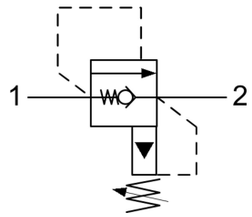
RVPL.M27 VALVE SERIES

METRIC Cartridge - 400 bar

Pilot Operated with anti-cavitation

Poppet type

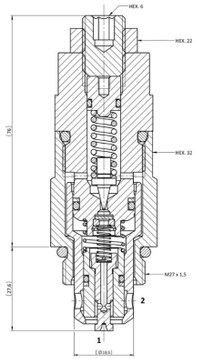
HYDRAULIC SYMBOL



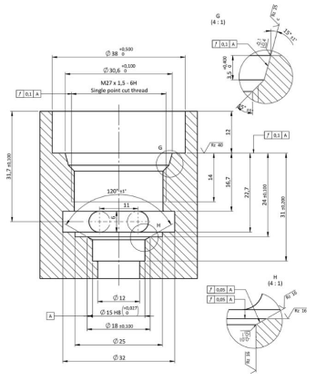
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.
Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve.

CROSS SECTION

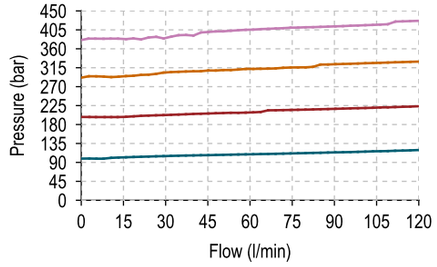


CAVITY
VH217

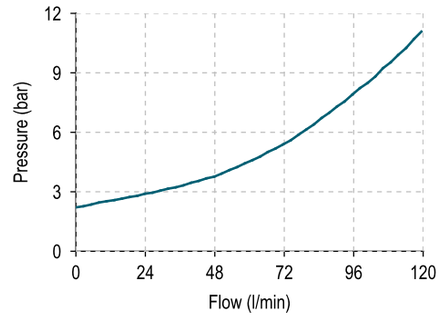


PERFORMANCE DETAILS

(Nominal setting pressure)



100 bar @ 20 lpm
200 bar @ 20 lpm
300 bar @ 20 lpm
390 bar @ 20 lpm



2vs1(Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	120 l/min
PRESSURE SETTING RANGE	100 - 400 bar
SETTING PRESSURE	See table below
ANTI-CAV CRACKING PRESSURE	<3,0 bar
MAXIMUM INTERNAL LEAKAGE	5 cm^3 / min @ 69 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) and Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-23 °C to 225 °C - (FKM) -30 °C to 110 °C - (NBR - BUNA - N - Upon customer request) -35 °C to 140 °C - (HNBR - Upon customer request)
OIL TEMPERATURE RANGE	-30 °C to 110 °C
PRESSURE SETTING ESTABLISHED	20 l/min
RESEAT PRESSURE	Nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70 - 78 Nm Hex.32
NUT TINGHTENING TORQUE	54 - 66 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	See page X
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.220 (FKM)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,485 kg

ORDERING CODE

R	V	P	L	·	M	2	7	·	0	*	·	*	*	*

VALVE BASIC CODE
Valve basic code

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M27x1,5 with Ø19,5 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	100-400	181,96

Specifications may change without notice.

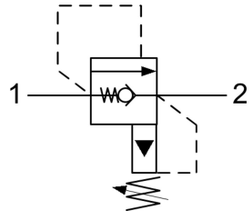
RVPL.M33 VALVE SERIES

METRIC Cartridge - 400 bar

Pilot Operated with anti-cavitation

Poppet type

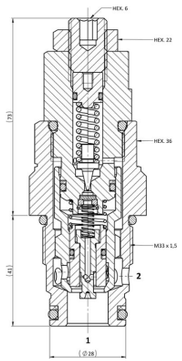
HYDRAULIC SYMBOL



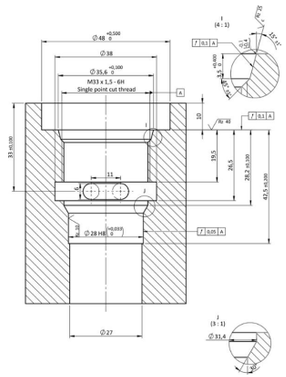
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.
Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve.

CROSS SECTION

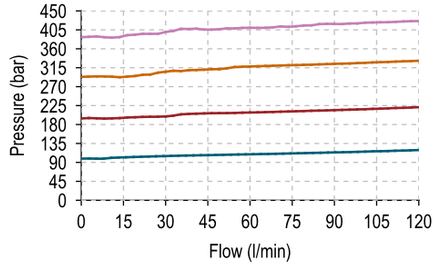


CAVITY
VH218

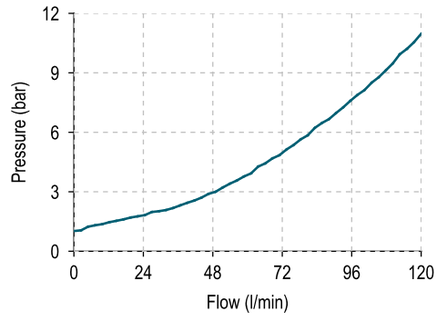


PERFORMANCE DETAILS

(Nominal setting pressure)



100 bar @ 20 lpm
200 bar @ 20 lpm
300 bar @ 20 lpm
390 bar @ 20 lpm



2vs1(Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	120 l/min
PRESSURE SETTING RANGE	100 - 400 bar
SETTING PRESSURE	See table below
ANTI-CAV CRACKING PRESSURE	<3,0 bar
MAXIMUM INTERNAL LEAKAGE	5 cm^3 / min @ 69 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) and Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30 °C to 110 °C - (NBR - BUNA - N) -23 °C to 225 °C - (FKM) -35 °C to 140 °C - (HNBR - Upon customer request)
OIL TEMPERATURE RANGE	-30 °C to 110 °C
PRESSURE SETTING ESTABLISHED	20 l/min
RESEAT PRESSURE	Nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	120 - 140 Nm Hex.36
NUT TINGHTENING TORQUE	54 - 66 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	See page X
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.221 (NBR-BUNA-N and FKM)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,654 kg

ORDERING CODE

R	V	P	L	·	M	3	3	·	0	*	·	*	*	*

VALVE BASIC CODE
Valve basic code

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M33x1,5 with Ø28 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	100-400	181,96

Specifications may change without notice.

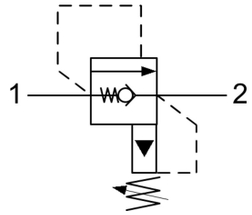
RVPV.M33 VALVE SERIES

METRIC Cartridge - 400 bar

Pilot Operated with anti-cavitation

Poppet type

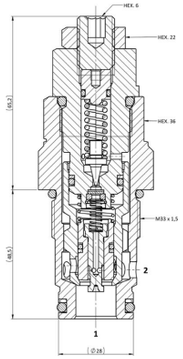
HYDRAULIC SYMBOL



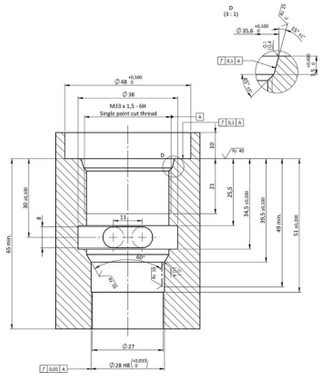
DESCRIPTION

The RVP valve combines in one compact cartridge the typical function of relief valve and anticavitation through the check valve. It's a screw-in, pilot operated (2-stage), poppet type, normally closed valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis. Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve.

CROSS SECTION

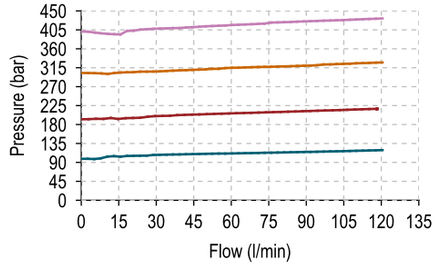


CAVITY
VH239

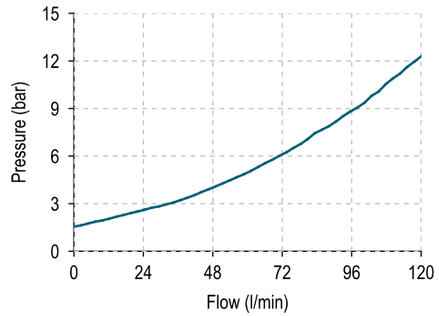


PERFORMANCE DETAILS

(Nominal setting pressure)



100 bar @ 20 lpm
200 bar @ 20 lpm
300 bar @ 20 lpm
390 bar @ 20 lpm



2vs1(Anti-cavitation function)

NOTE

The performance chart illustrates flow handling capacity at various settings.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	120 l/min
PRESSURE SETTING RANGE	100 - 400 bar
SETTING PRESSURE	See table below
ANTI-CAV CRACKING PRESSURE	<3,0 bar
MAXIMUM INTERNAL LEAKAGE	5 cm^3 / min @ 69 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) and Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30 °C to 110 °C - (NBR - BUNA - N) -23 °C to 225 °C - (FKM) -35 °C to 140 °C - (HNBR - Upon customer request)
OIL TEMPERATURE RANGE	-30 °C to 110 °C
PRESSURE SETTING ESTABLISHED	20 l/min
RESEAT PRESSURE	Nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	120 - 140 Nm Hex.36
NUT TINGHTENING TORQUE	54 - 66 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	See page X
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.221 (NBR-BUNA-N and FKM)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,654 kg

ORDERING CODE

R	V	P	V	·	M	3	3	·	0	*	·	*	*	*

VALVE BASIC CODE
Valve basic code

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
METRIC M33x1,5 with Ø28 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	100-400	181,96

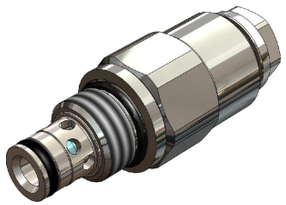
Specifications may change without notice.

RVI0.S08 VALVE SERIES

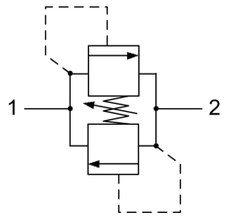
SAE08 Cartridge - 350 bar

Direct acting - Poppet type

Bi-directional



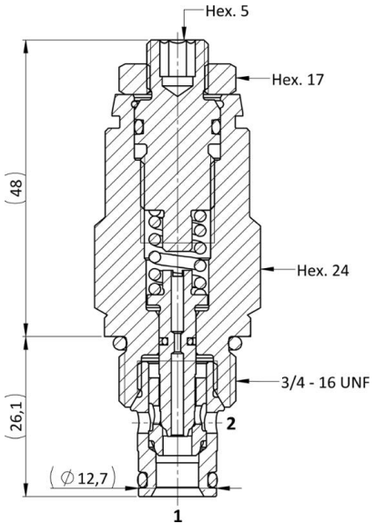
HYDRAULIC SYMBOL



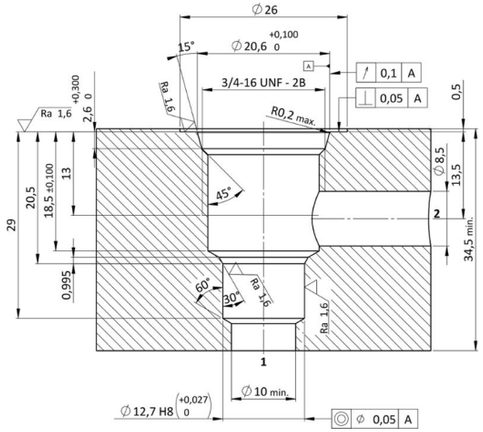
DESCRIPTION

A screw-in, cartrigde style, direct acting, poppet type, normally closed hydraulic bi-directional relief valve. It's typically used to protect hydraulic components from pressure transients. The RVI valve blocks flow from either port 1 or port 2. When the pressure differential between ports 1 and 2 reaches the valve setting, the valve starts to open, throttling flow to minimize the pressure rise, regardless of the inlet flow direction. Both directions have very similar setting pressure performance. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



CAVITY
SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	5 cm^3 / min to 70 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 80% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
NUT TINGHTENING TORQUE	10-15 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.003
WEIGHT	0,180 kg

ORDERING CODE

R	V	I	0	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
3/4-16 UNF with Ø12,7 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
Y	20-35	10
N	36-80	25
B	75-170	47
G	125-260	67
V	260-350	93

Specifications may change without notice.

Rev. 1

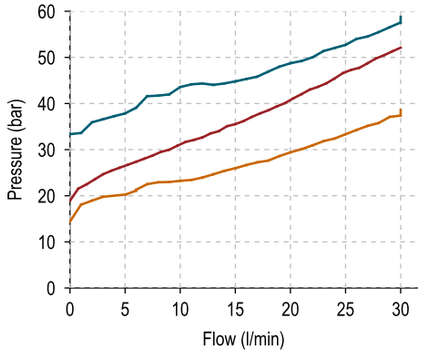
RV10.SO8 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

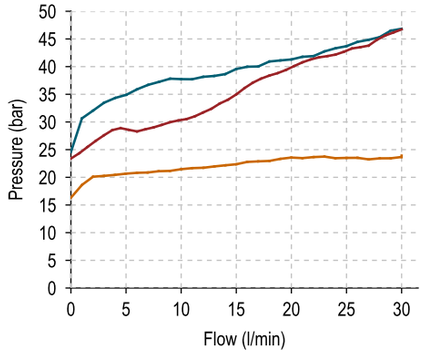
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

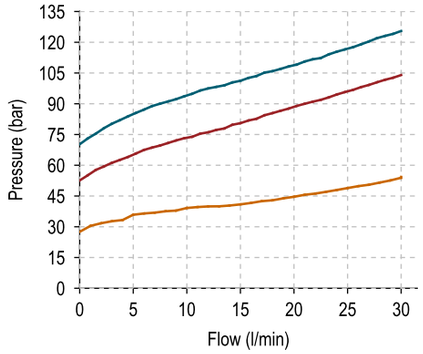
SPRING Y - 1VS2



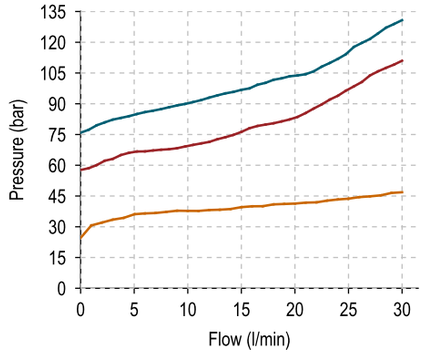
SPRING Y - 2VS1



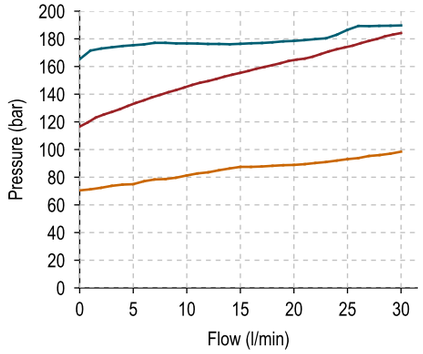
SPRING N - 1VS2



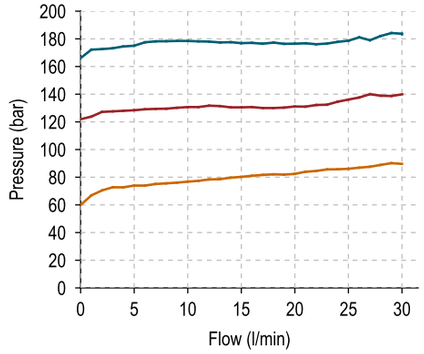
SPRING N - 2VS1



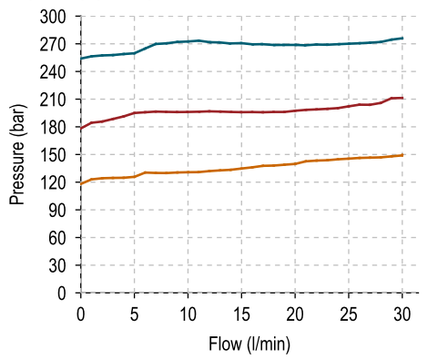
SPRING B - 1VS2



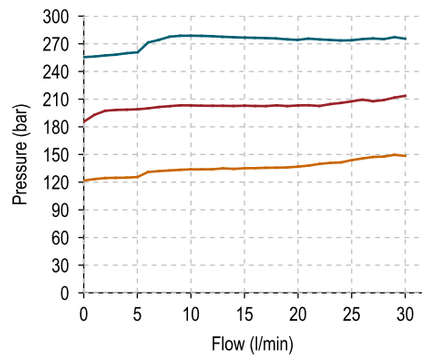
SPRING B - 2VS1



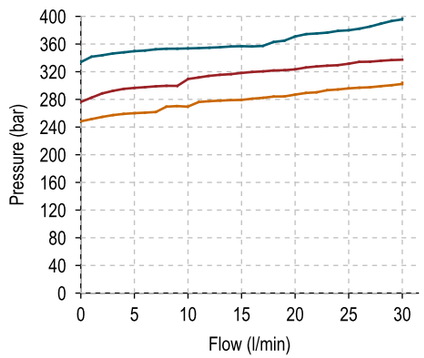
SPRING G - 1VS2



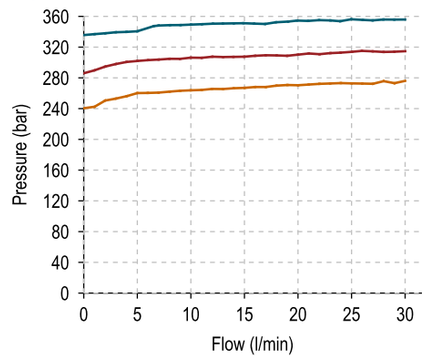
SPRING G - 2VS1



SPRING V - 1VS2



SPRING V - 2VS1



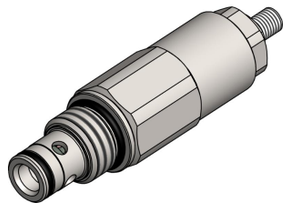
Rev. 1

RVI0.S10 VALVE SERIES

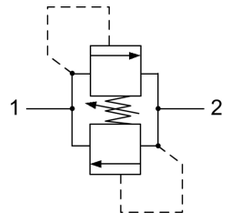
SAE10 Cartridge - 350 bar

Direct acting - Poppet type

Bi-directional



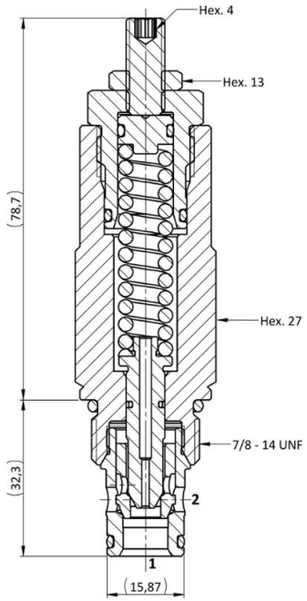
HYDRAULIC SYMBOL



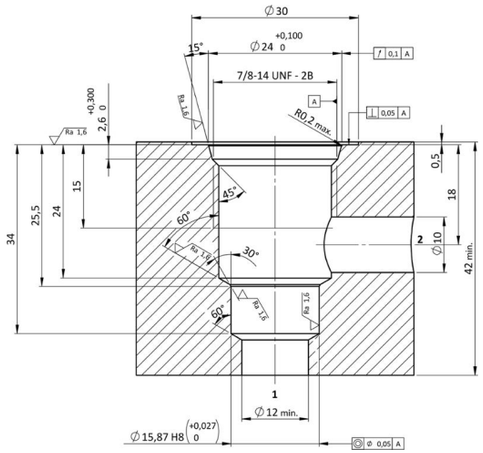
DESCRIPTION

A screw-in, cartrigde style, direct acting, poppet type, normally closed hydraulic bi-directional relief valve. It's typically used to protect hydraulic components from pressure transients. The RVI valve blocks flow from either port 1 or port 2. When the pressure differential between ports 1 and 2 reaches the valve setting, the valve starts to open, throttling flow to minimize the pressure rise, regardless of the inlet flow direction. Both directions have very similar setting pressure performance. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis.

CROSS SECTION



CAVITY
SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	15 cm^3 / min to 70 % of nominal set point
MAX. DIFFERENCE FOR SETT. PRESSURE (BOTH DIRECTION)	<10% of setting pressure
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 80% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-60 Nm Hex.27
NUT TINGHTENING TORQUE	10-15 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
WEIGHT	0,320 kg

ORDERING CODE

R	V	I	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

SIZE
7/8-14 UNF with Ø15,87 nose size

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	20-60	13,1
B	60-150	31,9
G	150-250	53,3
V	220-350	92,8

Specifications may change without notice.

Rev. 1

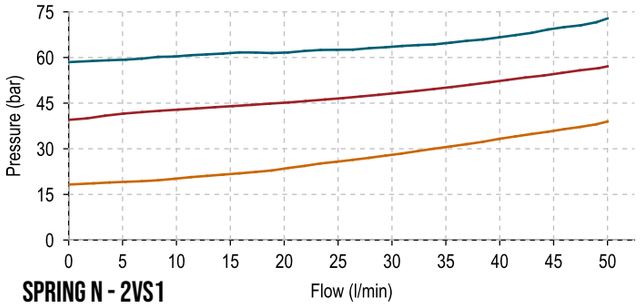
RV10.S10 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

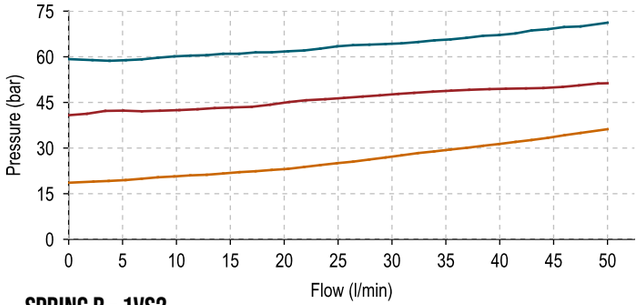
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

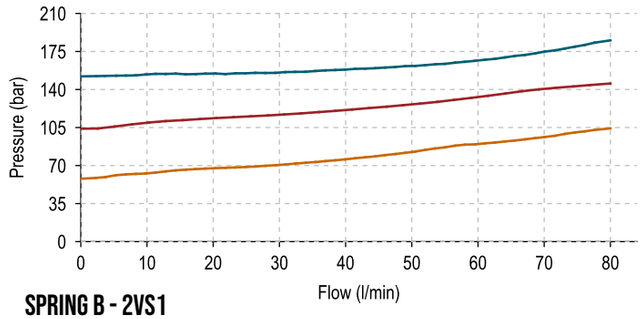
SPRING N - 1VS2



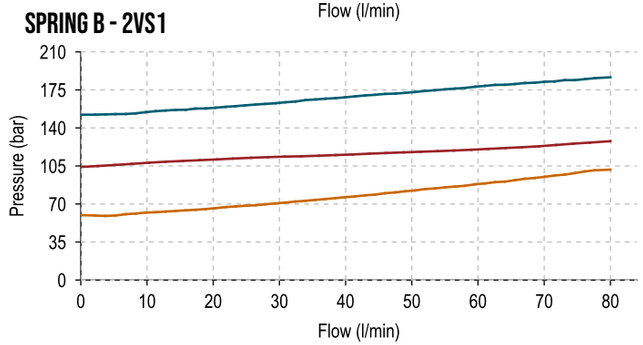
SPRING N - 2VS1



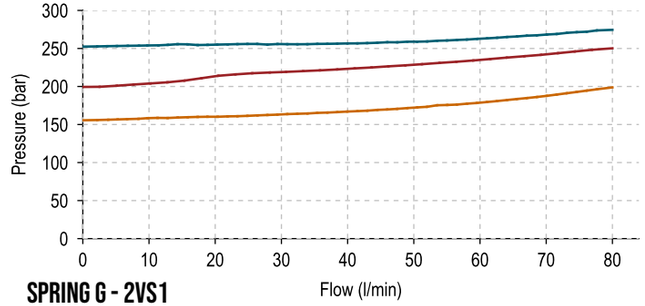
SPRING B - 1VS2



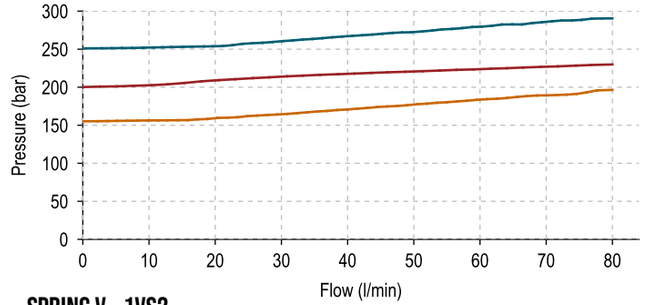
SPRING B - 2VS1



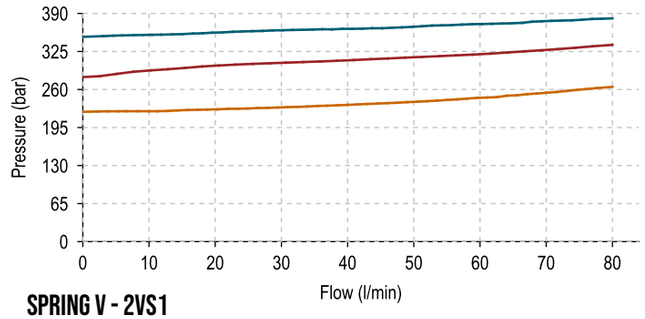
SPRING G - 1VS2



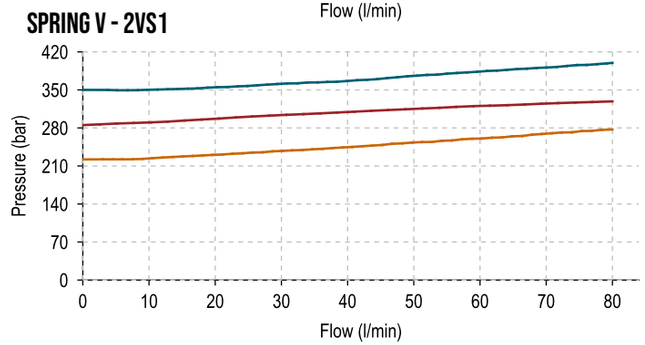
SPRING G - 2VS1



SPRING V - 1VS2



SPRING V - 2VS1



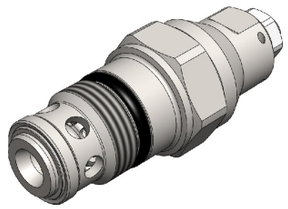
Rev. 1

RVA0.M18 VALVE SERIES

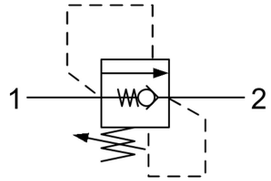
METRIC Cartridge - 350 bar

Direct acting with anti-cavitation

Poppet type



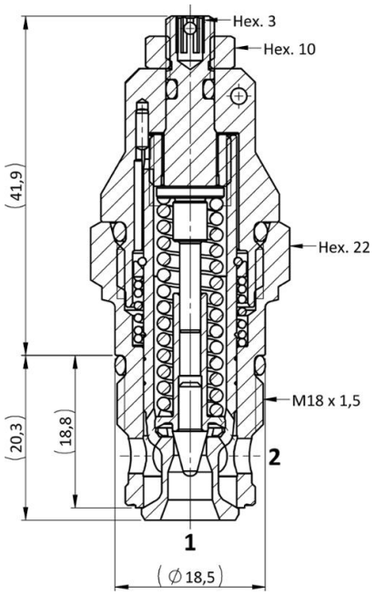
HYDRAULIC SYMBOL



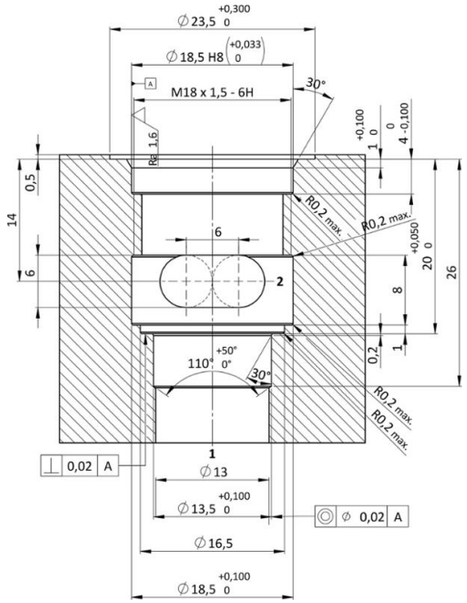
DESCRIPTION

The RVA valve combines in one compact cartridge the typical function of shock relief valve and anti-cavitation through the built-in check valve. In the relief function when the pressure at the the Inlet (1) reaches the valve setting, the valve starts to open to tank (2) and thanks to the effect of the deflector integrated into the poppet it provides a limited pressure rise. The cartridge offers excellent response to load changes in hydraulic circuits requiring low internal leakage as well as limited hysteresis. Innovative design on internal dampening part guarantees great stability. In the free reverse flow function a light bias spring allows for ease of flow passage from side to nose (2 to 1) by lowering the internal seat.

CROSS SECTION



CAVITY VH160



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	5 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.22
NUT TINGHTENING TORQUE	5-10 Nm Hex.10
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.102 (standard sealing NBR-BUNA-N)
PLASTIC TAMPER PROOF CAP	CTP.001
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,117 kg

ORDERING CODE

R	V	A	0	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M18x1,5 (No other cavity options available)

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
Y	20-50
N	51-90
B	91-145
G	146-205
V	206-300
W	301-350

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.

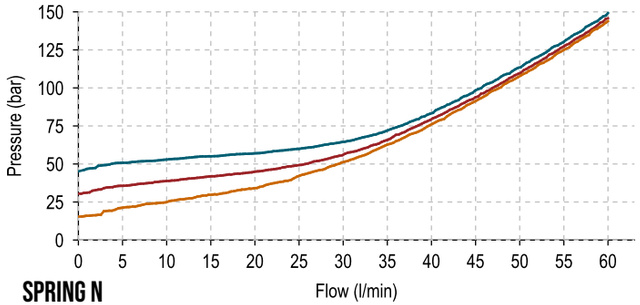
RVAO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

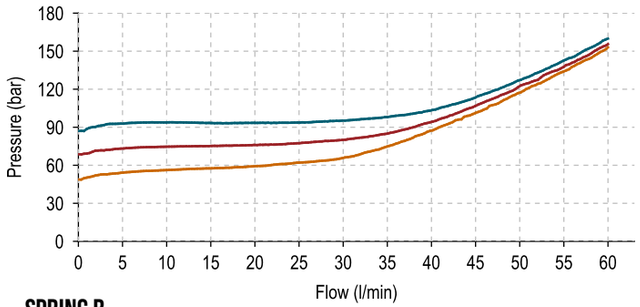
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

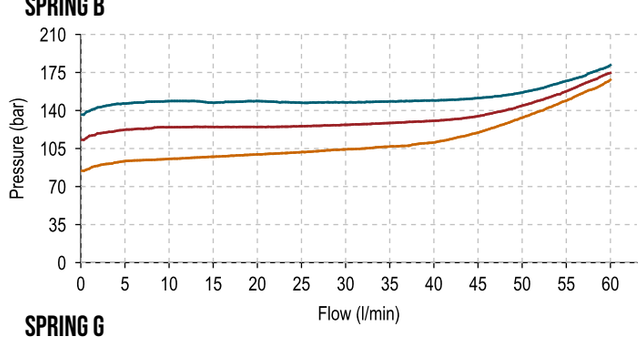
SPRING Y



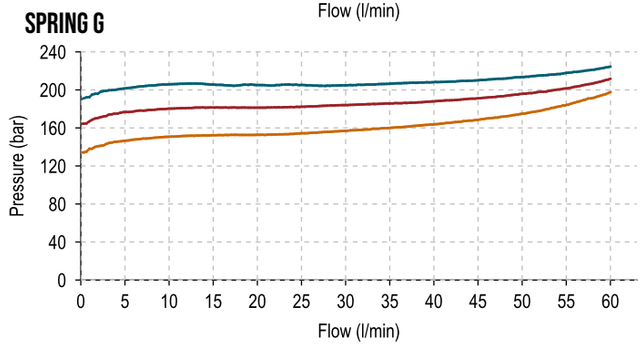
SPRING N



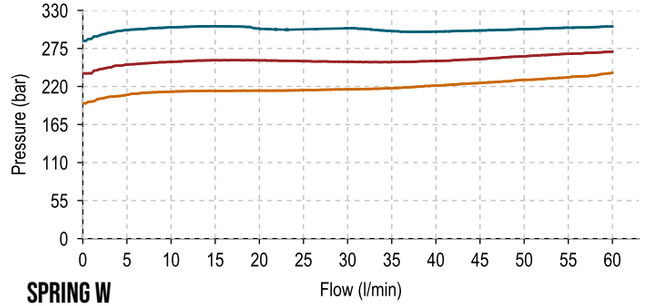
SPRING B



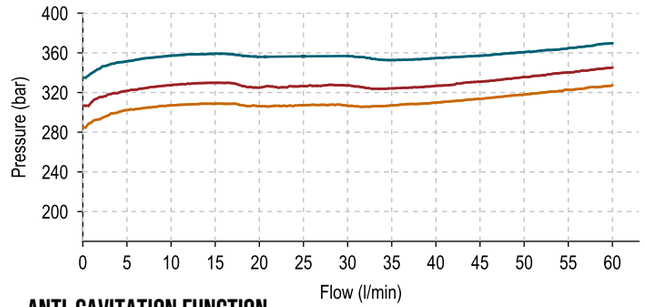
SPRING G



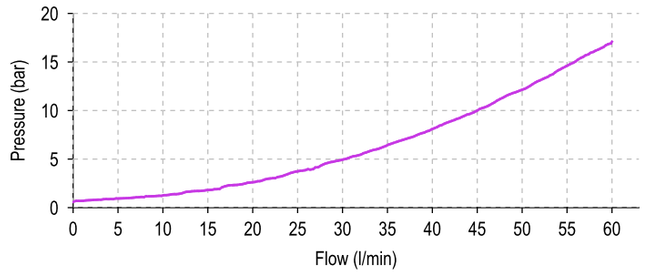
SPRING V



SPRING W



ANTI-CAVITATION FUNCTION

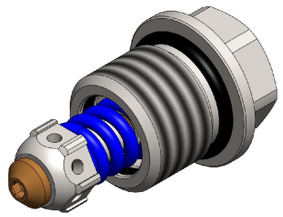


IRAO.M16 VALVE SERIES

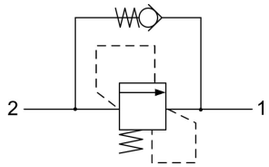
METRIC Insert - 350 bar

Direct acting with anti-cavitation

Poppet type



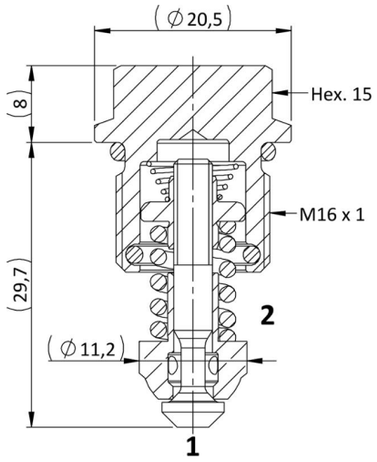
HYDRAULIC SYMBOL



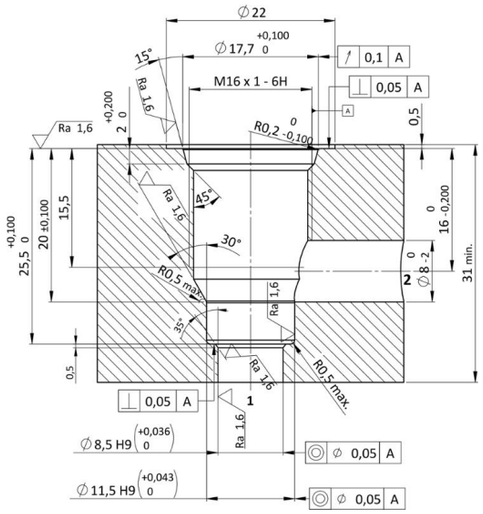
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY
VH004



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.15
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.008 (standard sealing NBR-BUNA-N)
COINING KIT	CK.001
WEIGHT	0,040 kg

ORDERING CODE

I	R	A	0	·	M	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M16x1

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
Y	15-25
N	26-50
B	51-100
G	101-150
V	151-250
W	251-350

Specifications may change without notice.

Rev. 1

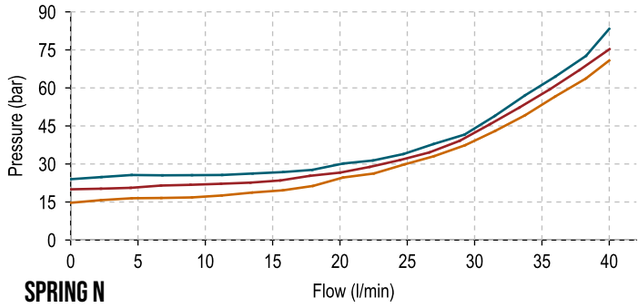
IRAO.M16 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

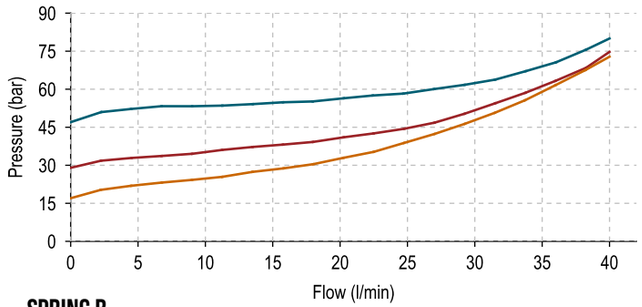
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

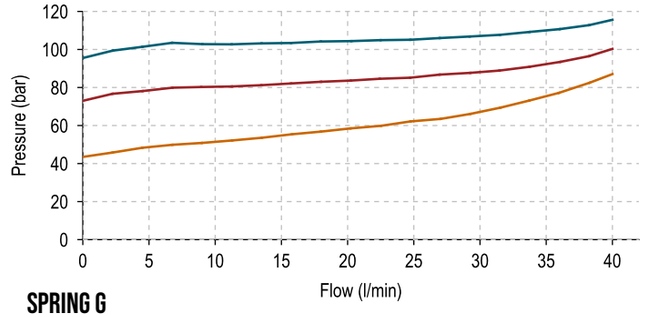
SPRING Y



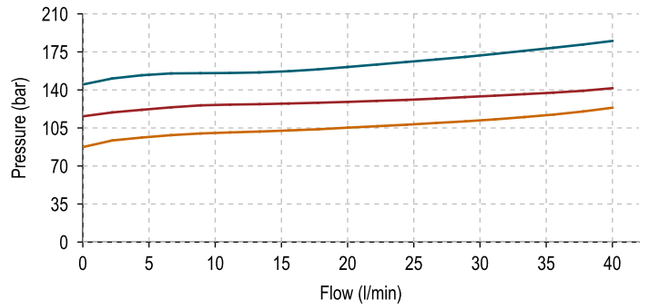
SPRING N



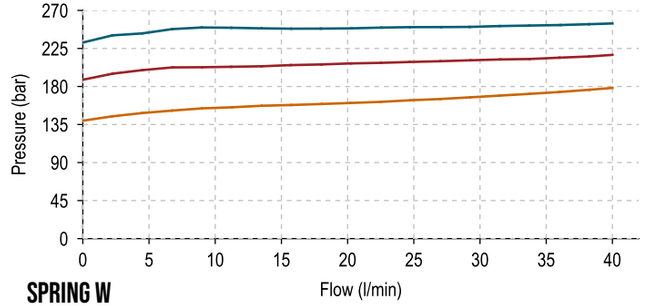
SPRING B



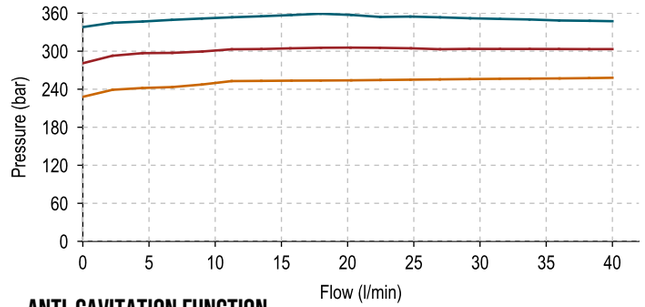
SPRING G



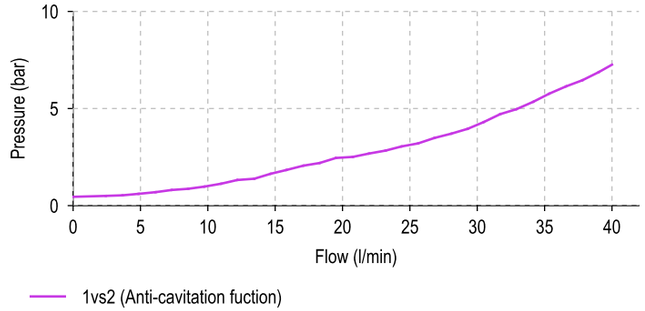
SPRING V



SPRING W



ANTI-CAVITATION FUNCTION



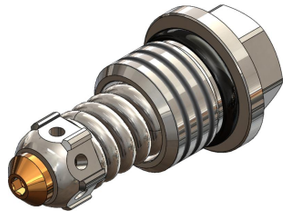
IRA6.M16 VALVE SERIES

METRIC Insert - 350 bar

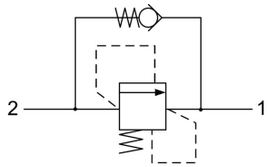
Direct acting with anti-cavitation

Poppet type

Hybrid cavity



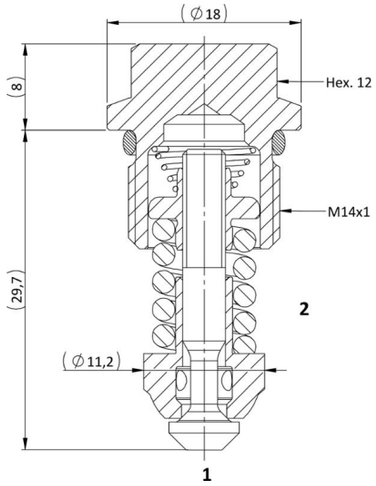
HYDRAULIC SYMBOL



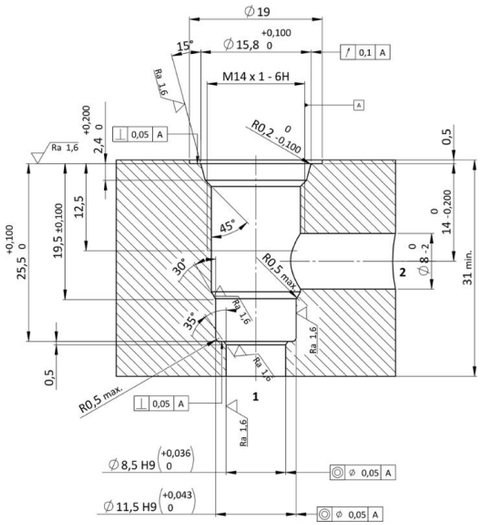
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.
Pressure setting is pre-adjusted by the factory and cannot be changed.

CROSS SECTION



CAVITY VH010



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 0% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.12
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COINING KIT	CK.001
WEIGHT	0,025 kg

ORDERING CODE

I	R	A	6	·	M	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M14x1

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	10-50
B	51-100
G	101-150
V	151-250
W	251-350

Specifications may change without notice.

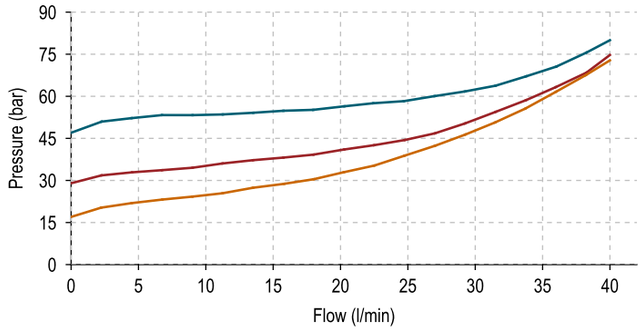
IRA6.M16 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

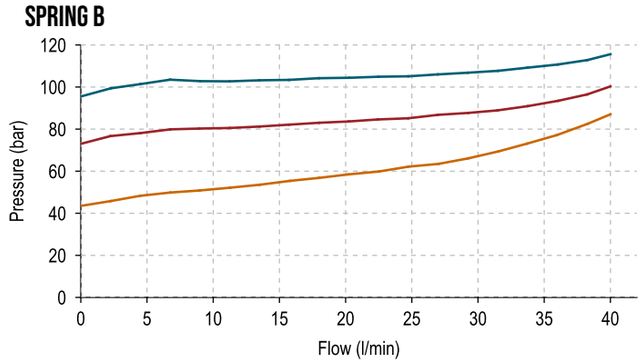
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

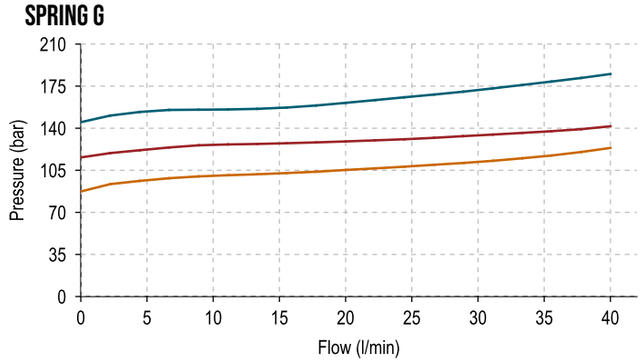
SPRING N



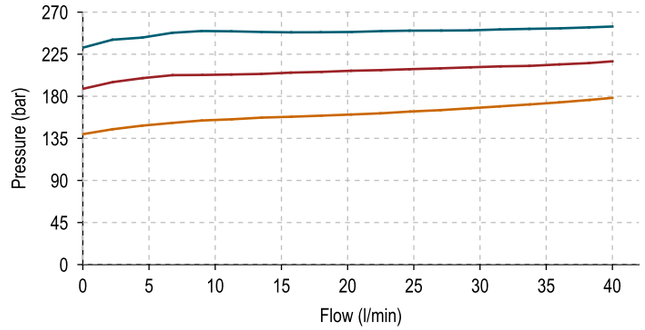
SPRING B



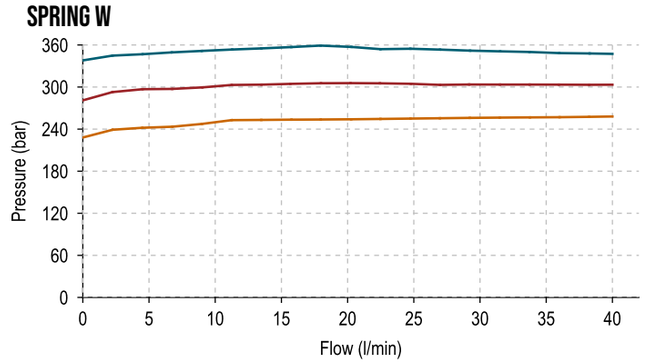
SPRING G



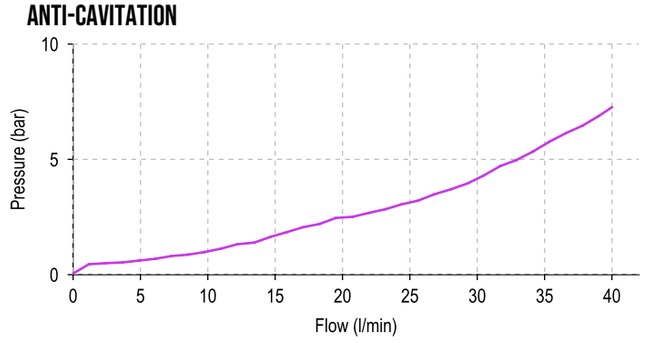
SPRING V



SPRING W



ANTI-CAVITATION

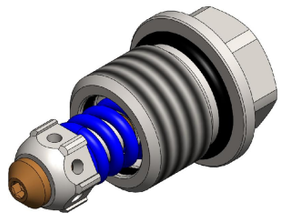


IRAO.M18 VALVE SERIES

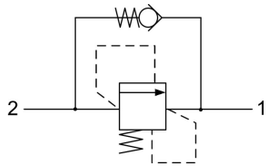
METRIC Insert - 450 bar

Direct acting with anti-cavitation

Poppet type



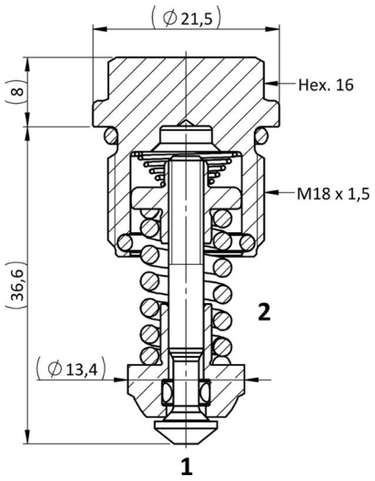
HYDRAULIC SYMBOL



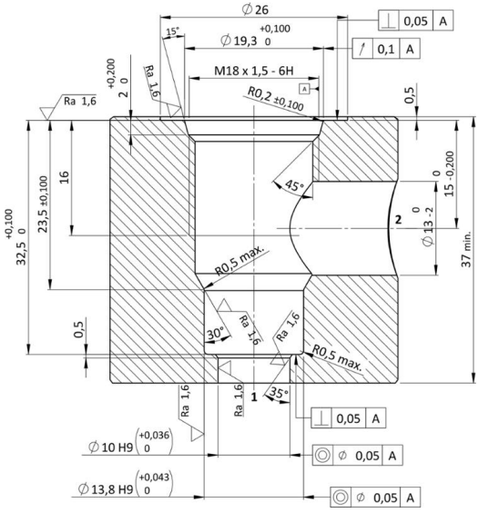
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage. The IRA valve can be provided upon request with a calibrated orifice in the poppet that allows a certain flow through the valve before its opening.

CROSS SECTION



CAVITY VH002



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	450 bar
MAXIMUM FLOW	60 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.16
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.005 (standard sealing NBR-BUNA-N)
COINING KIT	CK.002
WEIGHT	0,060 kg

ORDERING CODE

I	R	A	0	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE
IRL* calibrated orifice version

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M18x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-70
B	71-130
G	131-210
V	211-280
W	281-350
R	351-420
T	400-450

Specifications may change without notice.

Rev. 1

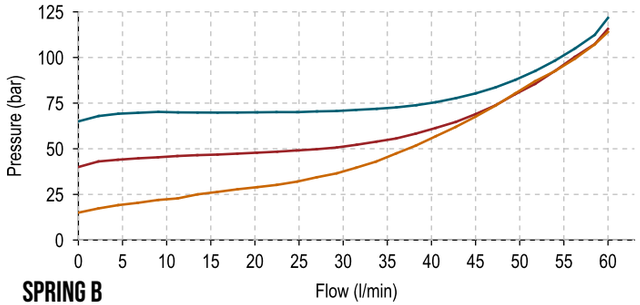
IRAO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

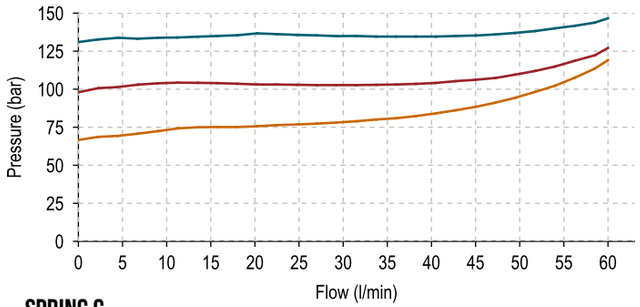
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

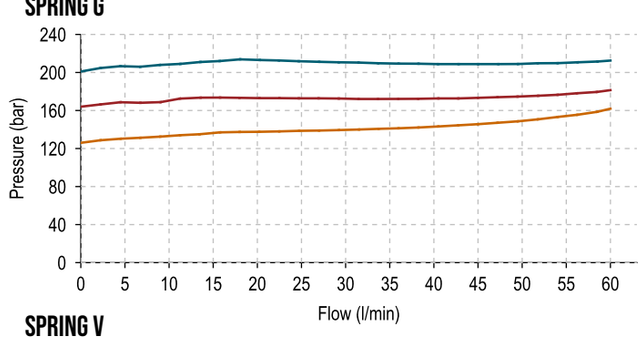
SPRING N



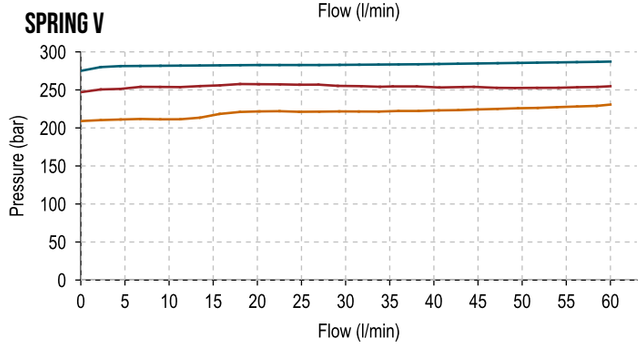
SPRING B



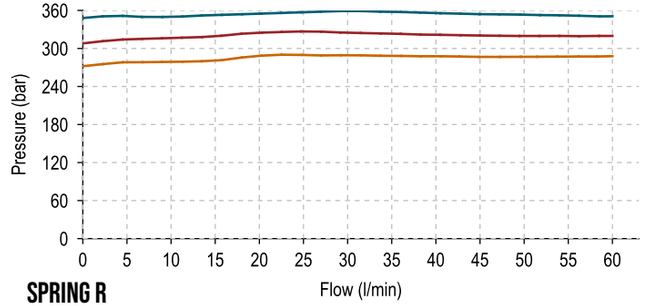
SPRING G



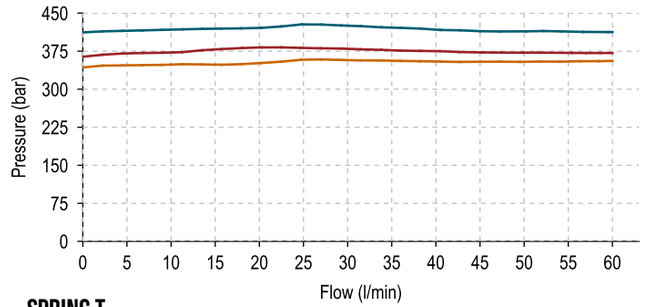
SPRING V



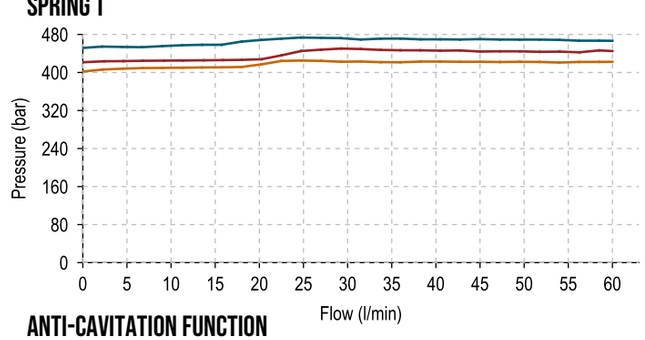
SPRING W



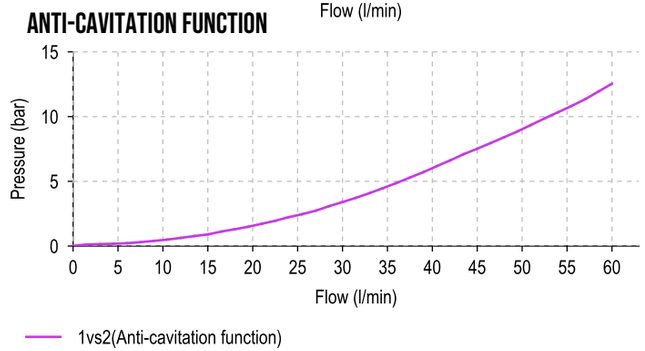
SPRING R



SPRING T



ANTI-CAVITATION FUNCTION



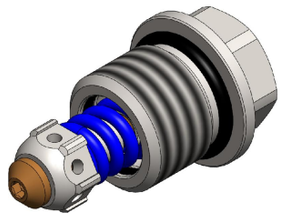
Rev. 1

IRA0.M20 VALVE SERIES

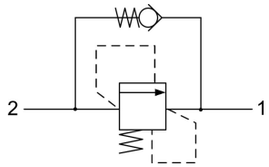
METRIC Insert - 420 bar

Direct acting with anti-cavitation

Poppet type



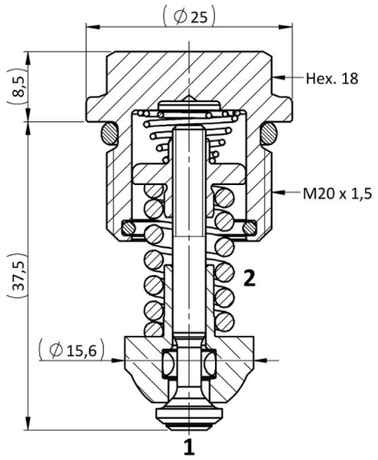
HYDRAULIC SYMBOL



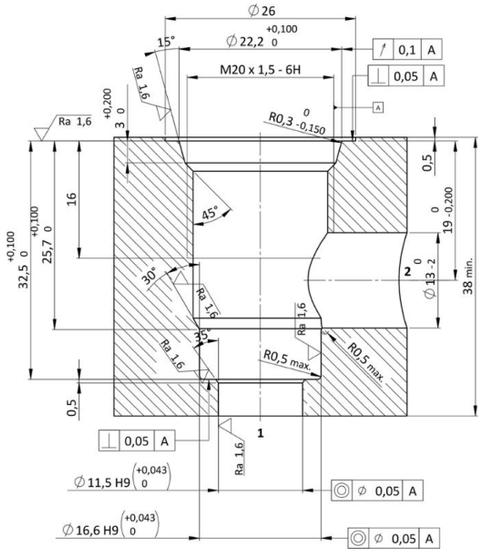
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY
VH003



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	58-62 Nm Hex.18
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.007 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,065 kg

ORDERING CODE

I	R	A	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M20x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-170
G	171-250
V	251-350
W	351-420

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

Rev. 1

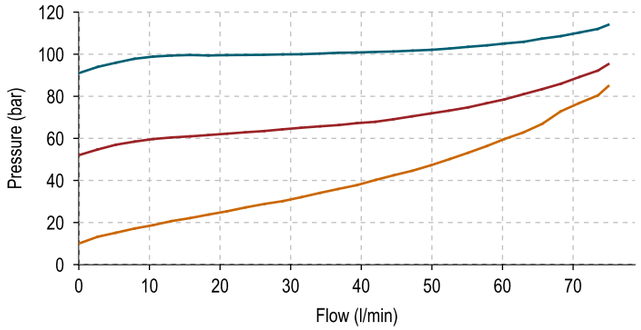
IRAO.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

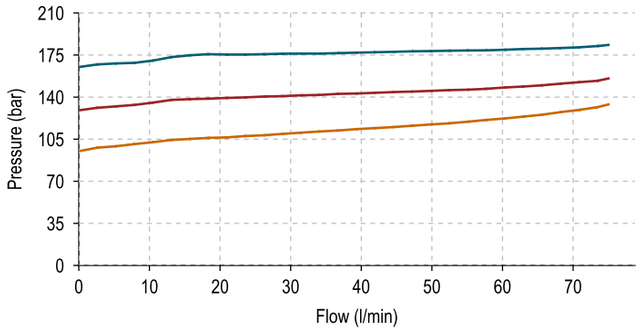
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

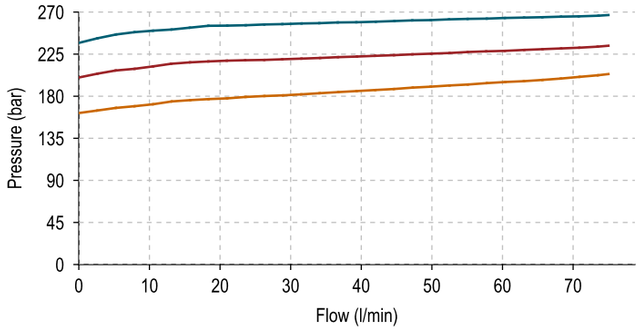
SPRING N



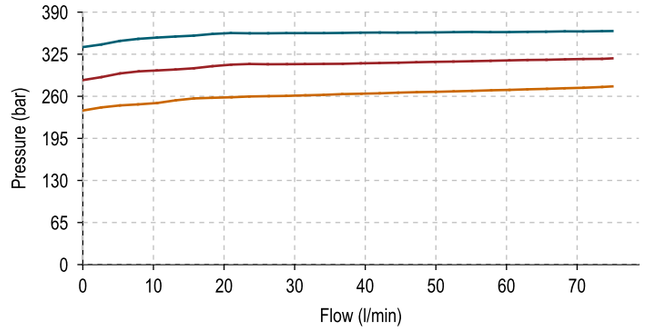
SPRING B



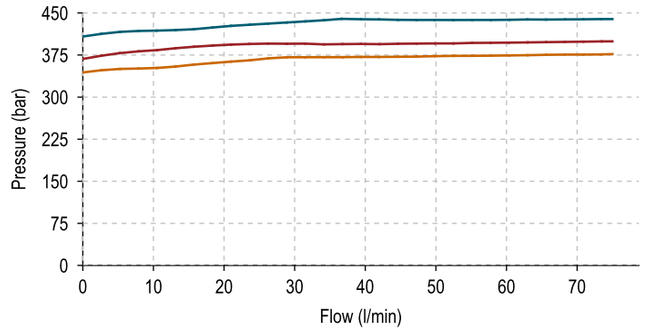
SPRING G



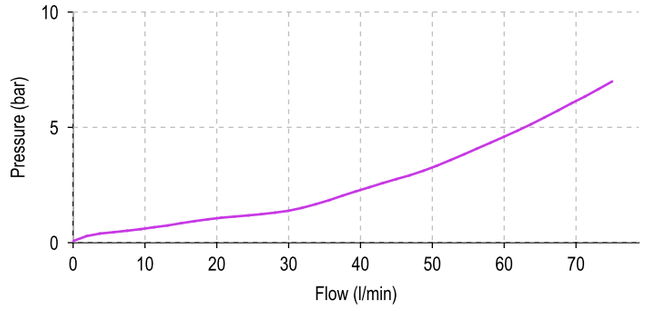
SPRING V



SPRING W



ANTI-CAVITATION



Rev. 1

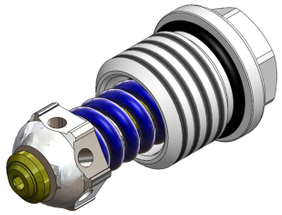
IRA6.M20 VALVE SERIES

Metric Insert - 420 bar

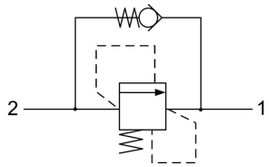
Direct acting with anti-cavitation

Poppet type

Hybrid cavity



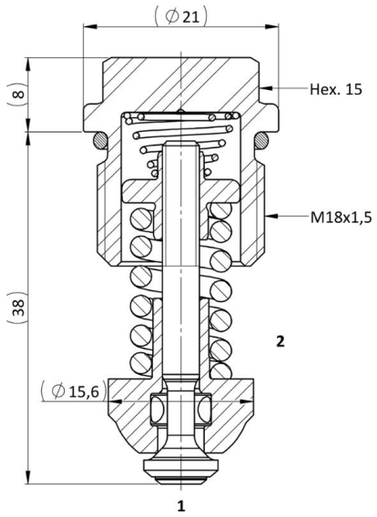
HYDRAULIC SYMBOL



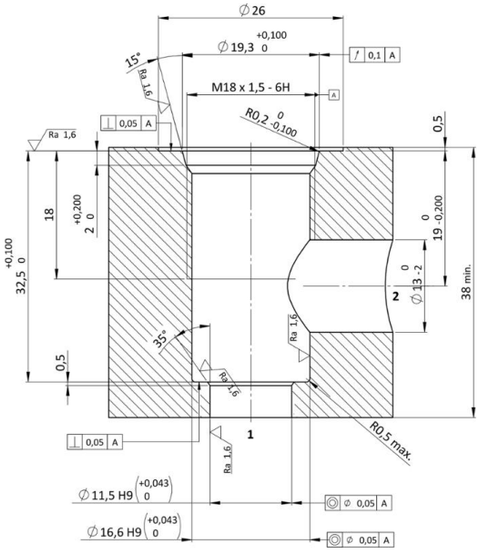
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.
Pressure setting is pre-adjusted by the factory and cannot be changed.

CROSS SECTION



CAVITY
VH006



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restriction
INSTALLATION TORQUE	35-40 Nm Hex.15
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.005 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,046 kg

ORDERING CODE

I	R	A	6	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M18x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-170
G	171-250
V	251-350
W	351-420

SETTING PRESSURE IN [BAR]
Standard setting are multiples of 5 bar.

Specifications may change without notice.

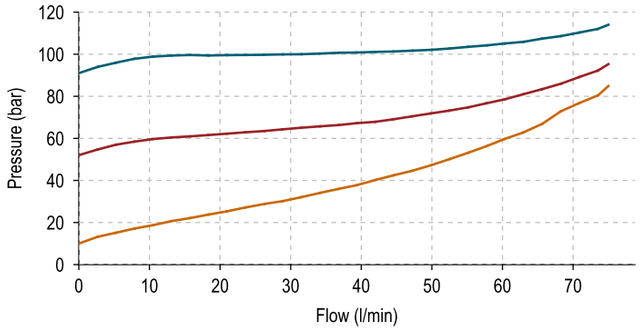
IRA6.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

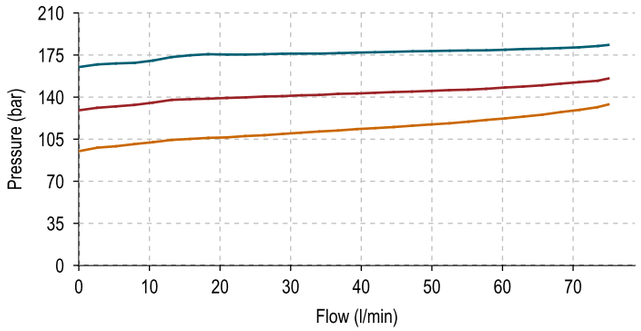
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

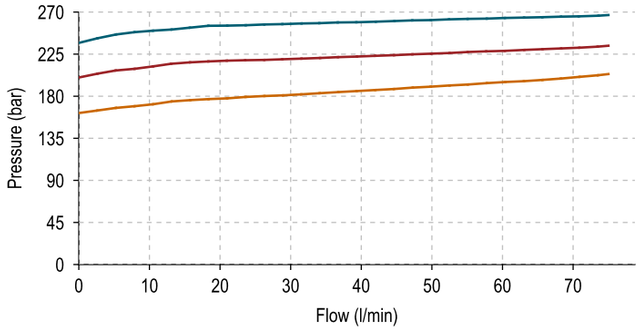
SPRING N



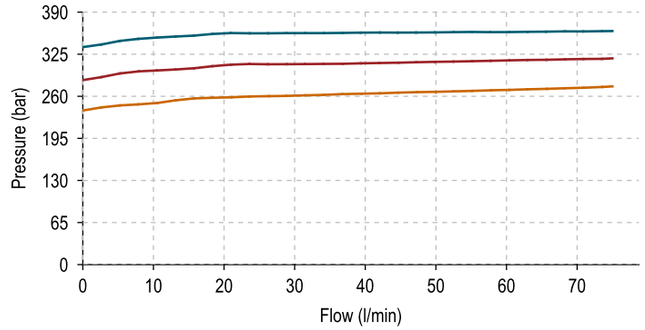
SPRING B



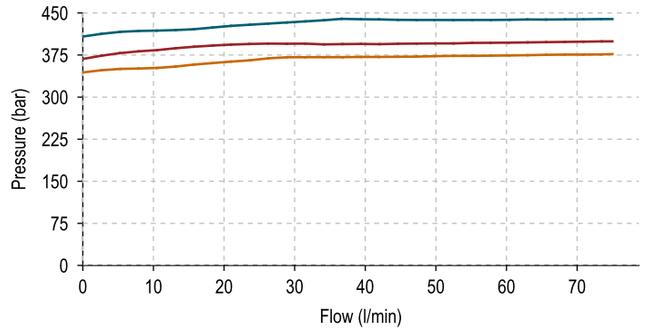
SPRING G



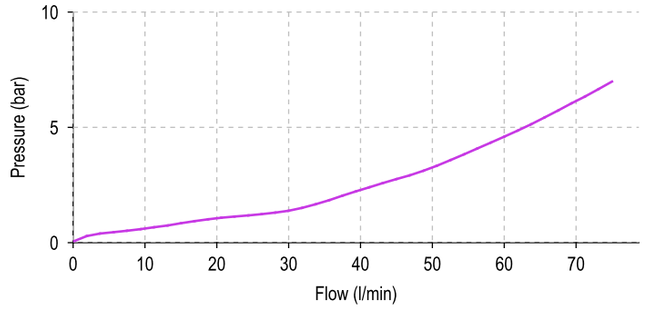
SPRING V



SPRING W



ANTI-CAVITATION

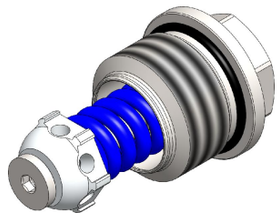


IRAR.M24 VALVE SERIES

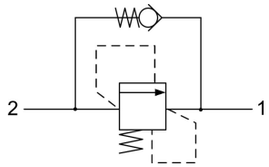
METRIC Insert - 400 bar

Direct acting with anti-cavitation

Poppet type



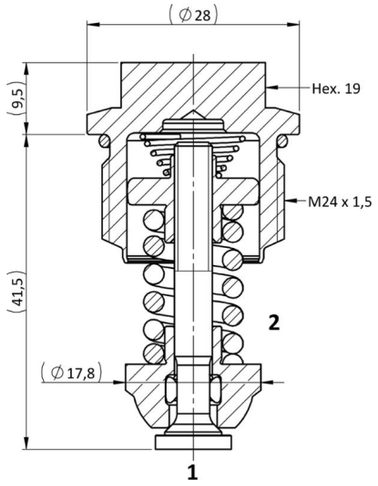
HYDRAULIC SYMBOL



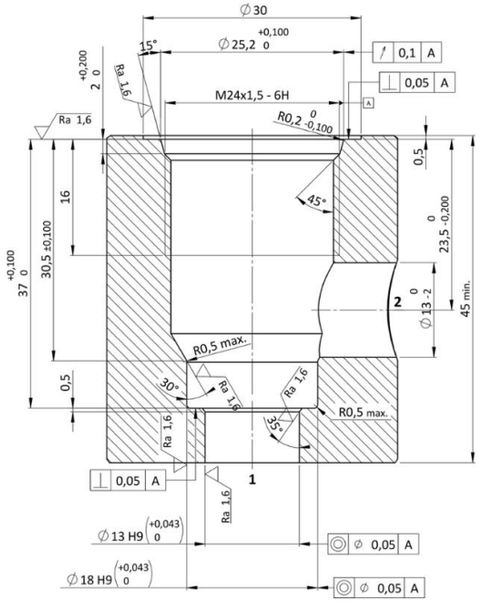
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY VH005



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	100 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70-80 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.009 (standard sealing NBR-BUNA-N)
COINING KIT	CK.004
WEIGHT	0,088 kg

ORDERING CODE

I	R	A	R	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M24x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	30-90
B	91-170
G	171-245
V	246-320
W	321-400

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

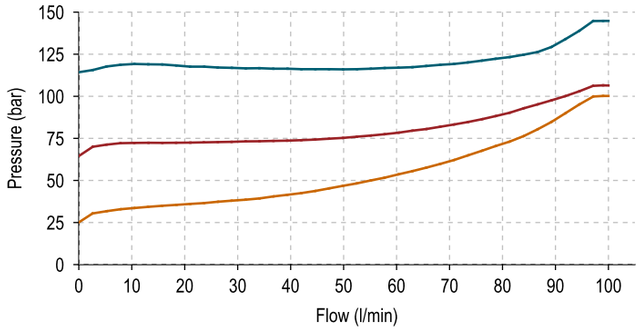
IRAR.M24 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

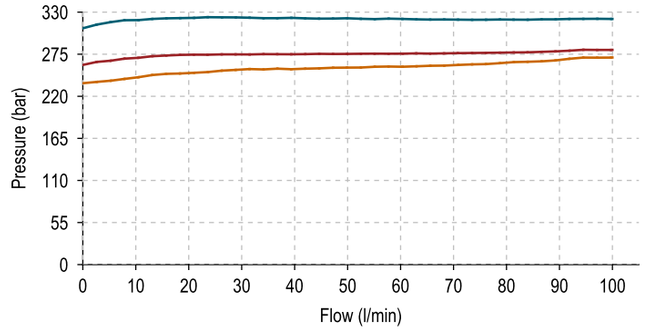
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

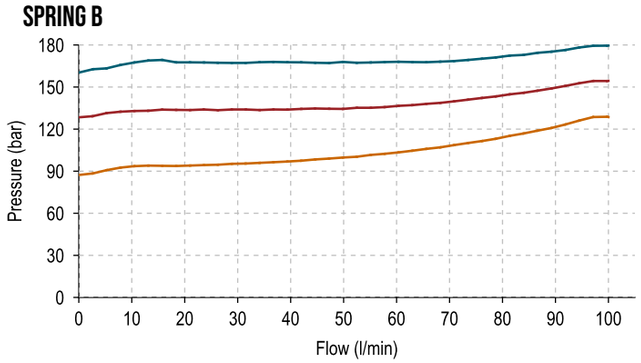
SPRING N



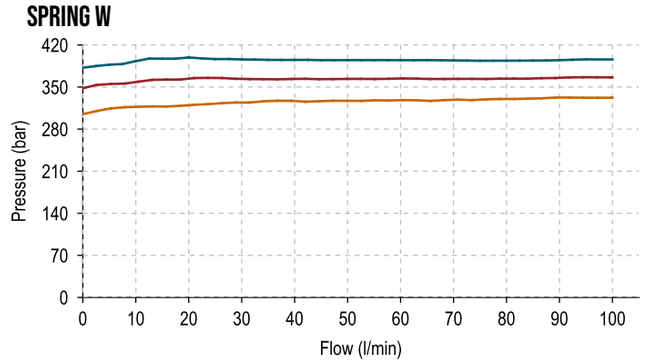
SPRING V



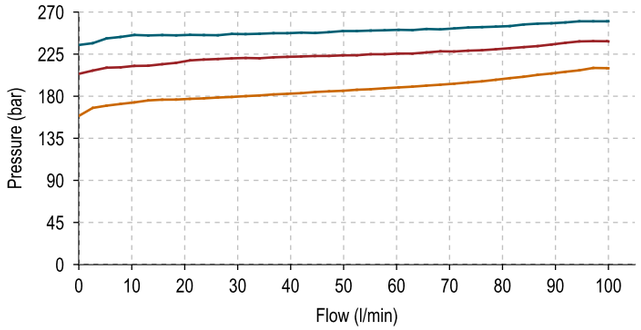
SPRING B



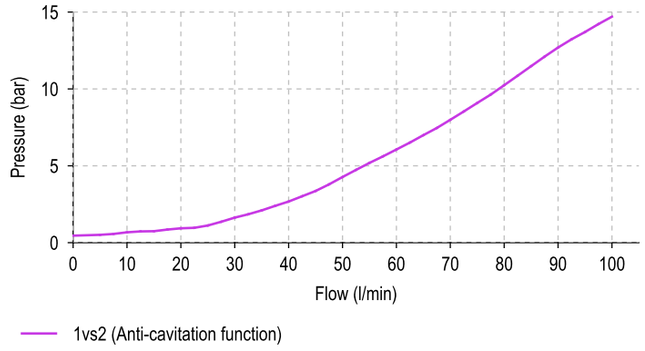
SPRING W



SPRING G



ANTI-CAVITATION FUNCTION

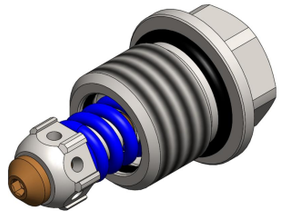


IRAO.M27 VALVE SERIES

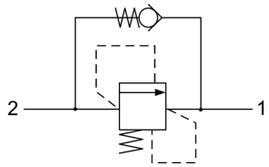
METRIC Insert - 400 bar

Direct acting with anti-cavitation

Poppet type



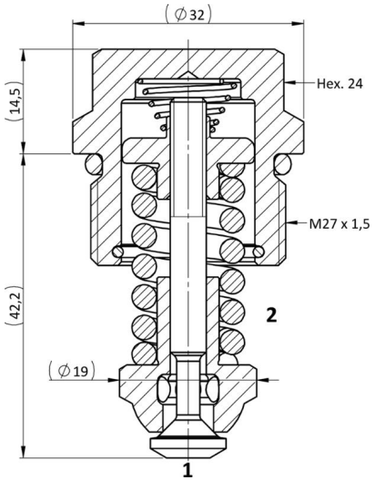
HYDRAULIC SYMBOL



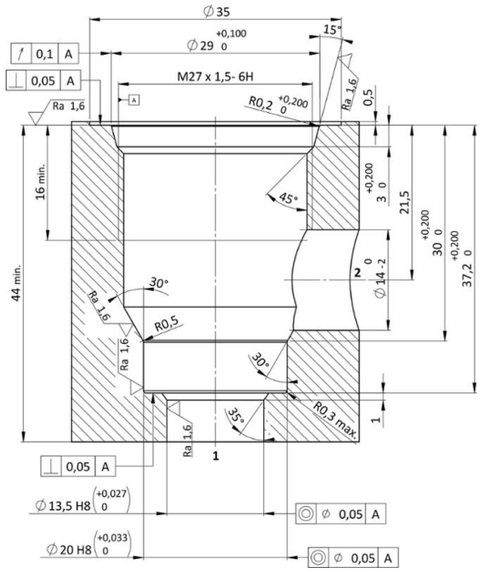
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY
VH054



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	150 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	3 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	70-80 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.044 (standard sealing NBR-BUNA-N)
COINING KIT	CK.005
WEIGHT	0,140 kg

ORDERING CODE

I	R	A	0	·	M	2	7	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M27x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-180
G	181-250
V	251-320
W	321-400

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

Rev. 1

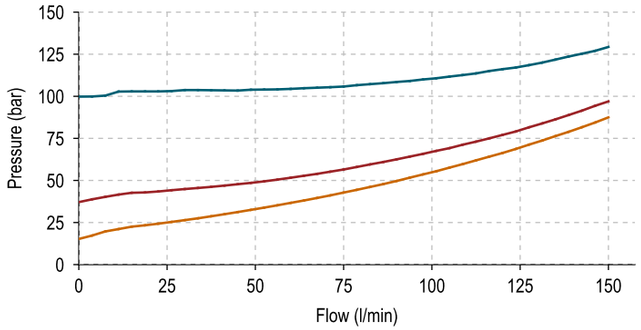
IRAO.M27 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

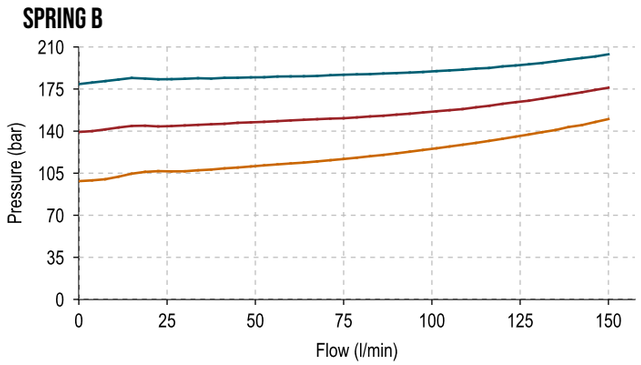
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

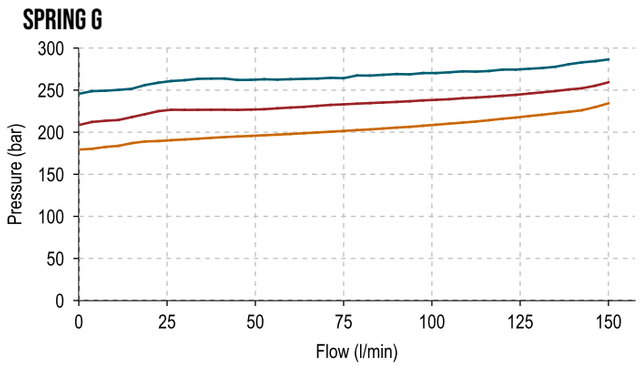
SPRING N



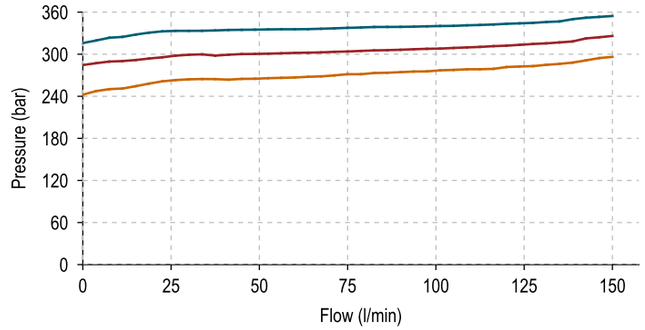
SPRING B



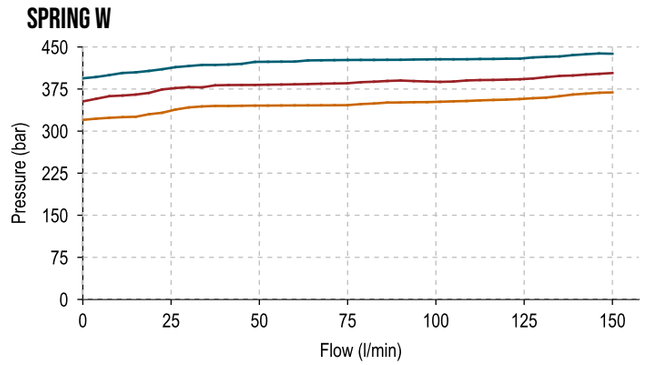
SPRING G



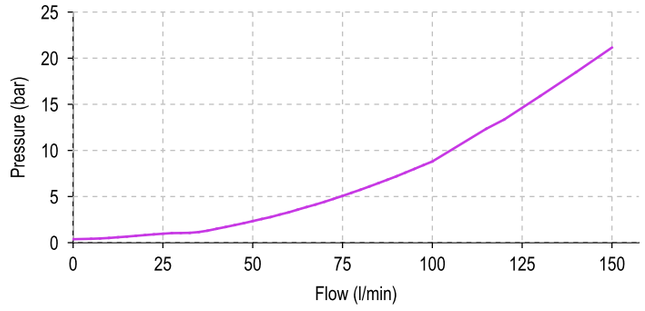
SPRING V



SPRING W



ANTI-CAVITATION FUNCTION



1vs2 (Anti-cavitation function)

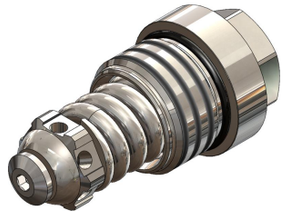
IRA6.M27 VALVE SERIES

METRIC Insert - 400 bar

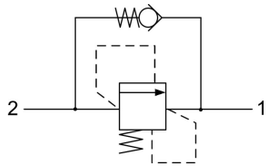
Direct acting with anti-cavitation

Poppet type

Hybrid cavity



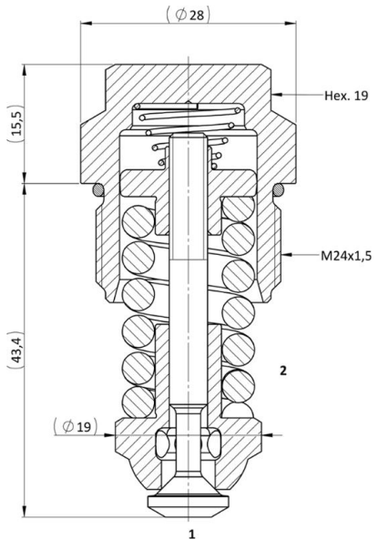
HYDRAULIC SYMBOL



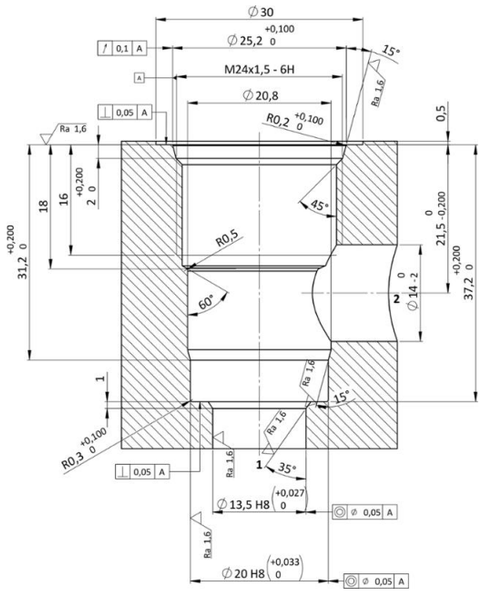
DESCRIPTION

The IRA valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.
Pressure setting is pre-adjusted by the factory and cannot be changed.

CROSS SECTION



CAVITY VH026



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	150 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	3 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 0% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.009 (standard sealing NBR-BUNA-N)
COINING KIT	CK.005
WEIGHT	0,109 kg

ORDERING CODE

I	R	A	6	·	M	2	7	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M24x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-180
G	181-250
V	251-320
W	321-400

Specifications may change without notice.

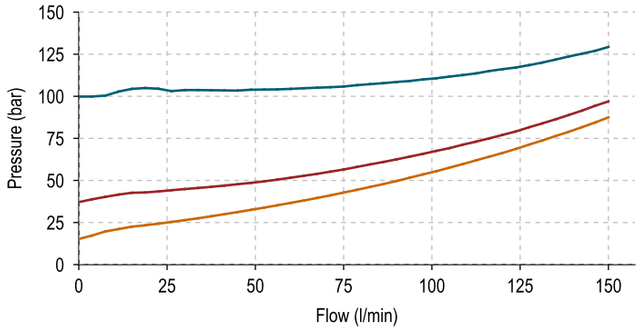
IRA6.M27 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

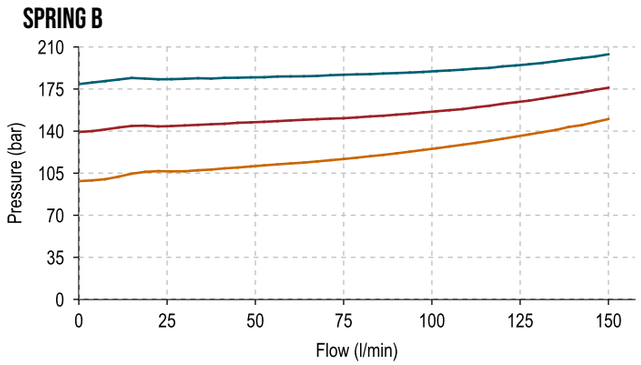
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

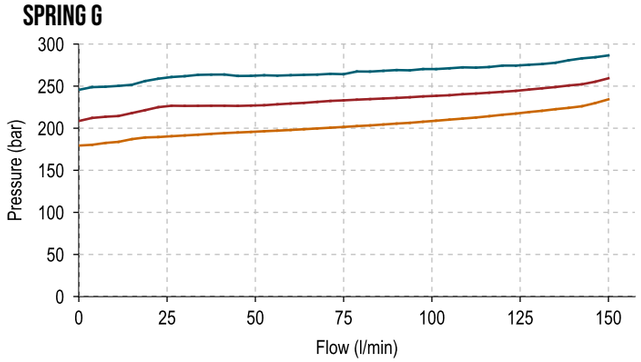
SPRING N



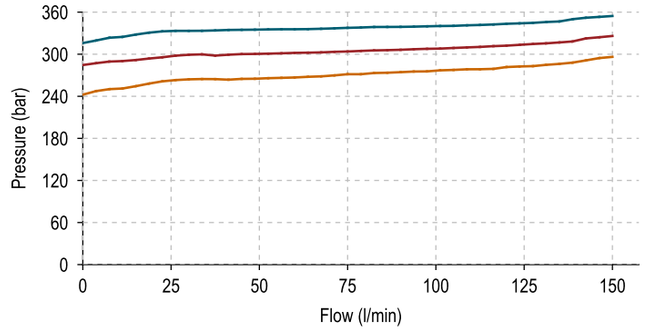
SPRING B



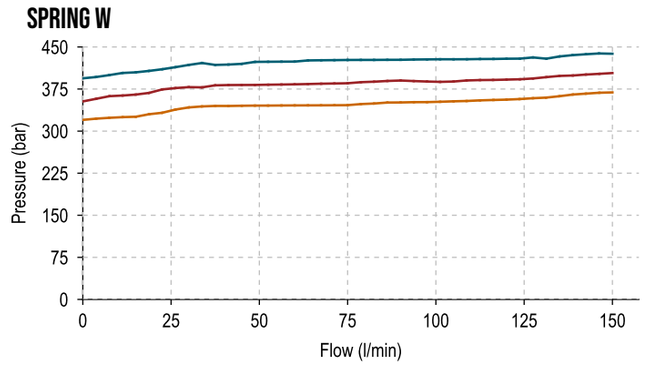
SPRING G



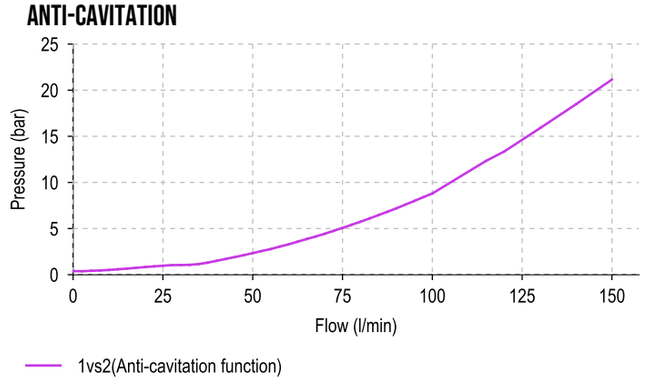
SPRING V



SPRING W



ANTI-CAVITATION



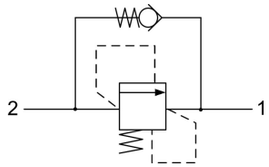
IRDO.M24 VALVE SERIES

METRIC Cartridge - 400 bar

Direct acting with anti-cavitation

Poppet type

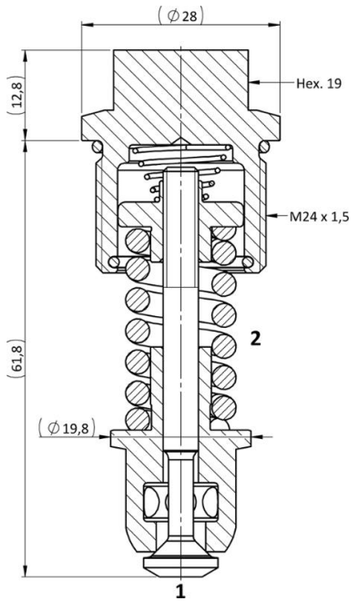
HYDRAULIC SYMBOL



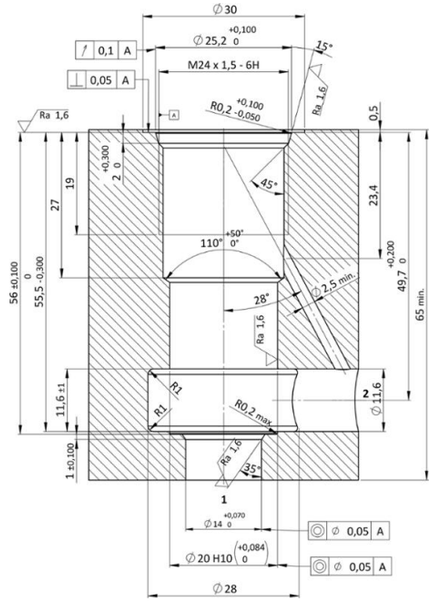
DESCRIPTION

The IRD valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY
VH095



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	180 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	3 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	95-100 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.009 (standard sealing NBR-BUNA-N)
COINING KIT	CK.006
WEIGHT	0,140 kg

ORDERING CODE

I	R	D	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M24x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-180
G	181-250
V	251-320
W	321-400

Specifications may change without notice.

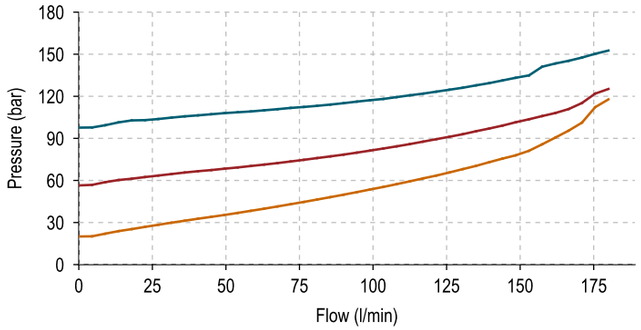
IRDO.M24 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

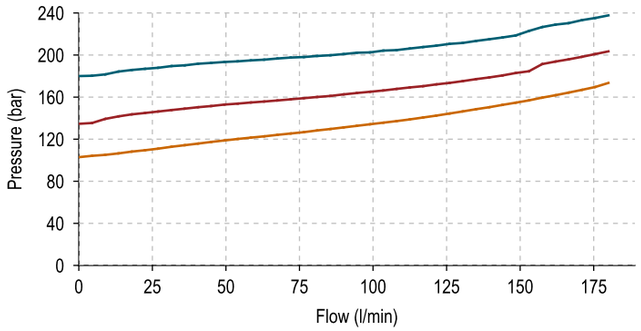
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

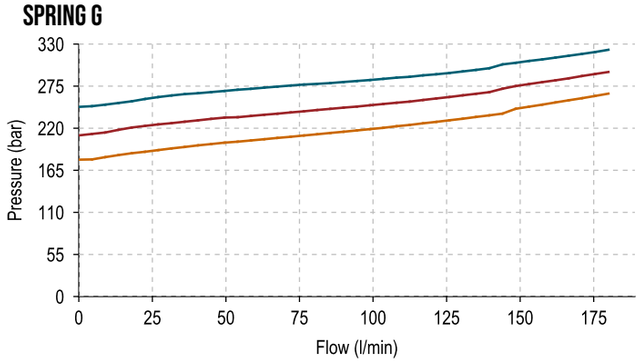
SPRING N



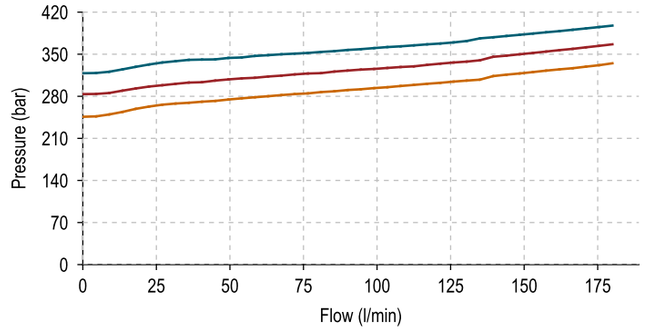
SPRING B



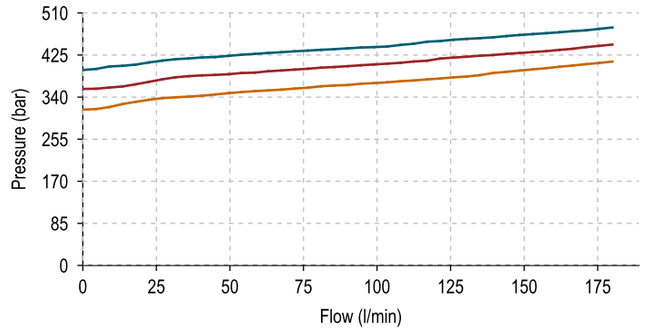
SPRING G



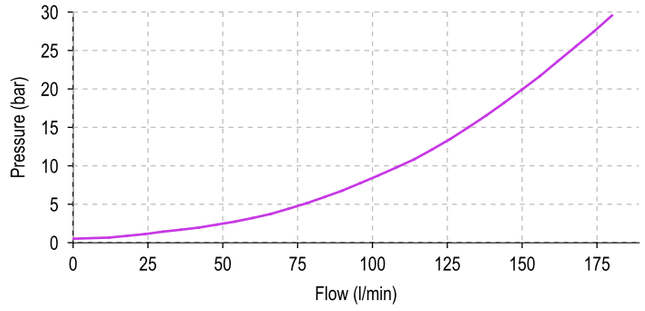
SPRING V



SPRING W



ANTI-CAVITATION FUNCTION



1vs2 (Anti-cavitation function)

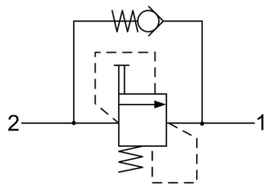
IREO.M18 VALVE SERIES

METRIC Insert - 420 bar

Direct acting with anti-cavitation, manual override

Poppet type

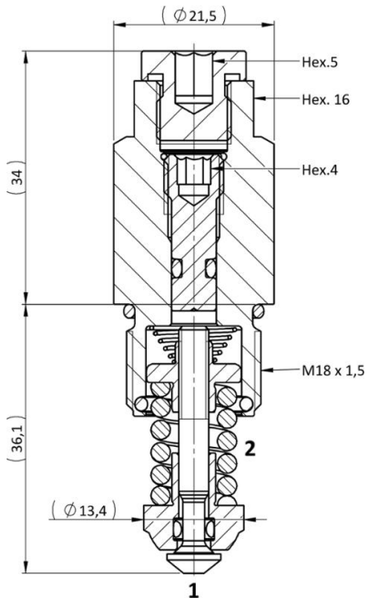
HYDRAULIC SYMBOL



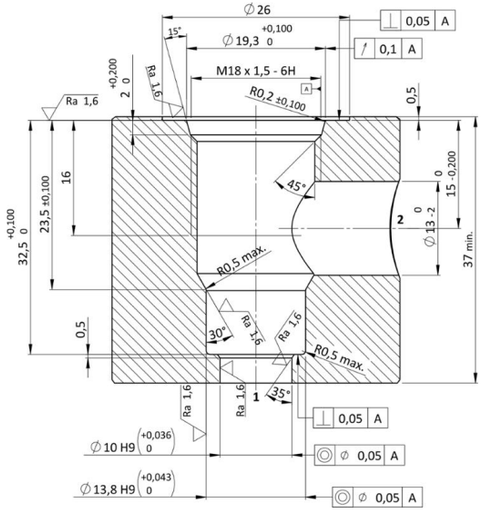
DESCRIPTION

The IRE valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage. Manual override funcion for RV configuration.

CROSS SECTION



CAVITY VH002



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.16
PLUG TINGHTENING TORQUE	10-12 Nm Hex.5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.005 (standard sealing NBR-BUNA-N)
COINING KIT	CK.002
WEIGHT	0,115 kg

ORDERING CODE

I	R	E	0	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M18x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-70
B	71-130
G	131-210
V	211-280
W	281-350
R	351-420

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

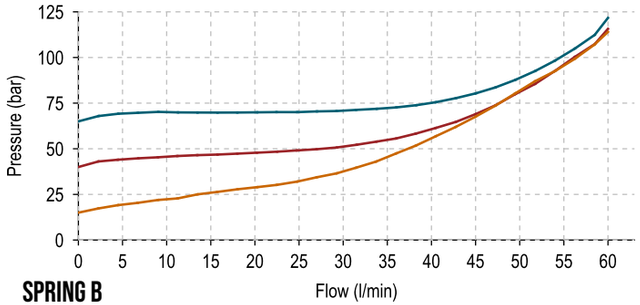
IREO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

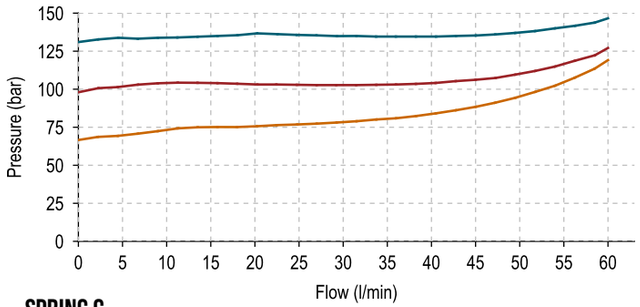
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

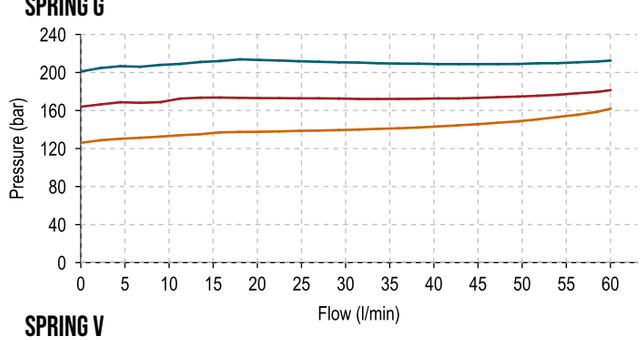
SPRING N



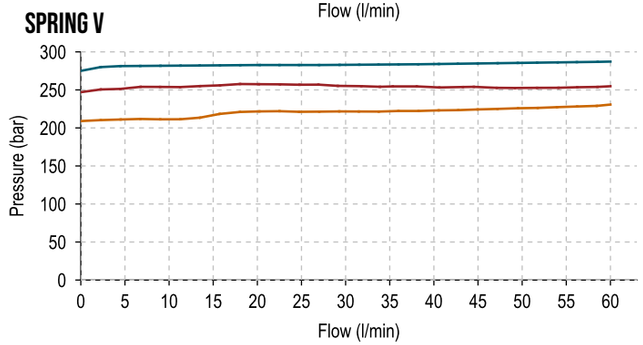
SPRING B



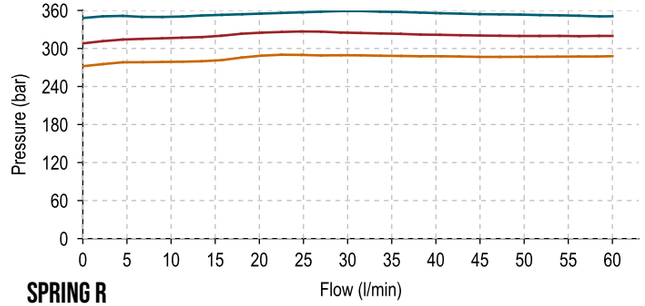
SPRING G



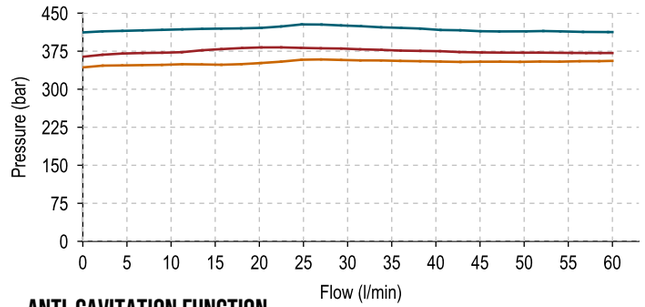
SPRING V



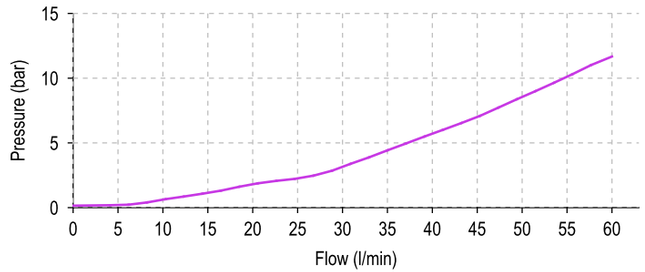
SPRING W



SPRING R



ANTI-CAVITATION FUNCTION



1vs2 (Anti-cavitation function)

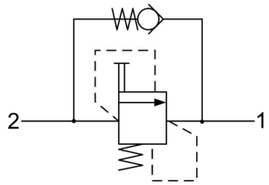
IREO.M20 VALVE SERIES

METRIC Insert - 420 bar

Direct acting with anti-cavitation, manual override

Poppet type

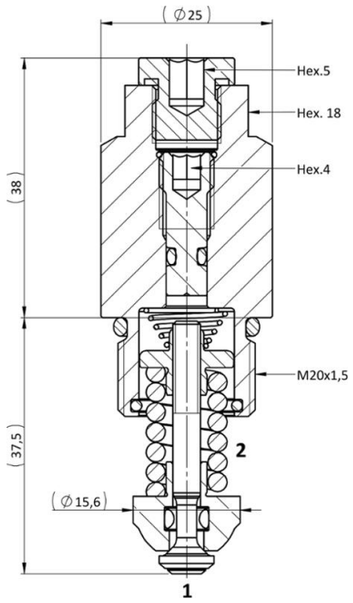
HYDRAULIC SYMBOL



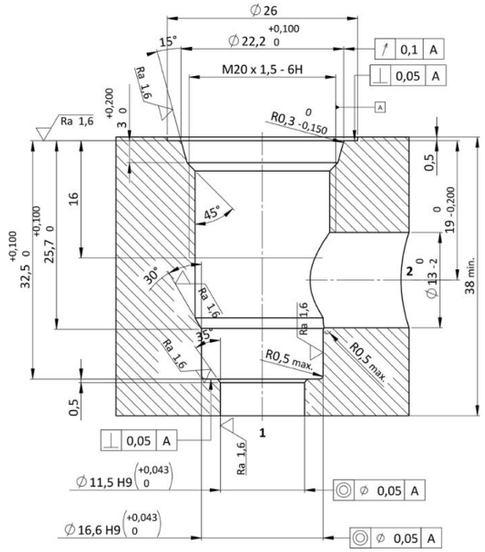
DESCRIPTION

The IRE valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage. Manual override funcion for RV configuration.

CROSS SECTION



CAVITY
VH003



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.18
PLUG TINGHTENING TORQUE	10-12 Nm Hex.5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.007 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,160 kg

ORDERING CODE

I	R	E	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M20x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-170
G	171-250
V	251-350
W	351-420

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

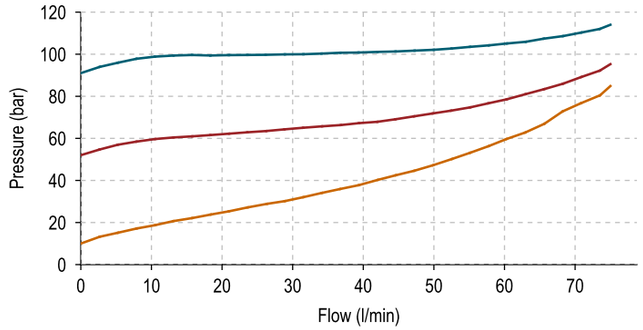
IREO.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

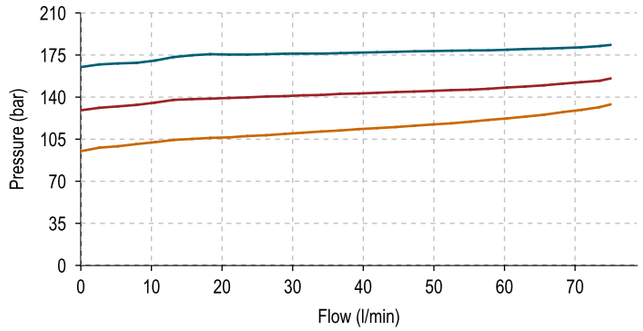
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

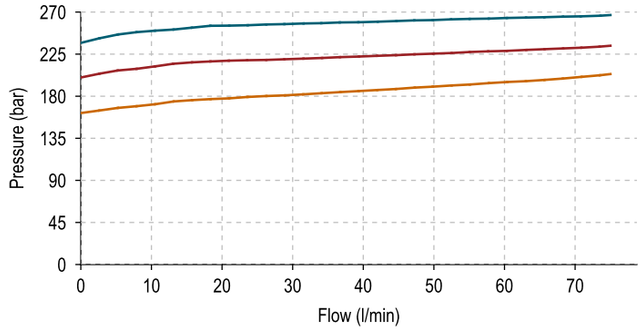
SPRING N



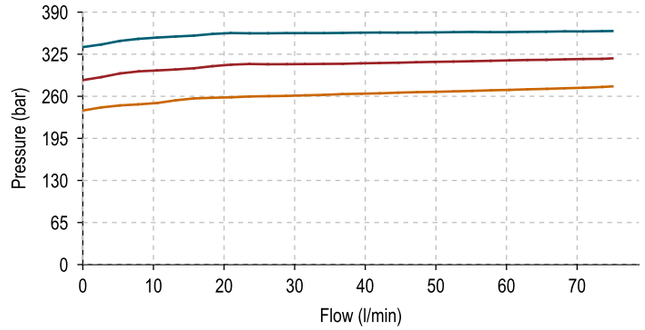
SPRING B



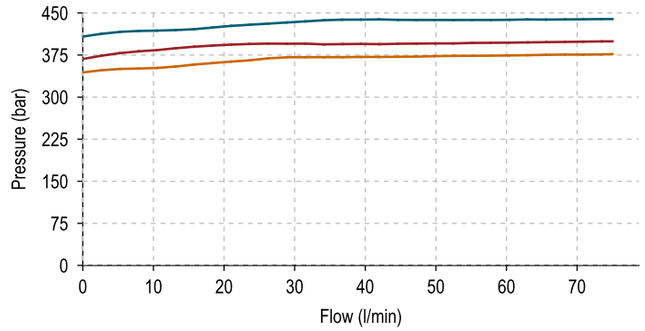
SPRING G



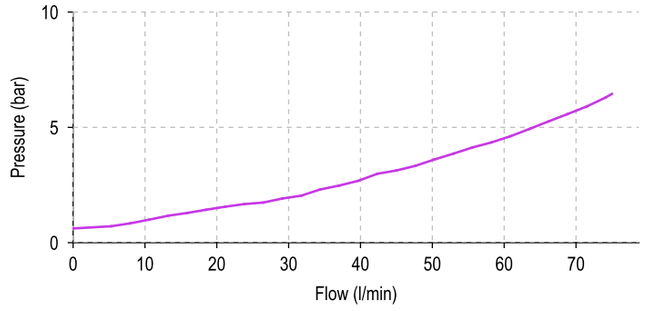
SPRING V



SPRING W



ANTI-CAVITATION FUNCTION

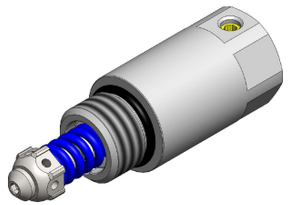


IRRO.M16 VALVE SERIES

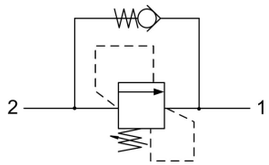
METRIC Insert - 350 bar

Direct acting with anti-cavitation

Poppet type



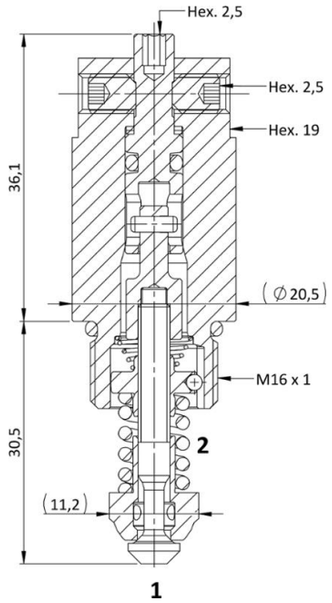
HYDRAULIC SYMBOL



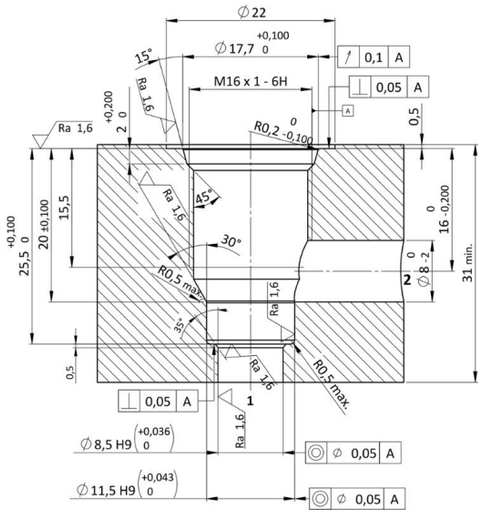
DESCRIPTION

The IRR valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY VH004



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.19
NUT TINGHTENING TORQUE	2-4 Nm Hex.2,5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.008 (standard sealing NBR-BUNA-N)
COINING KIT	CK.001
WEIGHT	0,100 kg

ORDERING CODE

I	R	R	0	·	M	1	6	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M16x1

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	10-50
B	51-100
G	101-170
V	171-250
W	251-350

Specifications may change without notice.

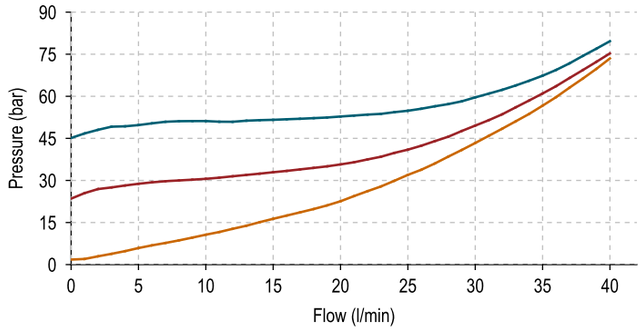
IRRO.M16 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

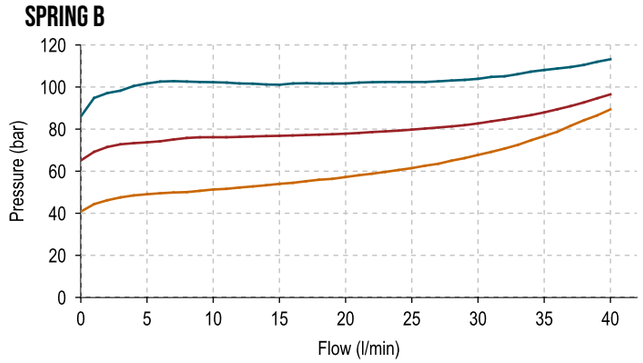
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

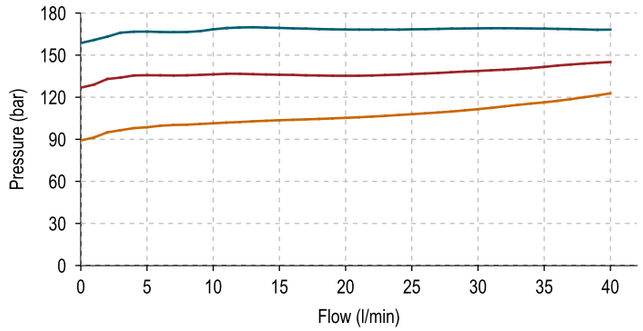
SPRING N



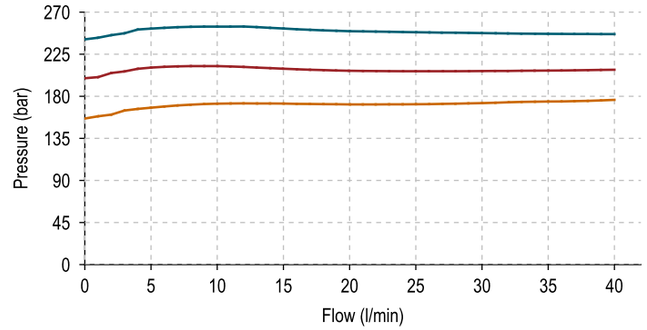
SPRING B



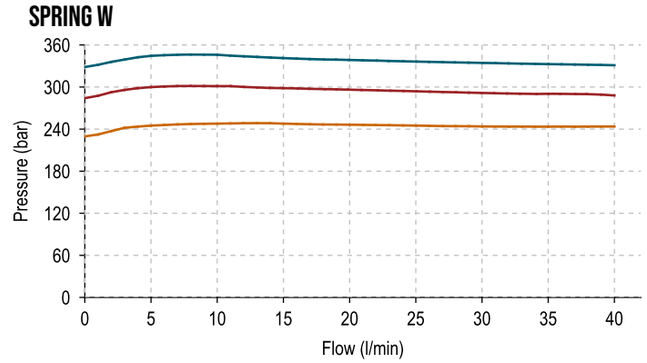
SPRING G



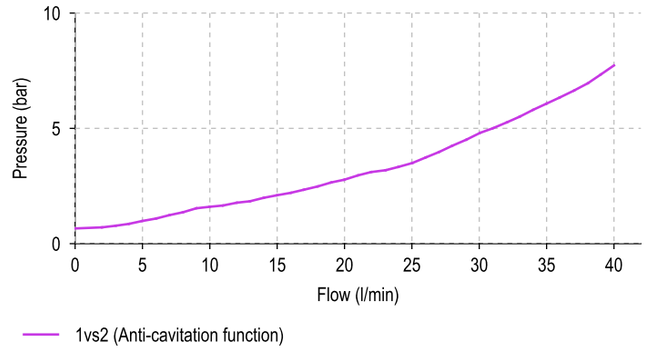
SPRING V



SPRING W



ANTI-CAVITATION FUNCTION

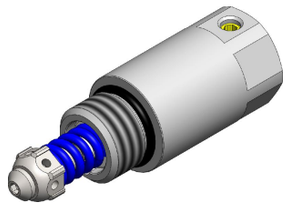


IRRO.M18 VALVE SERIES

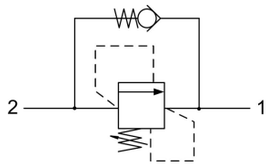
METRIC Insert - 420 bar

Direct acting with anti-cavitation

Poppet type



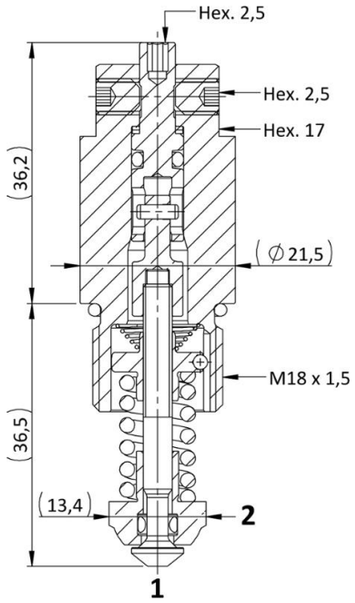
HYDRAULIC SYMBOL



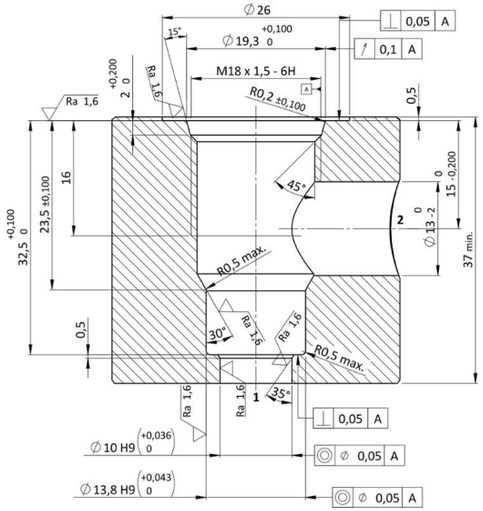
DESCRIPTION

The IRR valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY
VH002



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.17
NUT TINGHTENING TORQUE	2-4 Nm Hex.2,5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.005 (standard sealing NBR-BUNA-N)
COINING KIT	CK.002
WEIGHT	0,120 kg

ORDERING CODE

I	R	R	0	·	M	1	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M18x1,5

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-70
B	71-130
G	131-210
V	211-280
W	281-350
R	351-420

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

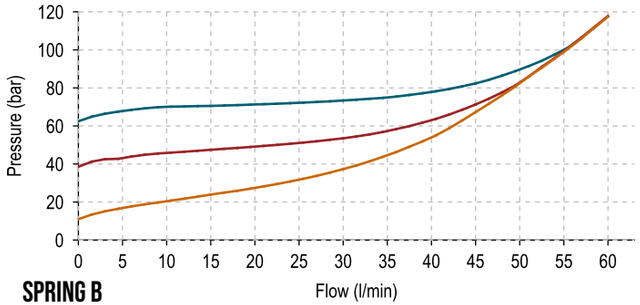
IRRO.M18 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

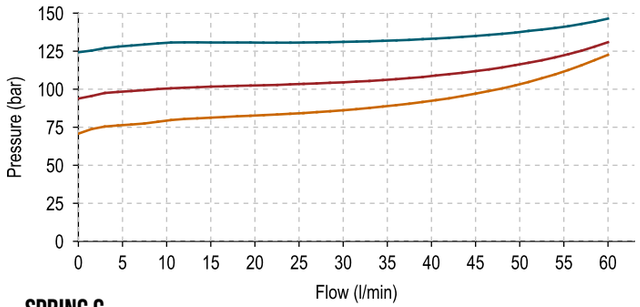
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

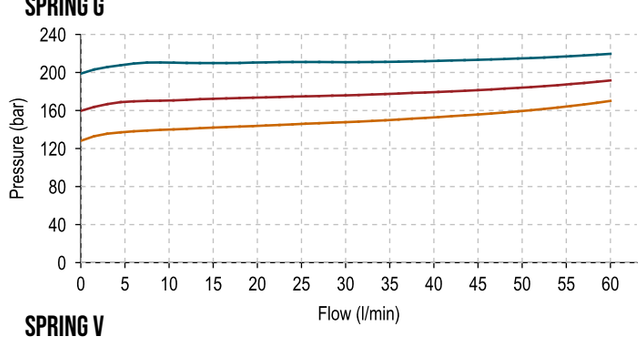
SPRING N



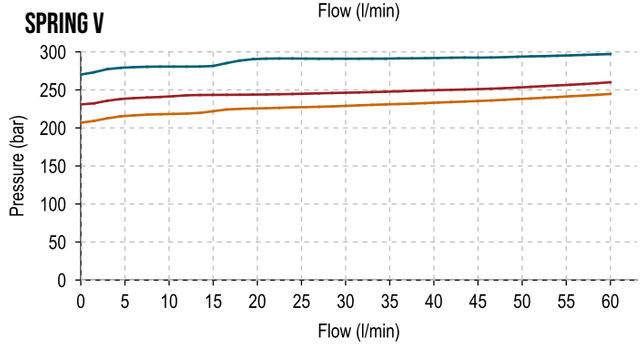
SPRING B



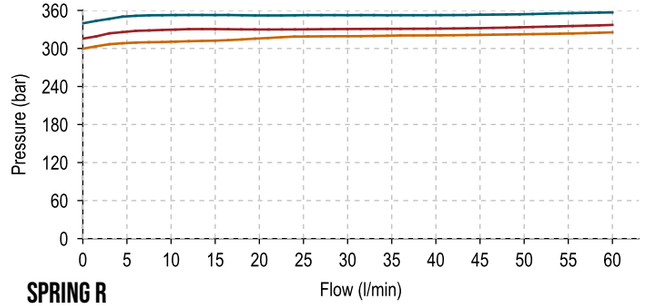
SPRING G



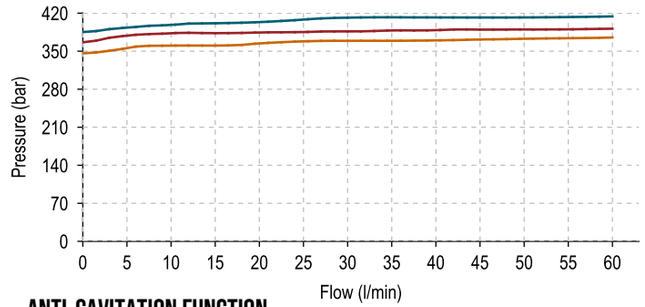
SPRING V



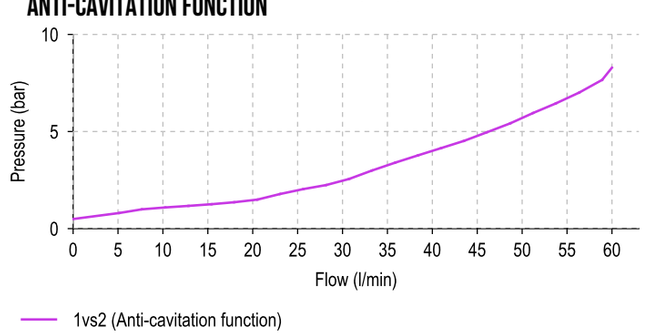
SPRING W



SPRING R



ANTI-CAVITATION FUNCTION

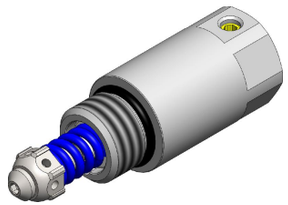


IRRO.M20 VALVE SERIES

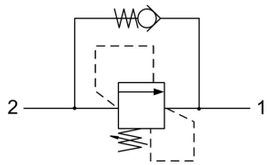
METRIC Insert - 420 bar

Direct acting with anti-cavitation

Poppet type



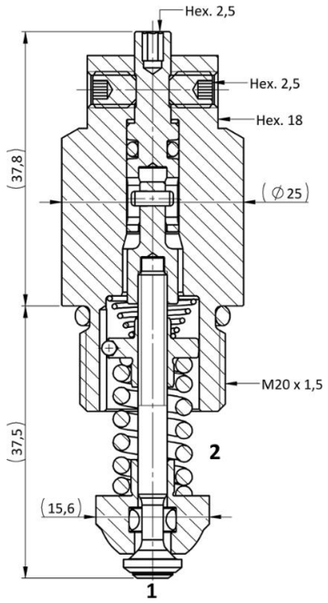
HYDRAULIC SYMBOL



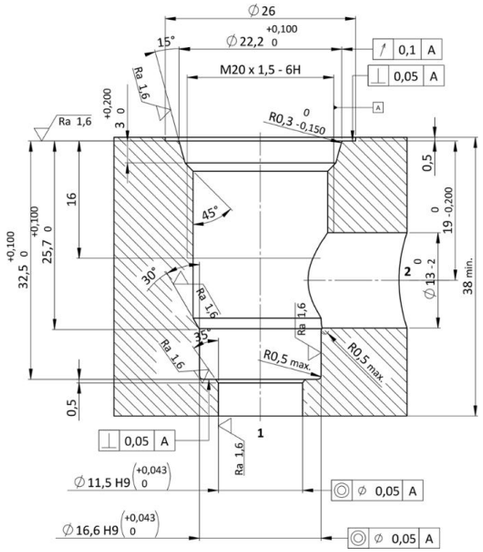
DESCRIPTION

The IRR valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY
VH003



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -30° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.18
NUT TINGHTENING TORQUE	2-4 Nm Hex.2,5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.007 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,156 kg

ORDERING CODE

I	R	R	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M20x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-170
G	171-250
V	251-350
W	351-420

Specifications may change without notice.

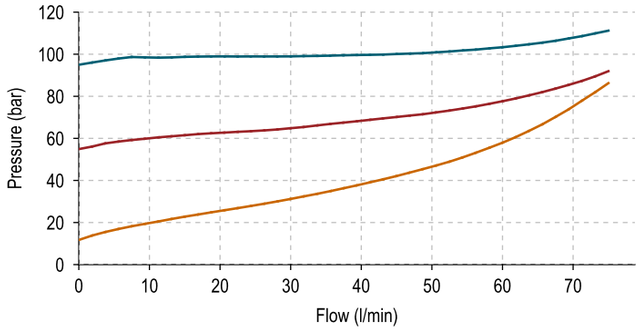
IRRO.M20 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for eachspring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

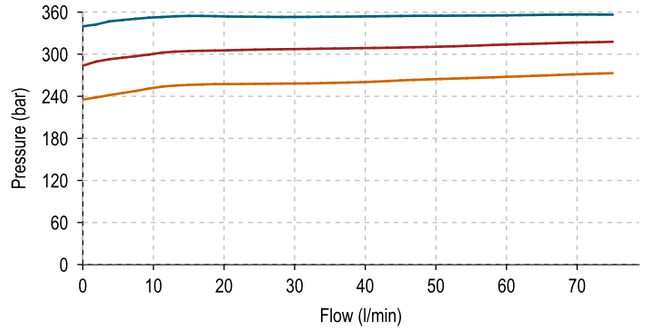
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

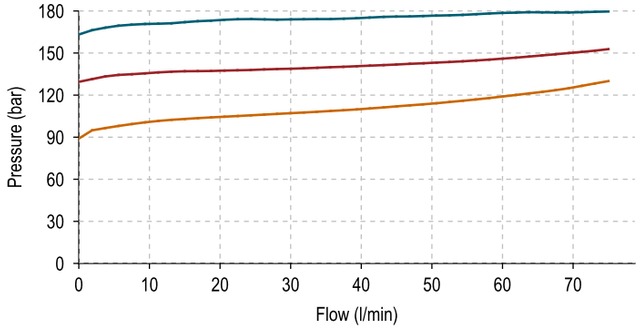
SPRING N



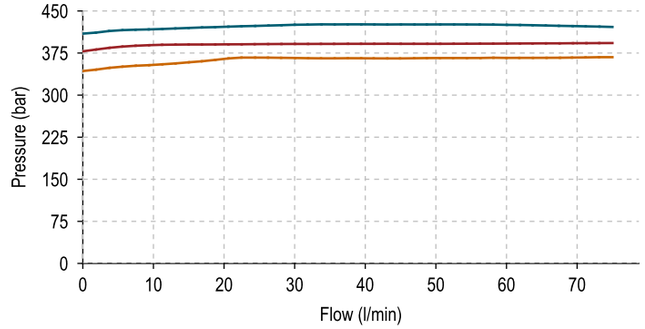
SPRING V



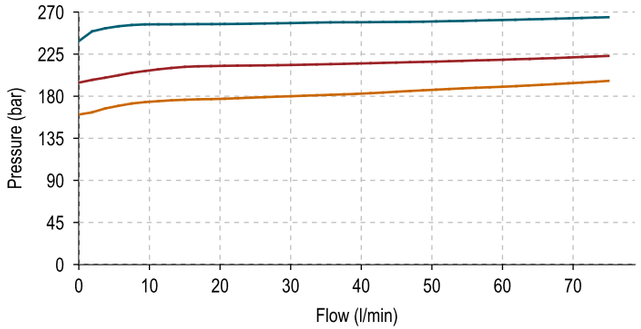
SPRING B



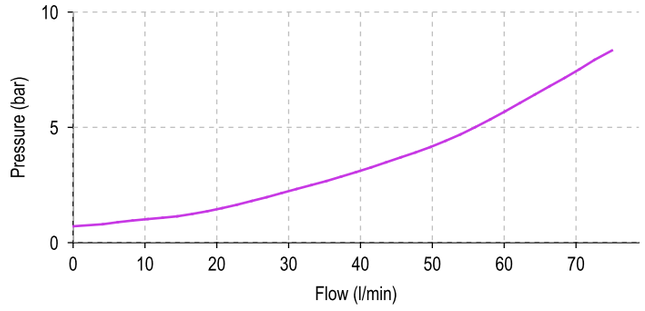
SPRING W



SPRING G



ANTI-CAVITATION FUNCTION

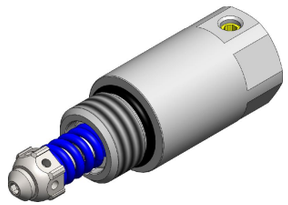


IRRO.M24 VALVE SERIES

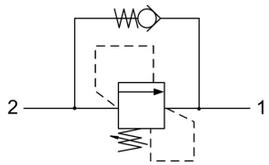
METRIC Insert - 420 bar

Direct acting with anti-cavitation

Poppet type



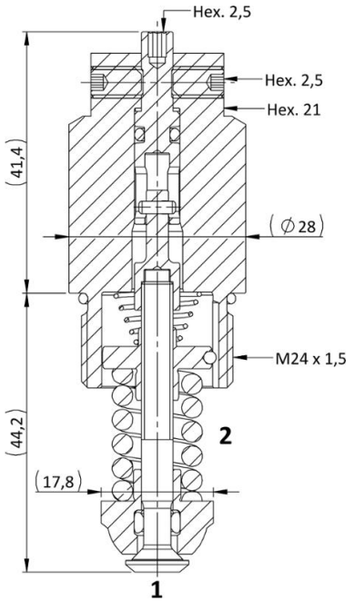
HYDRAULIC SYMBOL



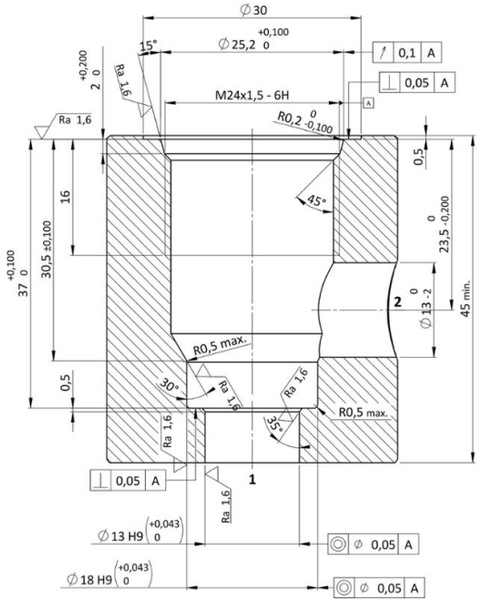
DESCRIPTION

The IRR valve combines in one compact insert cartridge the typical function of shock relief valve and anticavitation through the check valve. In the pressure relief function it's a side-in nose-exhaust valve, with very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal and external leakage.

CROSS SECTION



CAVITY VH005



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	400 bar
MAXIMUM FLOW	100 l/min
SETTING PRESSURE	see table below
ANTI-CAV CRACKING PRESSURE	<0,5 bar
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTINGS ESTABLISHED	10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.21
NUT TINGHTENING TORQUE	2-4 Nm Hex.2,5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.009 (standard sealing NBR-BUNA-N)
COINING KIT	CK.004
WEIGHT	0,205 kg

ORDERING CODE

I	R	R	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

SIZE
METRIC M24x1,5

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-90
B	91-170
G	171-245
V	246-320
W	321-400

Specifications may change without notice.

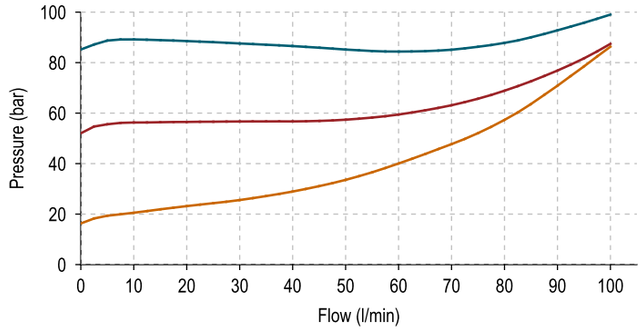
IRRO.M24 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

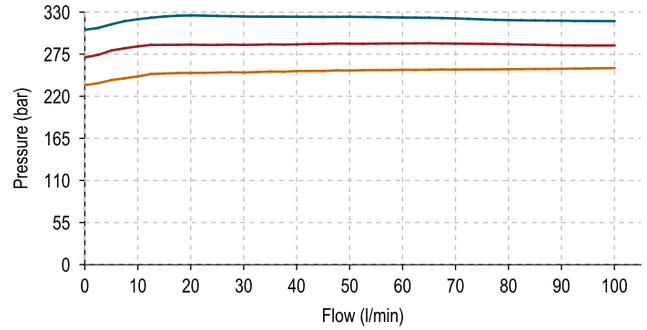
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

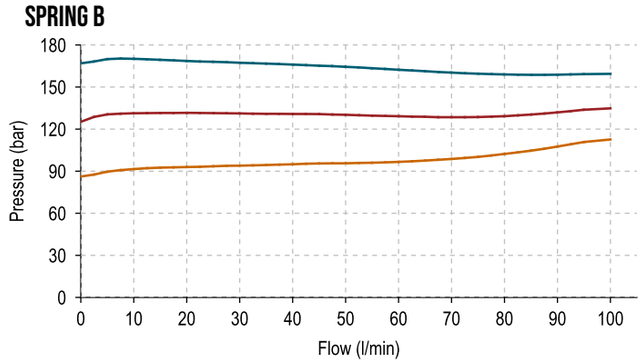
SPRING N



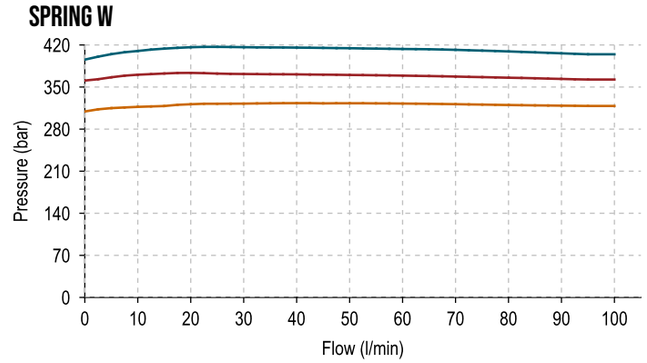
SPRING V



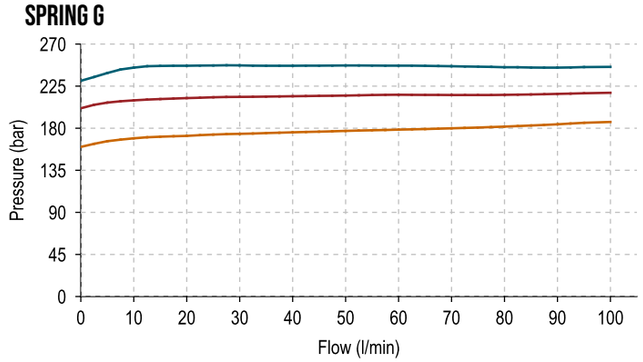
SPRING B



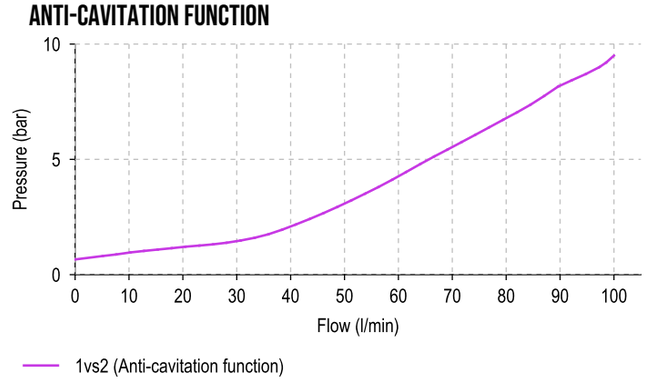
SPRING W



SPRING G



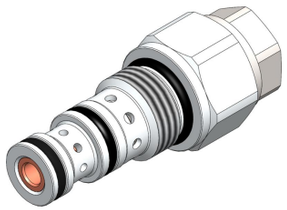
ANTI-CAVITATION FUNCTION



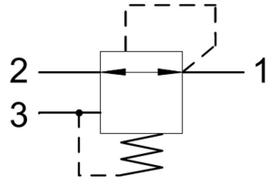
PRV0.S08 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Spool Type



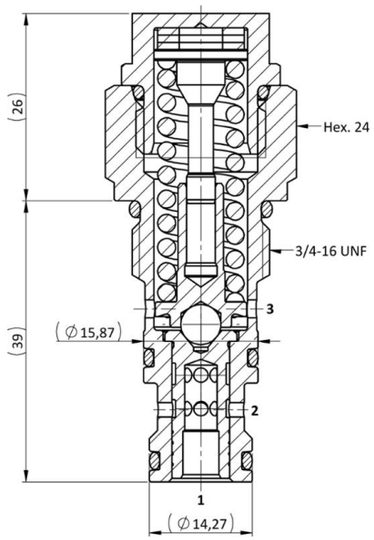
HYDRAULIC SYMBOL



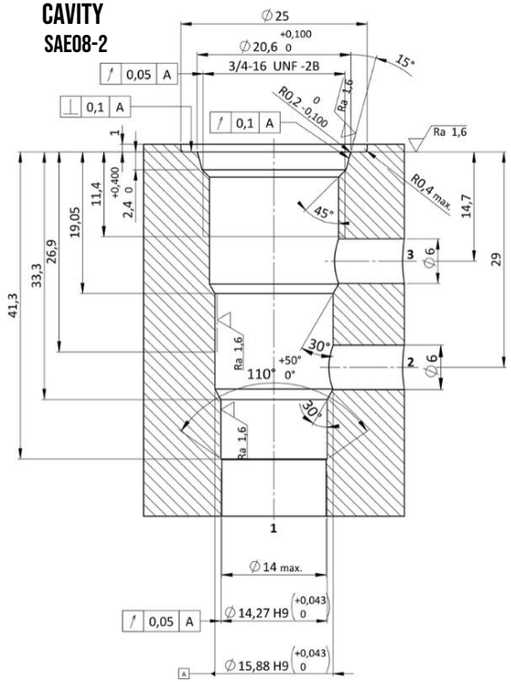
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, hydraulic pressure reducing and relieving valve with internal spring chamber drain. When the pressure at port (1) is below the valve setting, the valve allows the flow to pass bidirectionally from (1) to (2). When the pressure at port (1) exceeds the valve setting, the spool shifts to restrict the flow at port (2), relieving or reducing the pressure at port (1) depending on the flow direction. A further pressure increase in port (1) causes the spool to shift against the spring so that the flow is relieved to tank (3). The system is self-regulated and stable thanks to an appropriate negative feedback. The spring chamber is constantly drained to tank.

CROSS SECTION



CAVITY SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE (1 TO 3)	100 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTING ESTABLISHED	@1 l/min
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 (standard sealing NBR-BUNA-N)
WEIGHT	0,108 kg

ORDERING CODE

P	R	V	0	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SPRING RANGE

Spring model code	Pressure setting range (bar)
Y*	8-20
S	15-40
N	20-80

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

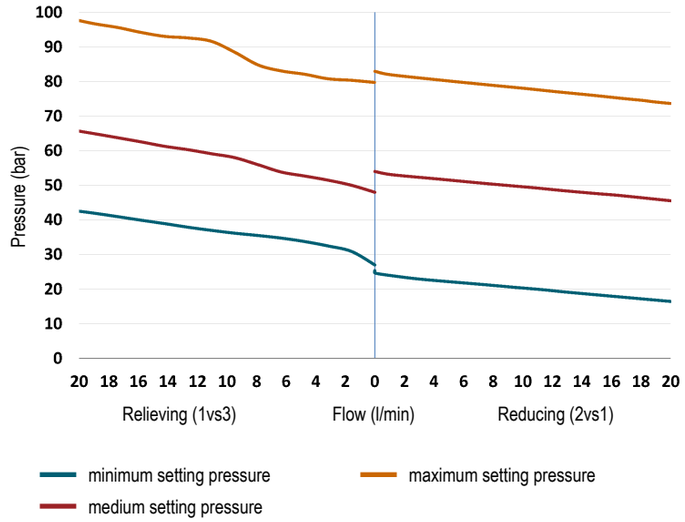
* max flow with this spring is 12 l/min

Specifications may change without notice.

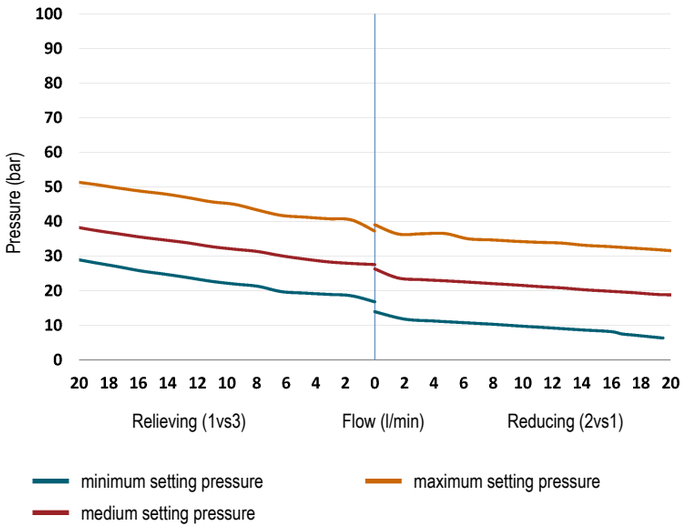
PRV0.S08

The performance chart illustrates flow handling capacity at various settings for each spring option.
Curves are recorded at TOil = 40°C and 46 cSt.

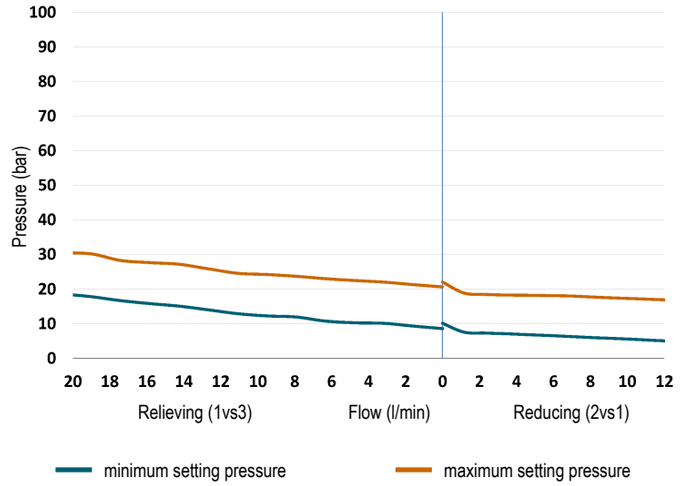
PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING N



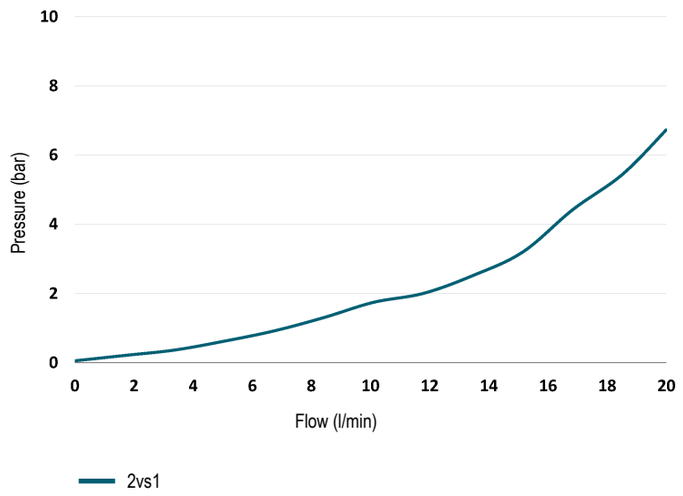
PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING S



PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING Y



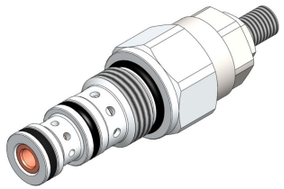
P/Q PERFORMANCE (FULLY OPEN)



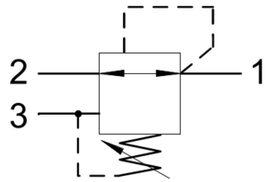
PRAO.S08 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Spool Type



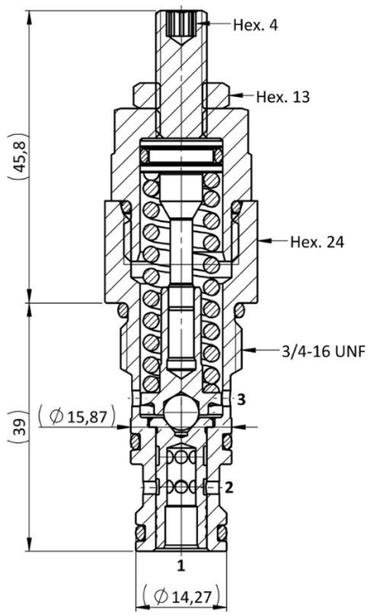
HYDRAULIC SYMBOL



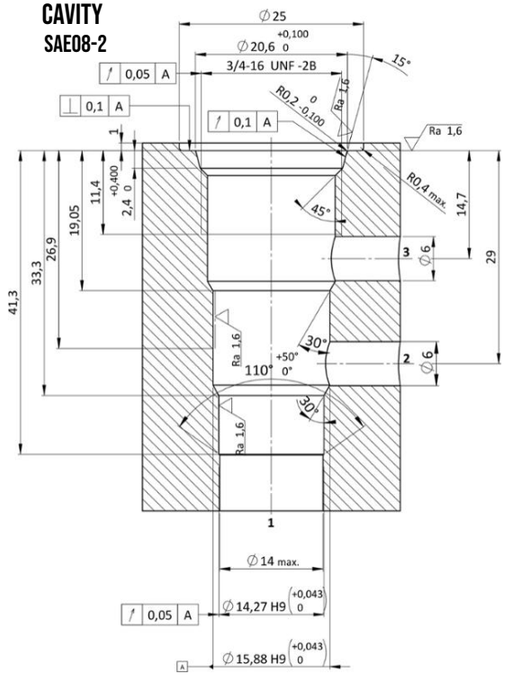
DESCRIPTION

A screw-in, cartridge style, direct acting, poppet type, hydraulic pressure reducing and relieving valve with internal spring chamber drain. When the pressure at port (1) is below the valve setting, the valve allows the flow to pass bidirectionally from (1) to (2). When the pressure at port (1) exceeds the valve setting, the spool shifts to restrict the flow at port (2), relieving or reducing the pressure at port (1) depending on the flow direction. A further pressure increase in port (1) causes the spool to shift against the spring so that the flow is relieved to tank (3). The system is self-regulated and stable thanks to an appropriate negative feedback. The spring chamber is constantly drained to tank.

CROSS SECTION



CAVITY SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE (1 TO 3)	100 cm^3 / min to 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
PRESSURE SETTING ESTABLISHED	@1 l/min
PLASTIC TAMPER PROOF CAP	CTP.013
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TIGHTENING TORQUE NUT	10-15 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 (standard sealing NBR-BUNA-N)
WEIGHT	0,141 kg

ORDERING CODE

P	R	A	0	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE
0= standard; J= special version only reducing valve for 80-120 bar

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SPRING RANGE

Spring model code	Pressure setting range (bar)
S	15-40
N	20-80
B	80-120

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

Spring B= reducing fuction only (PRAJ.S08)

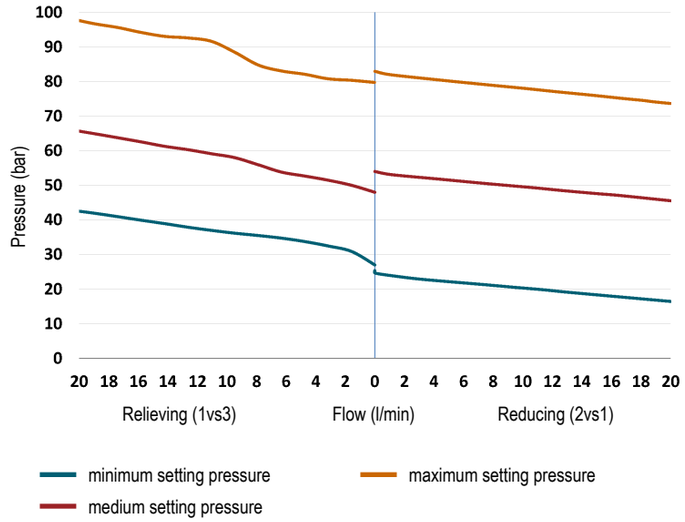
Specifications may change without notice.

Rev. 1

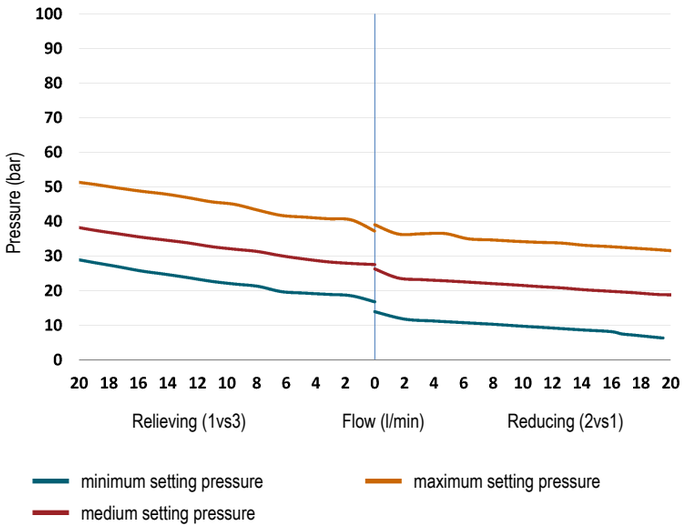
PRA0.S08

The performance chart illustrates flow handling capacity at various settings for each spring option.
Curves are recorded at TOil = 40°C and 46 cSt.

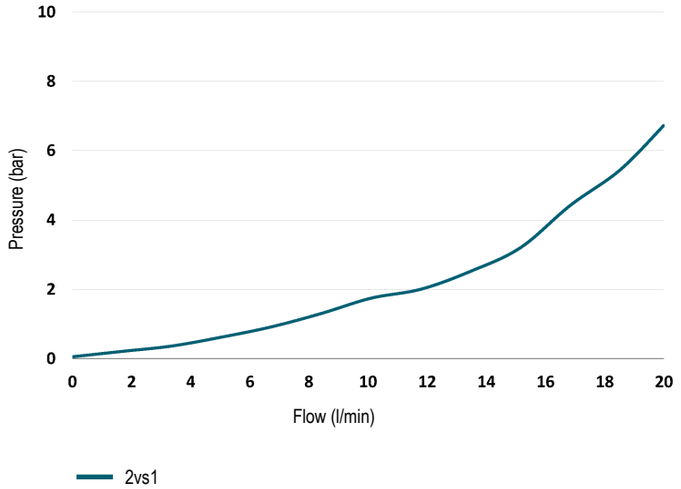
PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING N



PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING S



P/Q PERFORMANCE (FULLY OPEN)

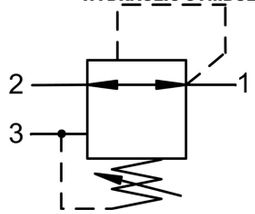


PRAO.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Spool Type

HYDRAULIC SYMBOL



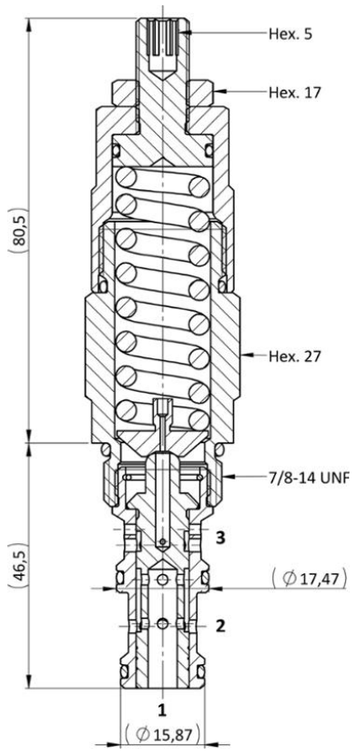
DESCRIPTION

A screw-in, cartridge style, direct acting, spool type, hydraulic pressure reducing and relieving valve with internal spring chamber drain. When the pressure at port (1) is below the valve setting, the valve allows the flow to pass bidirectionally from (1) to (2). When the pressure at port (1) exceeds the valve setting, the spool shifts to restrict the flow at port (2), relieving or reducing the pressure at port (1) depending on the flow direction. A further pressure increase in port (1) causes the spool to shift against the spring so that the flow is relieved to tank (3). The system is self-regulated and stable thanks to an appropriate negative feedback. The spring chamber is constantly drained to tank.

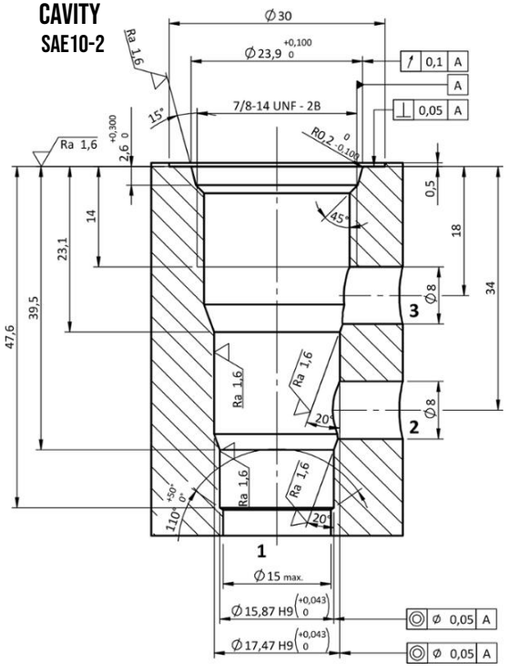
TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE (1 TO 3)	70 cm^3 / min at 80 % of nominal set point
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.27
TIGHTENING TORQUE NUT	13-17 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,284 kg

CROSS SECTION



CAVITY SAE10-2



ORDERING CODE

P	R	A	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE
PRA1 = Version with filter

SIZE
7/8-14 UNF with Ø17,47 and Ø15,87 nose sizes

MARKING
0 = standard factory marking. Customized marking can be done upon request.

PRESSURE SETTING IN [BAR]
Standard settings are multiples of 5 bars

SPRING RANGE

Spring model code	Pressure setting range (bar)
Y	3-10
N	6-30
B	20-60
G	25-100
V	45-150

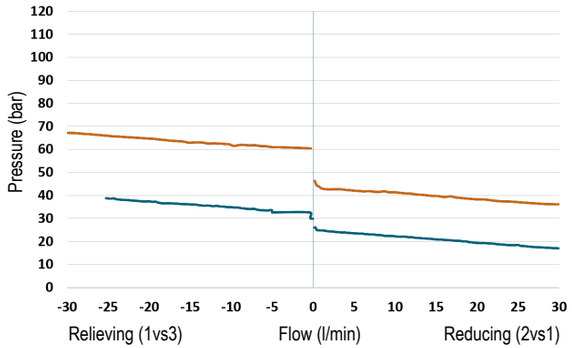
Specifications may change without notice.

PRAO.S10

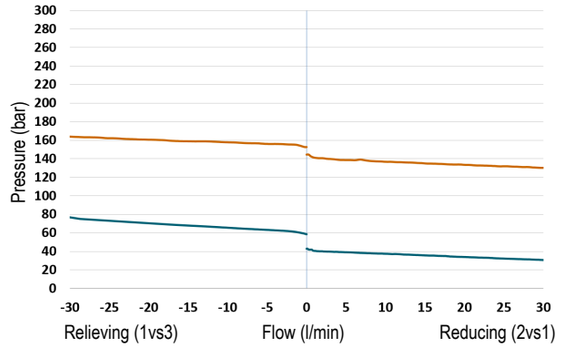
The performance chart illustrates flow handling capacity at various settings for each spring option.
Curves are recorded at TOil = 40°C and 46 cSt.

maximum setting pressure
minimum setting pressure

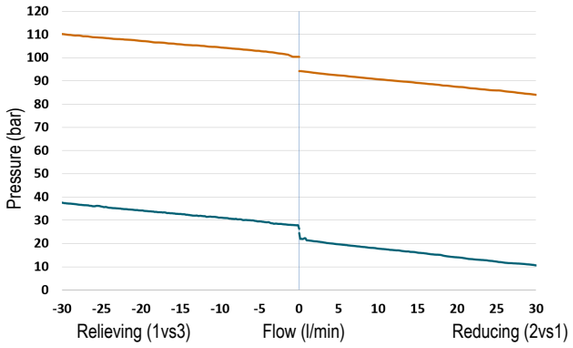
PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING B



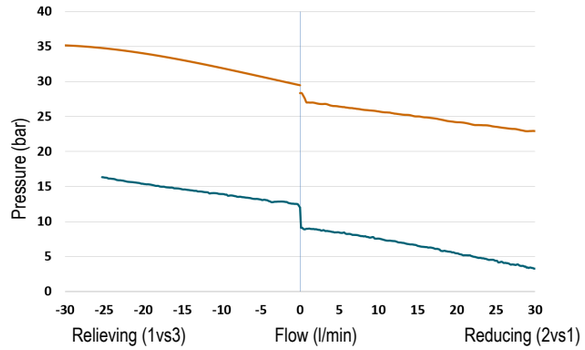
PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING V



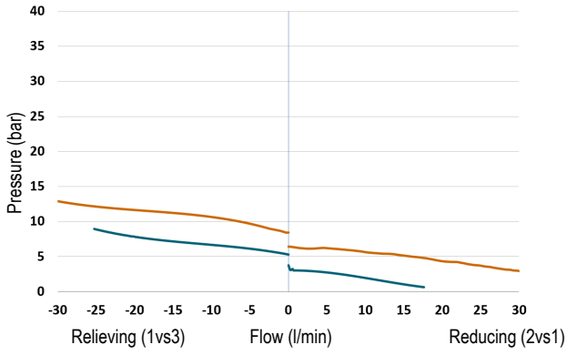
PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING G



PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING N



PRESSURE REDUCING & RELIEVING FUNCTIONS - SPRING Y

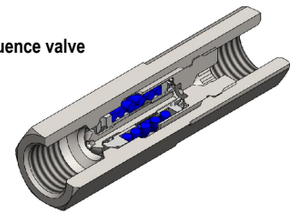


SQA0.G38 VALVE SERIES

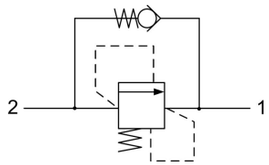
GAS Cartridge - 420 bar

Direct acting with anti-cavitation - In line sequence valve

Steel housing



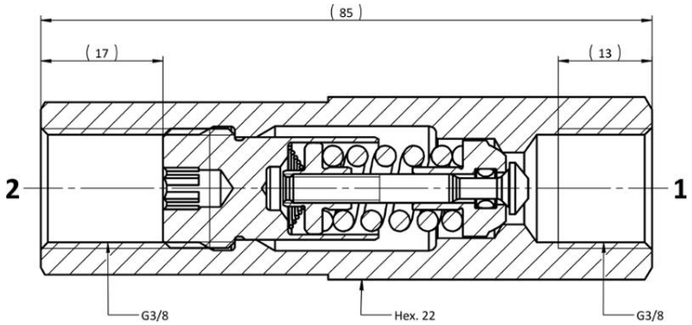
HYDRAULIC SYMBOL



DESCRIPTION

Direct acting in-line sequence valve with steel housing. The SQA combines in one easy-to-install in line valve the typical function of shock relief and anticavitation through the check valve. In the pressure relief function it provides very low pressure rise thanks to the smart deflector design. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). In the free reverse flow function a very light bias spring allows for ease of flow passage from nose to side (1 to 2). High precision machining guarantees quick response to load changes, limited hysteresis and reduced leakage.

CROSS SECTION



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min to 80 % of nominal set point
PRESSURE SETTING ESTABLISHED	@10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
ANTI-CAV CRACKING PRESSURE	<0.5bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,187 kg

ORDERING CODE

S	Q	A	0	·	G	3	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
GAS 3/8

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SPRING RANGE

Spring model code	Setting pressure range (bar)
N	20-70
B	71-130
G	131-210
V	211-280
W	281-350
R	351-420

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

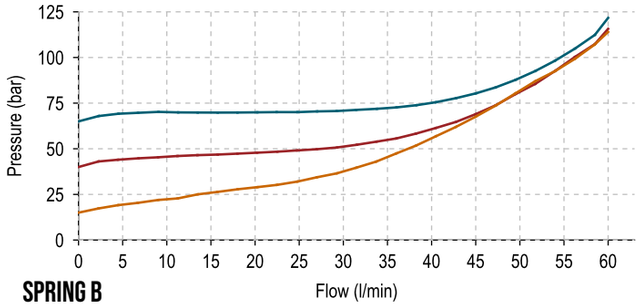
SQAO.G38 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity for each spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

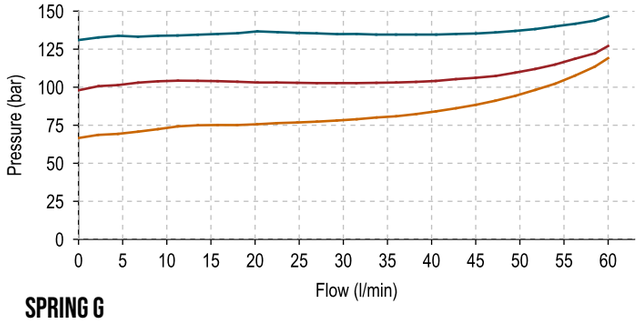
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

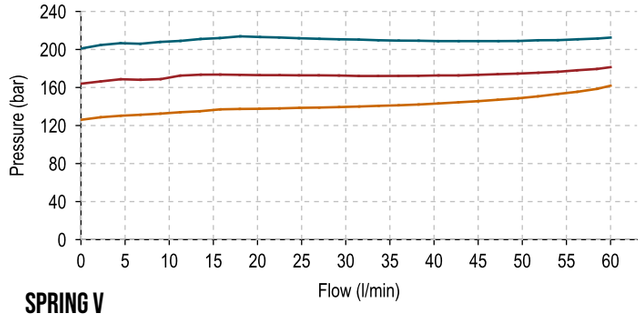
SPRING N



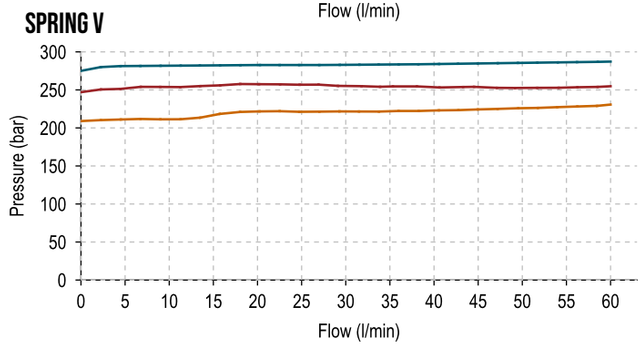
SPRING B



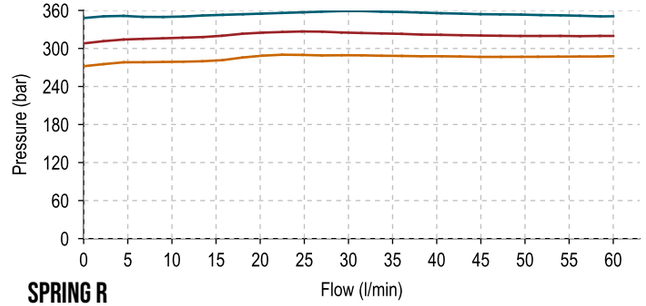
SPRING G



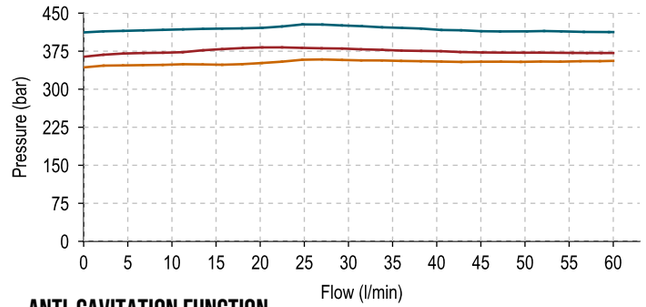
SPRING V



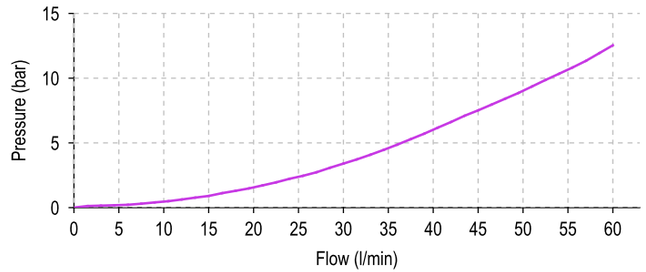
SPRING W



SPRING R



ANTI-CAVITATION FUNCTION



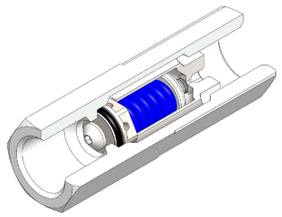
1vs2 (Anti-cavitation function)

SQV0.G38 VALVE SERIES

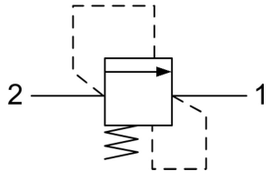
GAS Cartridge - 420 bar

Direct acting - In line sequence valve

Steel housing



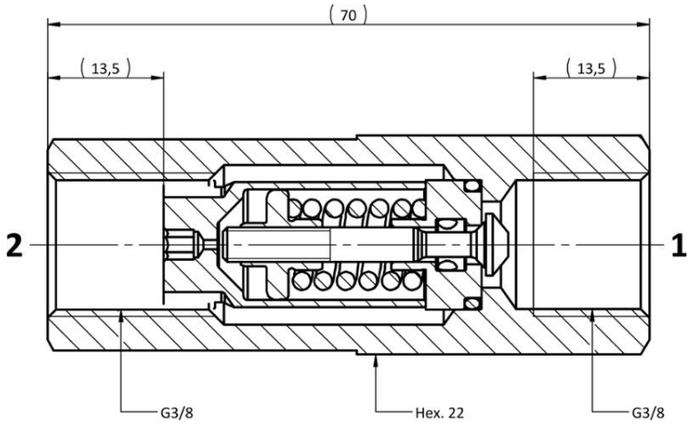
HYDRAULIC SYMBOL



DESCRIPTION

Direct acting in-line sequence valve with steel housing. The SQV combines in one easy-to-install in line valve the typical function of shock relief valve, side-in nose-exhaust. In the pressure relief function it provides very low pressure rise thanks to the smart deflector design.
When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked.
High precision machining guarantees quick response to load changes, limited hysteresis and reduced leakage.

CROSS SECTION



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min to 80 % of nominal set point
PRESSURE SETTING ESTABLISHED	@10 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,148 kg

ORDERING CODE

S	Q	V	0	·	G	3	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
GAS 3/8

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SPRING RANGE

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

Spring model code	Setting pressure range (bar)
N	20-70
B	71-130
G	131-210
V	211-280
W	281-350
R	351-420

Specifications may change without notice.

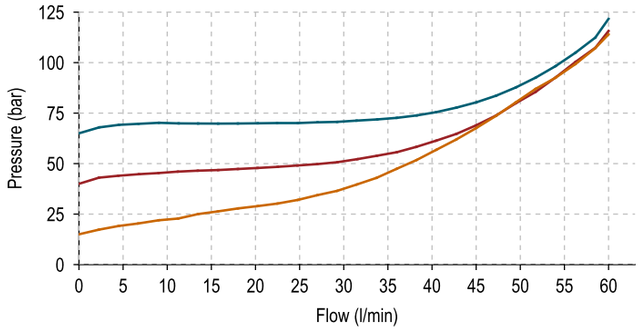
SQVO.G38 SPRINGS' GRAPHS

The performance chart illustrates flow handling capacity at maximum setting for each spring range option.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

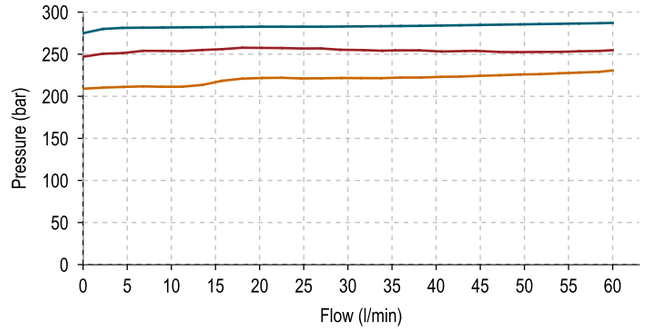
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

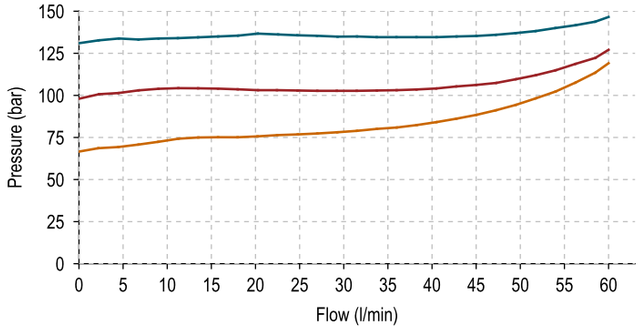
SPRING N



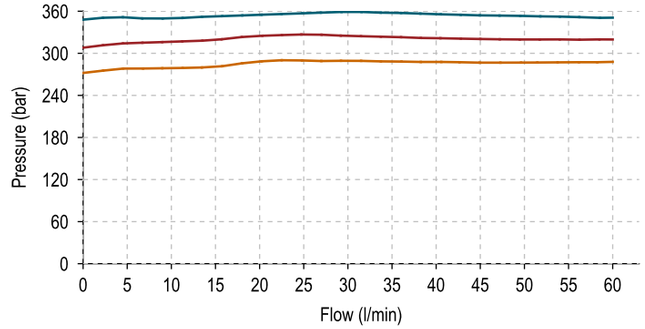
SPRING V



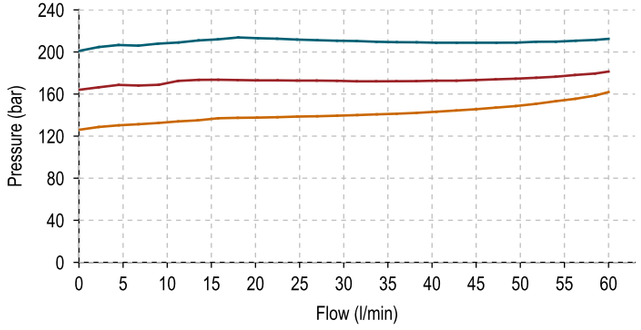
SPRING B



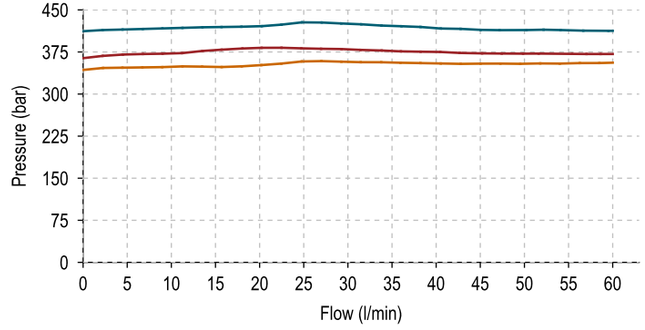
SPRING W



SPRING G



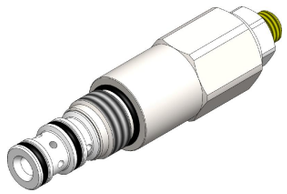
SPRING R



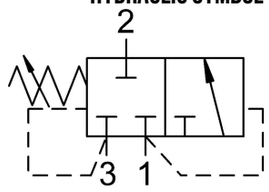
SQC0.S08 VALVE SERIES

Hybrid SAE Cartridge - 250 bar

Direct acting with internal Pilot and Vent



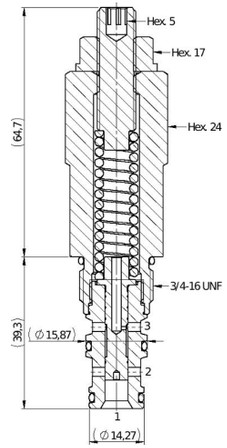
HYDRAULIC SYMBOL



DESCRIPTION

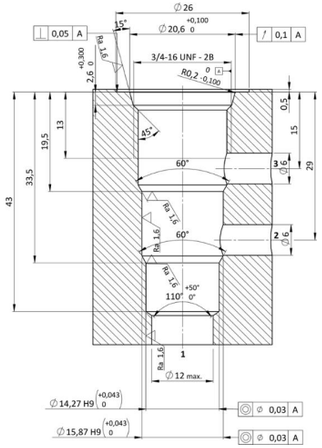
The SQC0.S08 is a screw in, cartridge style, direct acting, spool type hydraulic sequence valve with internal pilot. This valve has a spring chamber drain and is designed to direct oil to a secondary circuit once a predetermined pressure level is reached in the primary circuit. In the idle condition, the SQC0.S08 blocks flow at 1, and also allows no connection between 2 and 3. Once pressure setting is reached, the spool shifts and puts in connection ports 1 and 2, while blocking flow at 3. Note that the back pressure at port 3 is directly additive to the spring setting value.

CROSS SECTION

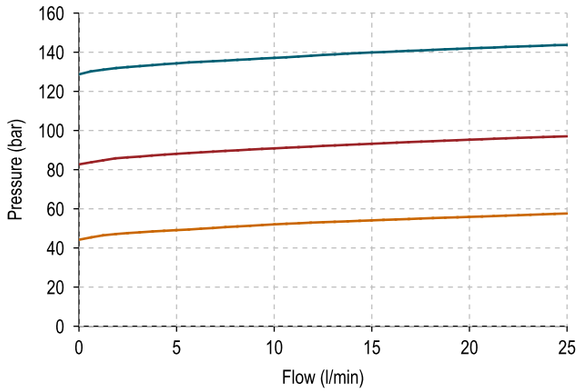


CAVITY

VH023



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for each spring bias options.
p/Qcurves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Maximum nominal setting pressure
- Medium nominal setting pressure
- Minimum nominal setting pressure

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 300 bar - when pilot in port 1 is activated
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TIGHTENING TORQUE NUT	13-17 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.069 (standard sealing NBR-BUNA-N)
WEIGHT	0,184 kg

ORDERING CODE

S	Q	C	0	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SPRING RANGE

Spring model code	Setting pressure range (bar)
N	50-135

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

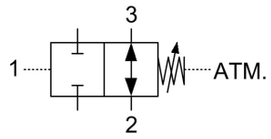
Specifications may change without notice.

SQC0.M22 VALVE SERIES

METRIC Cartridge - 300 bar

Direct acting with external Pilot and Vent

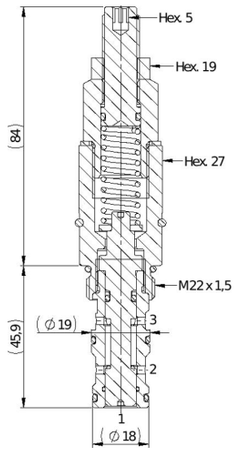
HYDRAULIC SYMBOL



DESCRIPTION

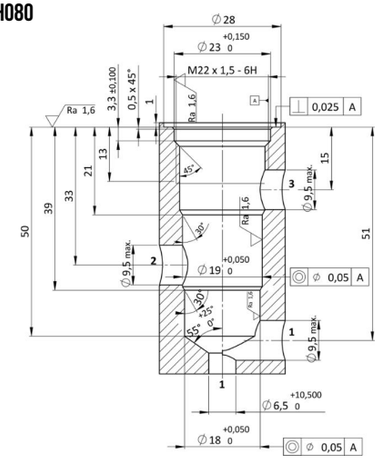
The SQC0.M22 is a screw in, cartridge style, direct acting, spool type hydraulic sequence valve with external pilot. Spring chamber is constantly air vented. The valve is designed to close flow connection between two ports that were previously connected. In the idle condition, the SCQ0.M22 allows flow to pass from 2 to 3. Once pilot pressure at 1 attains the spring setting the spool shifts and blocks flow between ports 2 and 3.

CROSS SECTION

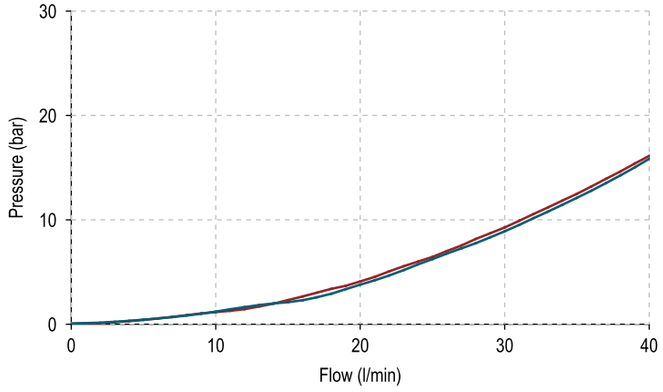


CAVITY

VH080



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity 2 to 3 and 3 to 2 (ideal position). p/Q curvesare recorded at TOil = 40°C and 46 cSt.

LEGEND

2vs3

3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	300 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 300 bar - when pilot in port 1 is activated
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.27
TIGHTENING TORQUE NUT	13-17 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.068 (standard sealing NBR-BUNA-N)
WEIGHT	0,327 kg

ORDERING CODE

S	Q	C	0	·	M	2	2	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M22x1,5 with Ø19 and Ø18 nose sizes

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SPRING RANGE

Spring model code	Setting pressure range (bar)
Y	15-60

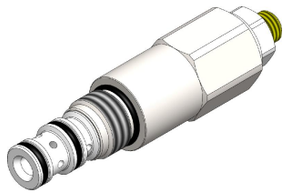
PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

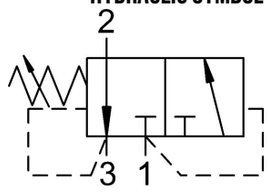
SQC1.S08 VALVE SERIES

Hybrid SAE Cartridge - 250 bar

Direct acting with internal Pilot and Vent



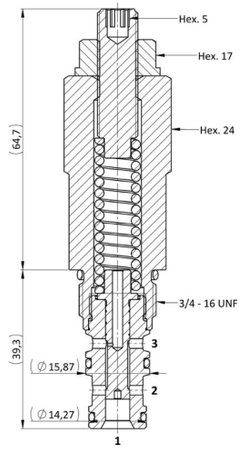
HYDRAULIC SYMBOL



DESCRIPTION

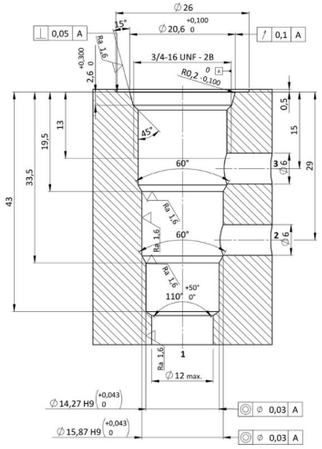
The SQC1.S08 is a screw in, cartridge style, direct acting, spool type hydraulic sequence valve with internal pilot. This valve has a spring chamber drain and is designed to direct oil to a secondary circuit once a predetermined pressure level is reached in the primary circuit. In the idle condition, the SQC1.S08 blocks flow at 1, while connecting ports 2 and 3. Once pressure setting is reached, the spool shifts and puts in connection ports 1 and 2, while blocking flow at 3. Note that the back pressure at port 3 is directly additive to the spring setting value.
Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve.

CROSS SECTION

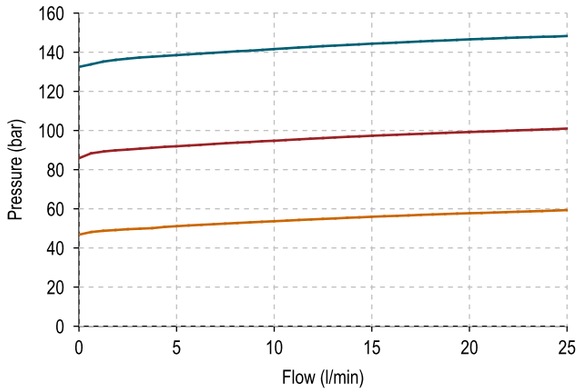


CAVITY

VH023



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for each spring bias options.
p/Qcurves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Maximum nominal setting pressure
- Medium nominal setting pressure
- Minimum nominal setting pressure

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 80% nominal pressure setting on port 1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TIGHTENING TORQUE NUT	13-17 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.069 (standard sealing NBR-BUNA-N)
WEIGHT	0,253 kg

ORDERING CODE

S	Q	C	1	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SPRING RANGE

Spring model code	Setting pressure range (bar)
N	50-135

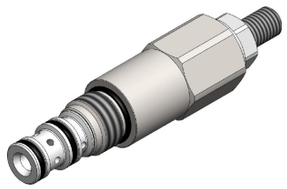
PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

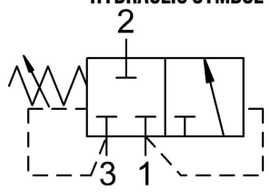
SQC2.S08 VALVE SERIES

Hybrid SAE Cartridge - 250 bar

Direct acting with external Pilot and Vent



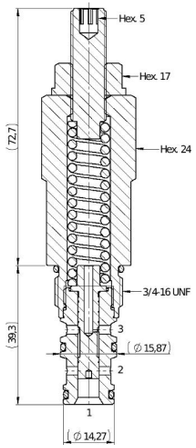
HYDRAULIC SYMBOL



DESCRIPTION

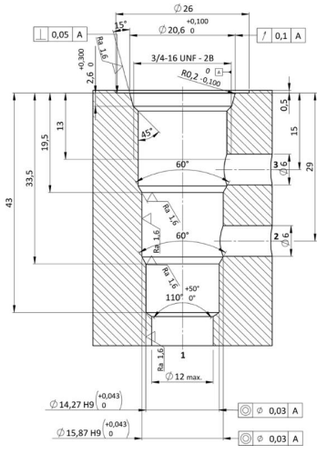
The SQC2.S08 is a screw in, cartridge style, direct acting, spool type hydraulic sequence valve with internal pilot. This valve has a spring chamber drain and is designed to direct oil to a secondary circuit once a predetermined pressure level is reached in the primary circuit. In the idle condition, the SQC2.S08 blocks flow at 1, and also allows no connection between 2 and 3. Once pressure setting is reached, the spool shifts and puts in connection ports 1 and 2, while blocking flow at 3. Note that the back pressure at port 3 is directly additive to the spring setting value.
Warning: Adjustment screw doesn't have a positive stop which prevents it from being backed out of the valve.

CROSS SECTION

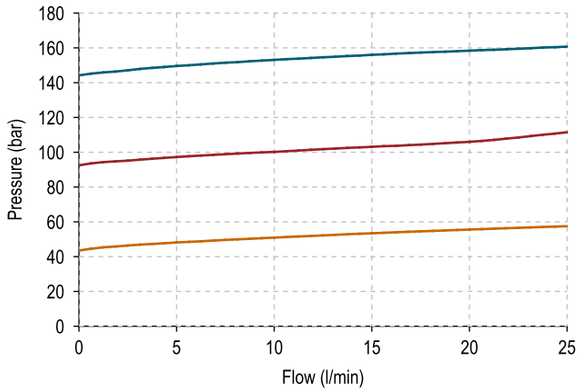


CAVITY

VH023



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity for each spring bias options.
p/Qcurves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Maximum nominal setting pressure
- Medium nominal setting pressure
- Minimum nominal setting pressure

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 300 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.24
TIGHTENING TORQUE NUT	13-17 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.069 (standard sealing NBR-BUNA-N)
WEIGHT	0,234 kg

ORDERING CODE

S	Q	C	2	·	S	0	8	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

SPRING RANGE

Spring model code	Setting pressure range (bar)
N	50-150

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

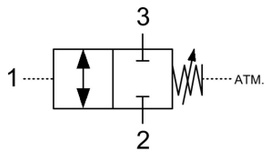
Specifications may change without notice.

SQD0.M22 VALVE SERIES

METRIC Cartridge - 300 bar

Direct acting with external Pilot and Vent

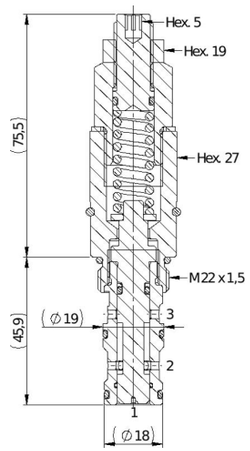
HYDRAULIC SYMBOL



DESCRIPTION

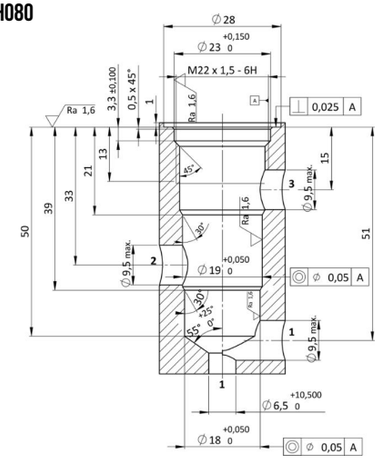
The SQD0.M22 is a screw in, cartridge style, spool type hydraulic sequence valve with external pilot. Spring chamber is constantly air vented. The valve is designed to open flow connection between two ports that were previously blocked. In the idle condition, the SQD0.M22 blocks flow between ports 2 and 3. Once pilot pressure at 1 attains the spring setting the spool shifts and allows flow between ports 2 and 3 in both directions.

CROSS SECTION

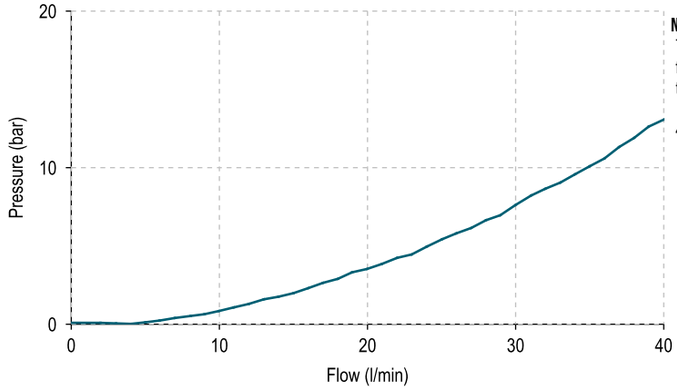


CAVITY

VH080



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity 2 to 3 and 3 to 2 (idle position).
p/Q curvesare recorded at TOil = 40°C and 46 cSt.

LEGEND

Spring Y (2vs3 3vs2)

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	300 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 300 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.27
TIGHTENING TORQUE NUT	13-17 Nm Hex.19
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.068 (standard sealing NBR-BUNA-N)
WEIGHT	0,328 kg

ORDERING CODE

S	Q	D	0	·	M	2	2	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M22x1,5 with Ø19 and Ø18 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

SPRING RANGE

Spring model code	Setting pressure range (bar)
Y	15-60

PRESSURE SETTING IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

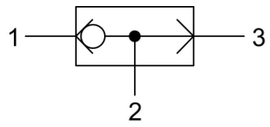
Rev. 1

SHV0.G18 VALVE SERIES

GAS Cartridge - 350 bar

Direct acting - Ball Type

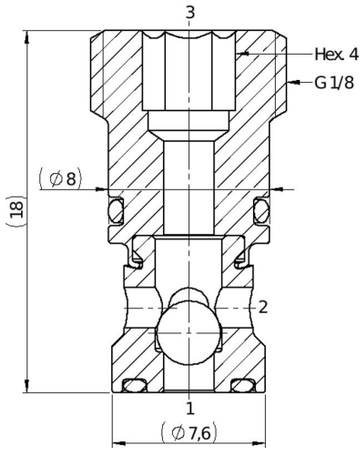
HYDRAULIC SYMBOL



DESCRIPTION

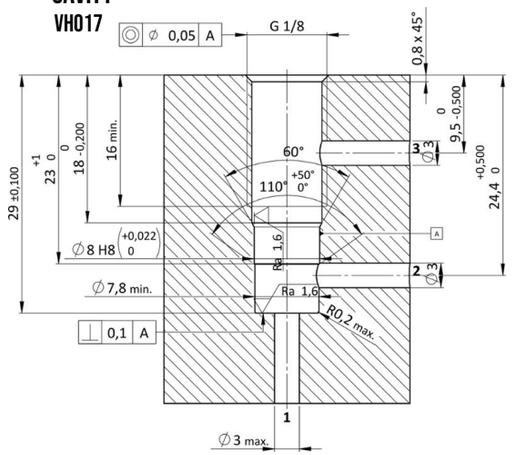
Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

CROSS SECTION

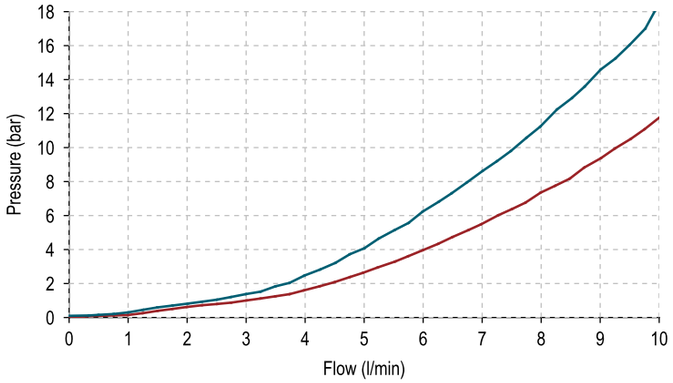


CAVITY

VH017



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt

LEGEND

1vs2

3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	7-9 Nm Hex.4
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.023 (standard sealing NBR-BUNA-N)
WEIGHT	0,006 kg

ORDERING CODE

S	H	V	0	·	G	1	8	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
GAS G1/8

000 = Standard configuration.

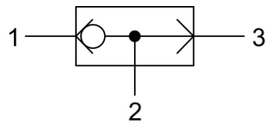
Specifications may change without notice.

SHVO.G14 VALVE SERIES

GAS Cartridge - 350 bar

Direct acting - Ball Type

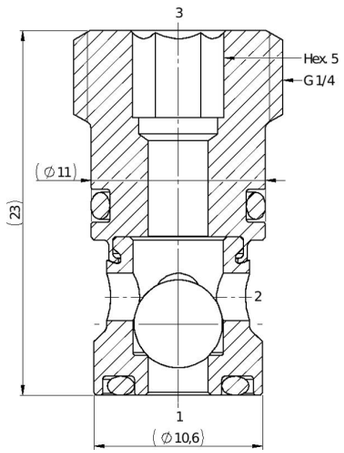
HYDRAULIC SYMBOL



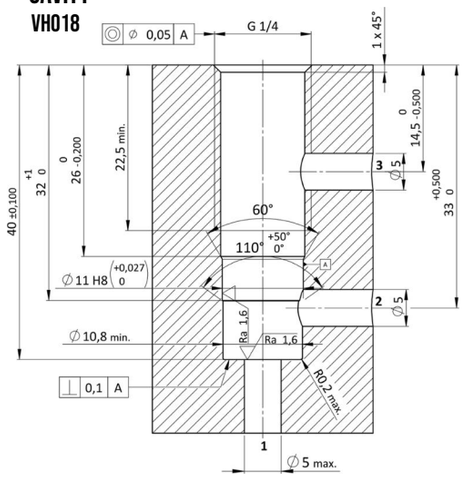
DESCRIPTION

Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

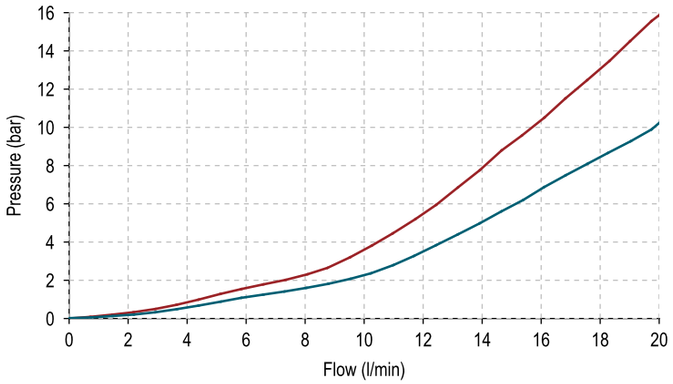
CROSS SECTION



CAVITY VH018



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2
- 3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	15-18 Nm Hex.5
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.024 (standard sealing NBR-BUNA-N)
WEIGHT	0,013 kg

ORDERING CODE

S	H	V	O	·	G	1	4	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
GAS G1/4

000 = Standard configuration.

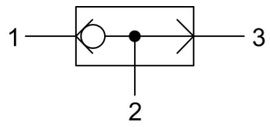
Specifications may change without notice.

SHV0.G38 VALVE SERIES

GAS Cartridge - 350 bar

Direct acting - Ball Type

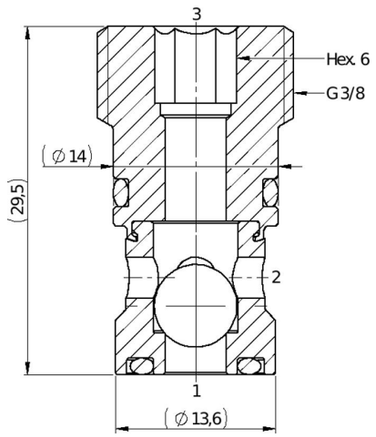
HYDRAULIC SYMBOL



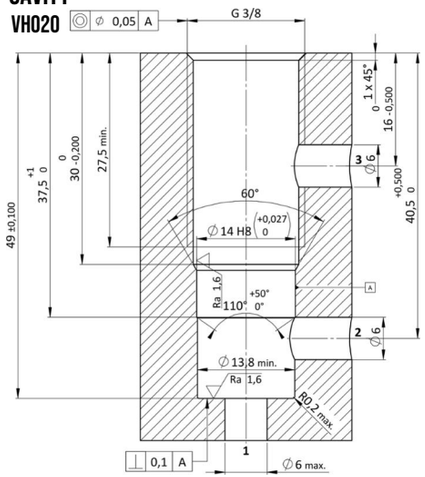
DESCRIPTION

Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

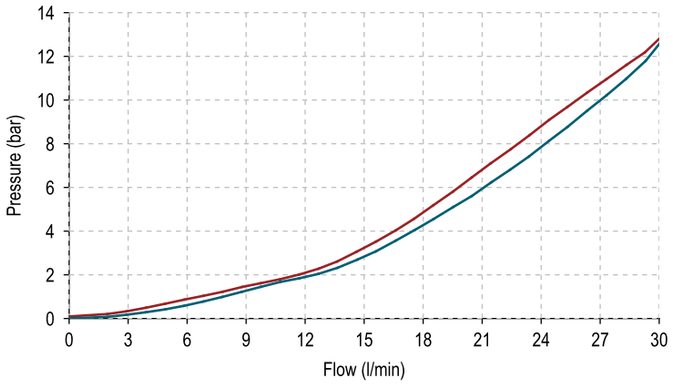
CROSS SECTION



CAVITY VH020



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2
- 3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	16-18 Nm Hex.6
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.025 (standard sealing NBR-BUNA-N)
WEIGHT	0,029 kg

ORDERING CODE

S	H	V	0	·	G	3	8	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
GAS G3/8

000 = Standard configuration.

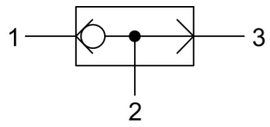
Specifications may change without notice.

SHVO.G12 VALVE SERIES

GAS Cartridge - 350 bar

Direct acting - Ball Type

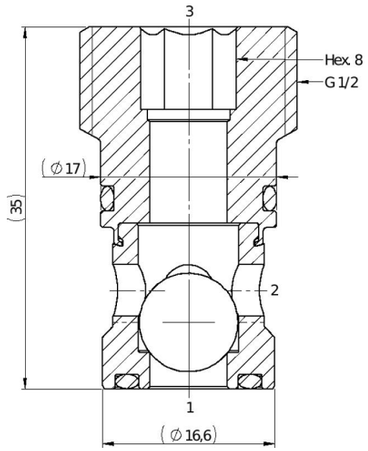
HYDRAULIC SYMBOL



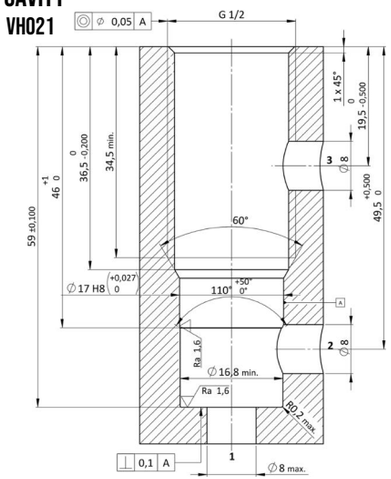
DESCRIPTION

Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

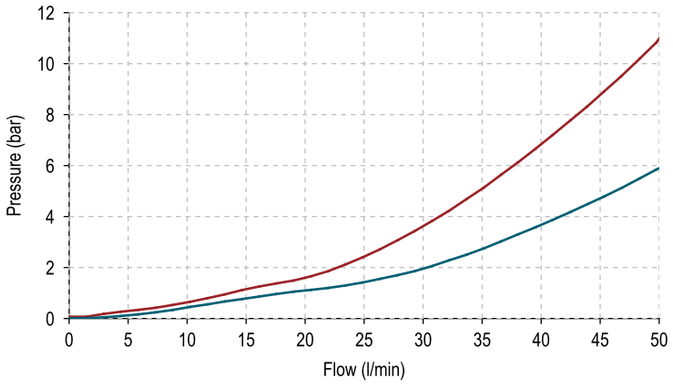
CROSS SECTION



CAVITY VH021



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2
- 3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	50 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	20-22 Nm Hex.8
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.026 (standard sealing NBR-BUNA-N)
WEIGHT	0,051 kg

ORDERING CODE

S	H	V	O	·	G	1	2	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
GAS G1/2

000 = Standard configuration.

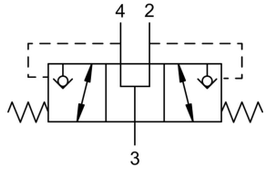
Specifications may change without notice.

SHIO.S10 VALVE SERIES

SAE Cartridge - 250 bar

Direct acting - Poppet Type

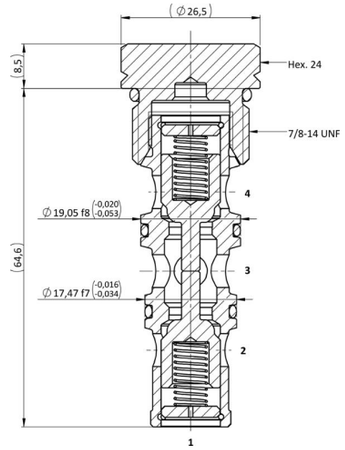
HYDRAULIC SYMBOL



DESCRIPTION

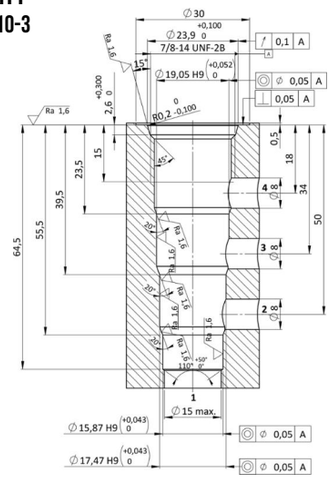
Shut-off valves for hydraulic system with one inlet (3) and two outlets (2-4). All ports are connected in neutral. When pressure at one of the two load ports (2-4) exceeds the other, the poppets shuttle to allow bi-directional flow between other two ports, while the load port with higher pressure is shut-off. NOTE: Port 1 should be blocked.

CROSS SECTION

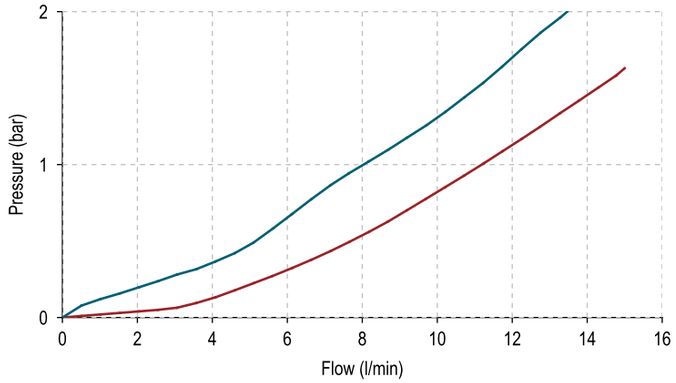


CAVITY

SAE10-3



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 3vs2
- 3vs4

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	15 l/min
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 10 bar 1 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-60 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.133 (standard sealing NBR-BUNA-N)
WEIGHT	0,120 kg

ORDERING CODE

S	H	I	O	·	S	1	0	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø19,05 and Ø17,47 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

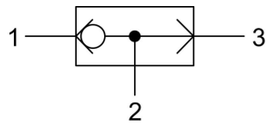
Specifications may change without notice.

SHCO.S04 VALVE SERIES

Hybrid SAE Cartridge - 250 bar

Direct acting - Ball Type

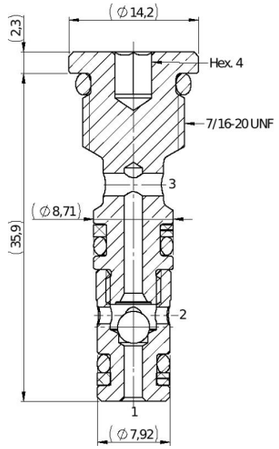
HYDRAULIC SYMBOL



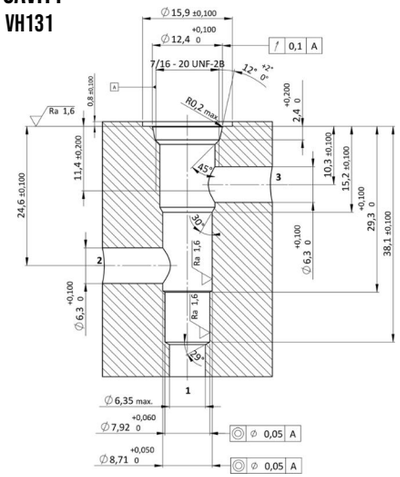
DESCRIPTION

Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

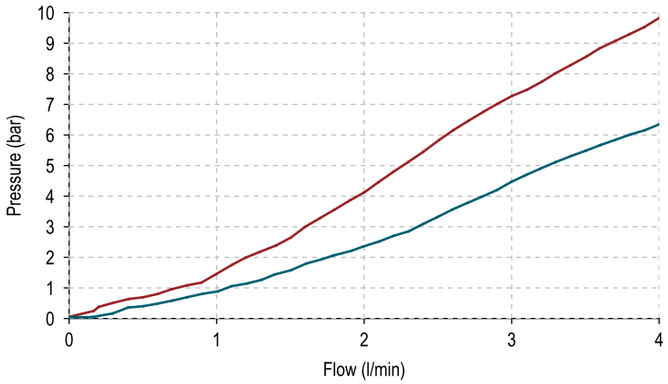
CROSS SECTION



CAVITY VH131



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2
- 3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	4 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	12-15 Nm Hex.4
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.072 (standard sealing NBR-BUNA-N)
WEIGHT	0,020 kg

ORDERING CODE

S	H	C	0	·	S	0	4	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
7/16-20 UNF with Ø8,71 and Ø7,92 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

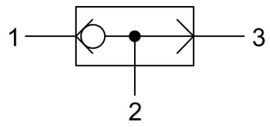
Specifications may change without notice.

SHCO.S08 VALVE SERIES

SAE Cartridge - 210 bar

Direct acting - Ball Type

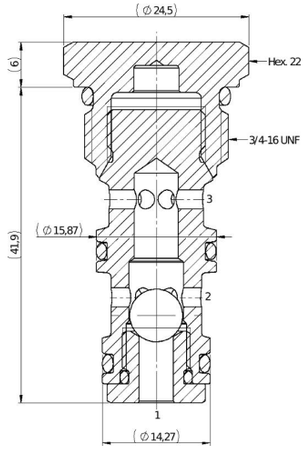
HYDRAULIC SYMBOL



DESCRIPTION

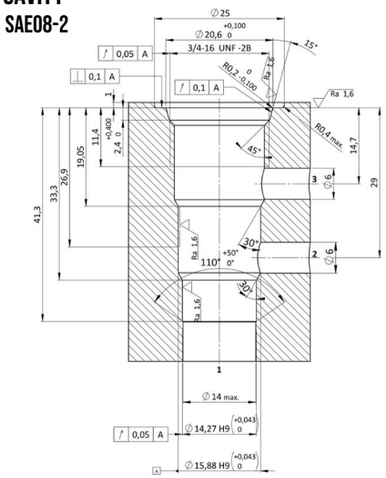
Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

CROSS SECTION

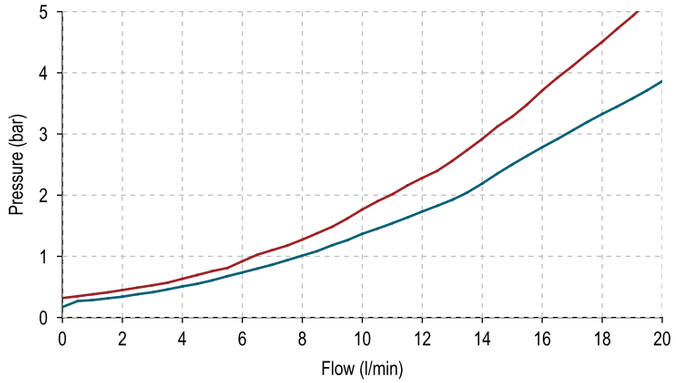


CAVITY

SAE08-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt

LEGEND

1vs2

3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	210 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 210 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.047 (standard sealing NBR-BUNA-N)
WEIGHT	0,065 kg

ORDERING CODE

S	H	C	0	·	S	0	8	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

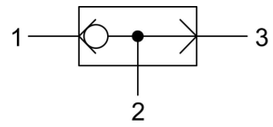
Specifications may change without notice.

SHC4.M18 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Ball Type

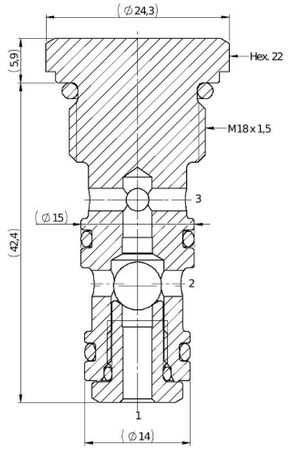
HYDRAULIC SYMBOL



DESCRIPTION

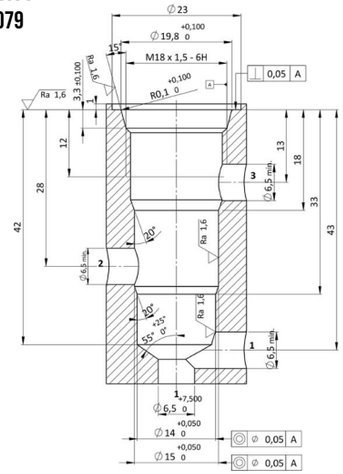
Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

CROSS SECTION

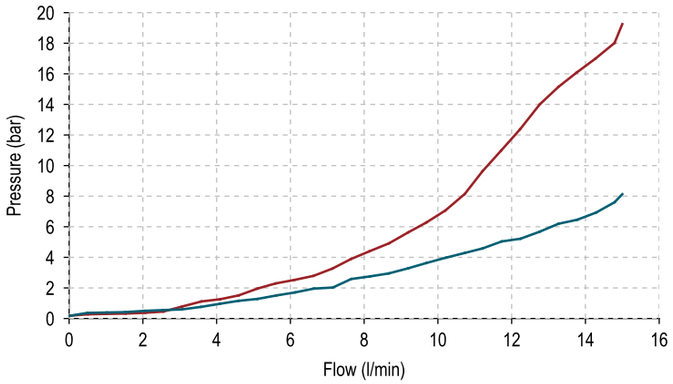


CAVITY

VH079



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- 1vs2
- 3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	15 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.156 (standard sealing NBR-BUNA-N)
WEIGHT	0,062 kg

ORDERING CODE

S	H	C	4	·	M	1	8	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE
METRIC M18x1,5 with Ø15 and Ø14 nose sizes

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

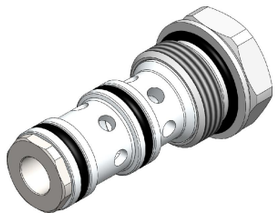
000 = Standard configuration.

Specifications may change without notice.

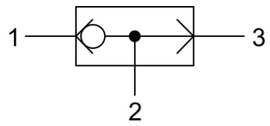
SHCO.M22 VALVE SERIES

METRIC Cartridge - 350 bar

Direct acting - Ball Type



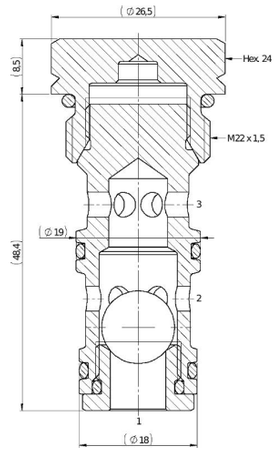
HYDRAULIC SYMBOL



DESCRIPTION

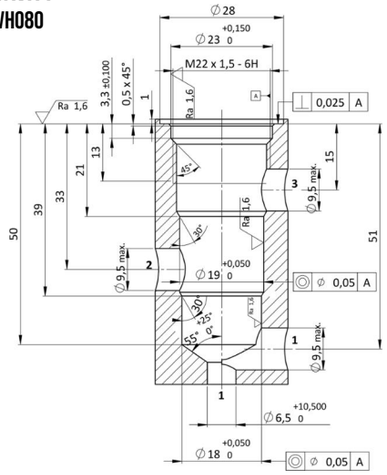
Shut-off valves for hydraulics systems, with two inlets and one outlet. Ball seat construction, automatic switching. The inlet with the higher pressure (port 1 or 3) is directly connected to tank (port 2), while the second inlet (port 3 or 1) is shut off.

CROSS SECTION

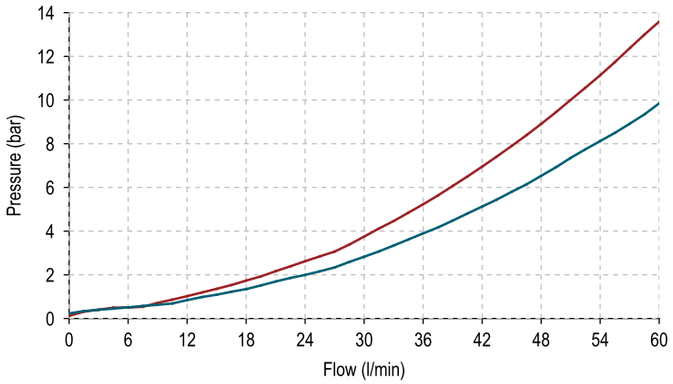


CAVITY

VH080



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in max flow condition. p/Q curves are recorded at TOil = 40°C and 46 cSt

LEGEND

- 1vs2
- 3vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.042 (standard sealing NBR-BUNA-N)
WEIGHT	0,102 kg

ORDERING CODE

S	H	C	0	·	M	2	2	·	0	0	·	0	0	0

VALVE BASIC CODE

SIZE

METRIC M22x1,5 with Ø19 and Ø18 nose sizes

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard configuration.

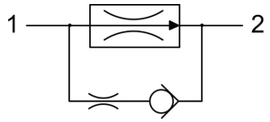
Specifications may change without notice.

FRD*.S08 VALVE SERIES

Hybrid SAE08 Cartridge - 250 bar

Direct acting - Pressure Compensated

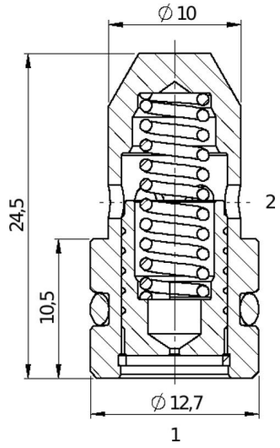
HYDRAULIC SYMBOL



DESCRIPTION

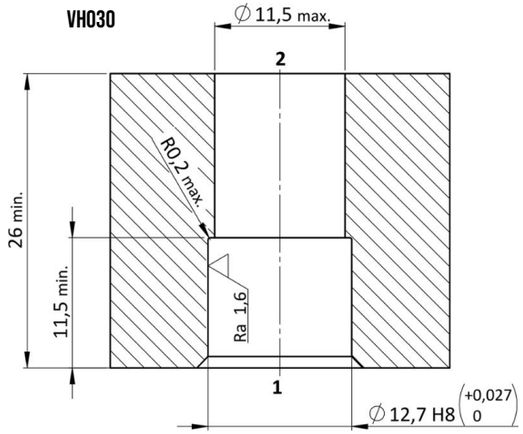
A direct acting, drop-in insert type, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

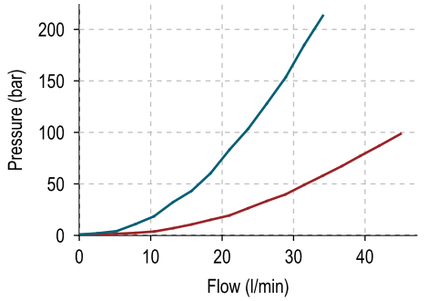


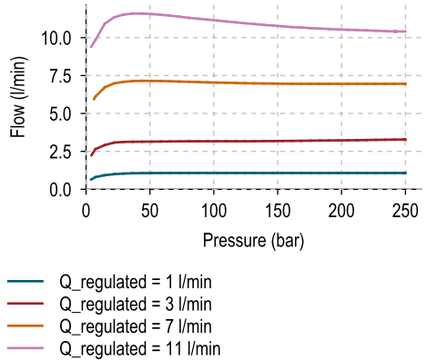
CAVITY

VH030



PERFORMANCE DETAILS





NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to 1 max working pressure 210bar)
MAXIMUM FLOW	12 l/min
EXTERNAL COMPONENT TREATMENT	Oxide burnished
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.060 (standard sealing NBR-BUNA-N)
WEIGHT	0,013 kg

ORDERING CODE

F	R	D	*	·	S	0	8	·	0	N	·	*	*	*	*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 2-12 l/min

1 = 0,5-1,8 l/min

SIZE

S08 = Ø12,7 bore size

FIXED FLOW SETTING

(l/min with 1 decimal)

FRD0		FRD1	
2 l/min	020	0,6 l/min	006
3 l/min	030	0,8 l/min	008
4 l/min	040	1,0 l/min	010
5 l/min	050	1,2 l/min	012
6 l/min	060	1,4 l/min	014
7 l/min	070	1,6 l/min	016
8 l/min	080	1,8 l/min	018
9 l/min	90		
10 l/min	100		
11 l/min	110		
12 l/min	120		

STEEL WIRE OPTION

W = If requested, leave blank if not.

NOTE

Customized fixed flow can be provided upon request.

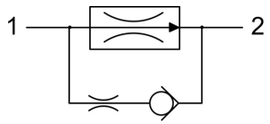
Specifications may change without notice.

FRS*.G14 VALVE SERIES

GAS Insert - 250 bar

Direct acting - Pressure Compensated

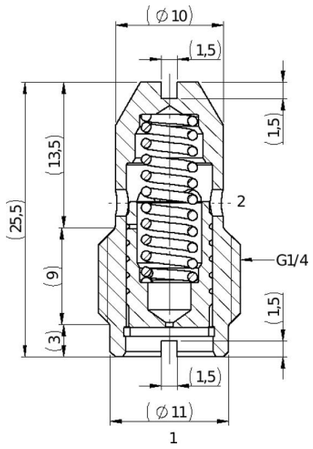
HYDRAULIC SYMBOL



DESCRIPTION

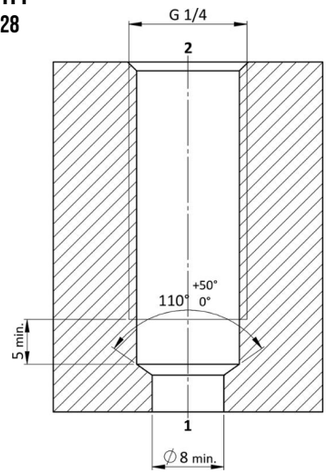
A direct acting, screw-in insert type, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

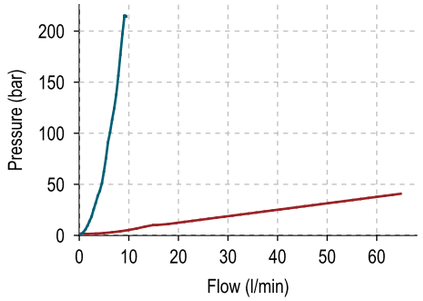


CAVITY

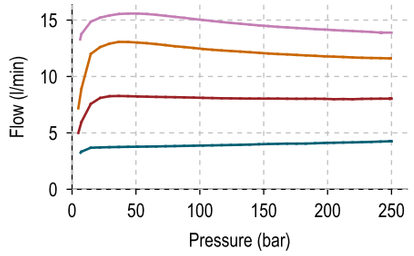
VH028



PERFORMANCE DETAILS



2vs1 - 020
2vs1 - 150



Q_regulated = 4 l/min
Q_regulated = 8 l/min
Q_regulated = 12 l/min
Q_regulated = 15 l/min

NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to 1 max working pressure 210bar)
MAXIMUM FLOW	15 l/min
EXTERNAL COMPONENT TREATMENT	Oxide burnished
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	1-3 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,013 kg

ORDERING CODE

F	R	S	*	·	G	1	4	·	0	N	·	*	*	*	*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 2-15 l/min

1 = 0,5-1,8 l/min

SIZE

G14 = GAS G1/4

FIXED FLOW SETTING

(l/min with 1 decimal)

FRS0		FRS1	
2 l/min	020	0,6 l/min	006
3 l/min	030	0,8 l/min	008
4 l/min	040	1,0 l/min	010
5 l/min	050	1,2 l/min	012
6 l/min	060	1,4 l/min	014
7 l/min	070	1,6 l/min	016
8 l/min	080	1,8 l/min	018
9 l/min	090		
10 l/min	100		
11 l/min	110		
12 l/min	120		
15 l/min	150		

STEEL WIRE OPTION

W = If requested, leave blank if not.

NOTE

Customized fixed flow can be provided upon request.

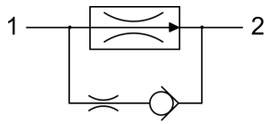
Specifications may change without notice.

FRS*.S04 VALVE SERIES

Hybrid SAE04 Insert - 250 bar

Direct acting - Pressure Compensated

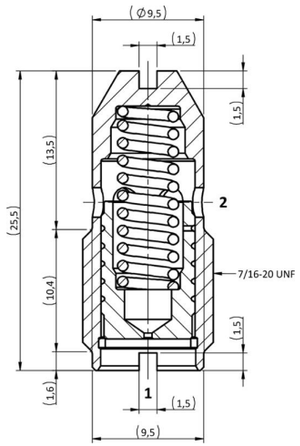
HYDRAULIC SYMBOL



DESCRIPTION

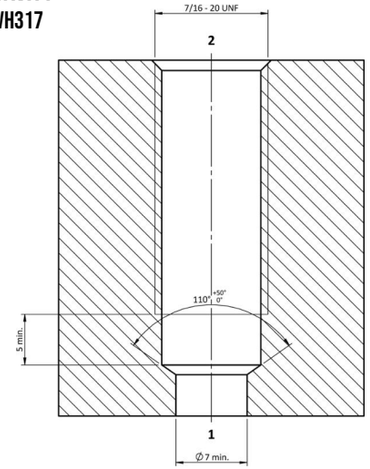
A direct acting, screw-in insert type, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

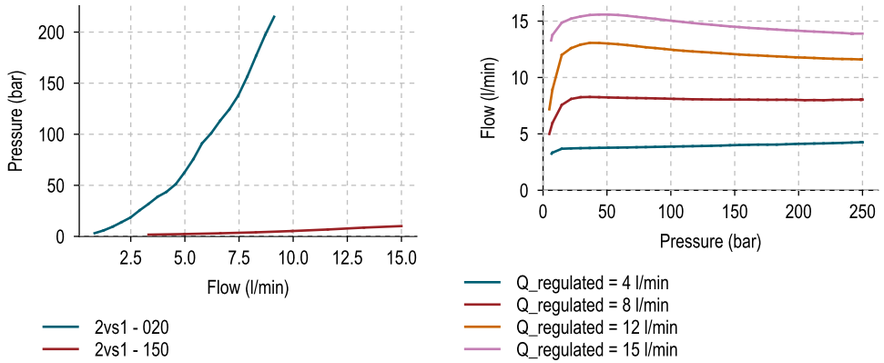


CAVITY

VH317



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to 1 max working pressure 210bar)
MAXIMUM FLOW	15 l/min
EXTERNAL COMPONENT TREATMENT	Oxide burnished
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
ORIENTATION	No restrictions
INSTALLATION TORQUE	1-3 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,010 kg

ORDERING CODE

F	R	S	*	·	S	0	4	·	0	N	·	*	*	*	*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 2-15 l/min

1 = 0,5-1,9 l/min

SIZE

S04 = 7/16 - 20 UNF

FIXED FLOW SETTING

(l/min with 1 decimal)

STEEL WIRE OPTION

***W = If requested, leave blank if not

FRS0		FRS1	
2 l/min	020	0,6 l/min	006
3 l/min	030	0,8 l/min	008
4 l/min	040	1,0 l/min	010
5 l/min	050	1,2 l/min	012
6 l/min	060	1,4 l/min	014
7 l/min	070	1,6 l/min	016
8 l/min	080	1,8 l/min	018
9 l/min	090		
10 l/min	100		
11 l/min	110		
12 l/min	120		
15 l/min	150		

NOTE

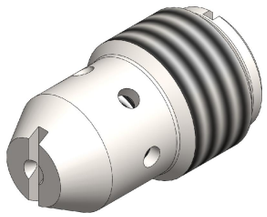
Customized fixed flow can be provided upon request.

Specifications may change without notice.

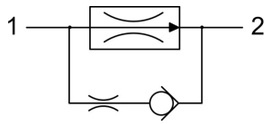
FRS0.G38 VALVE SERIES

GAS Insert - 250 bar

Direct acting - Pressure Compensated



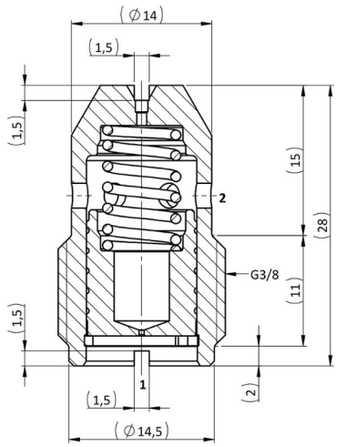
HYDRAULIC SYMBOL



DESCRIPTION

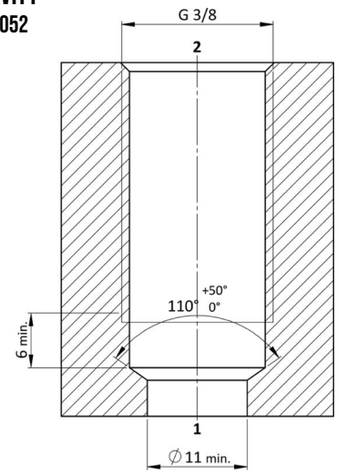
A direct acting, screw-in insert type, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

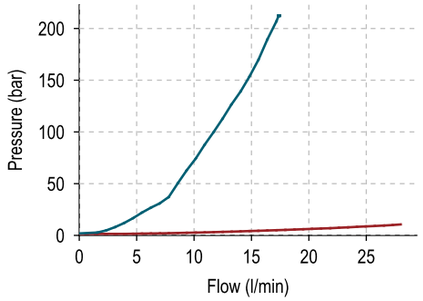


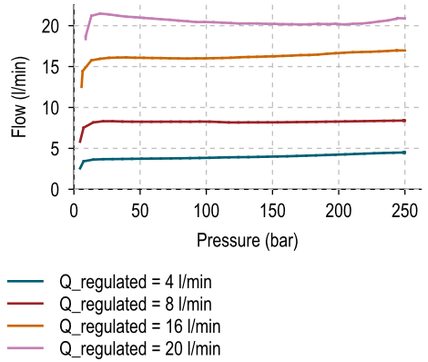
CAVITY

VH052



PERFORMANCE DETAILS





NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to 1 max working pressure 210 bar)
MAXIMUM FLOW	28 l/min
EXTERNAL COMPONENT TREATMENT	Oxide burnished
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	5-8 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,027 kg

ORDERING CODE

F	R	S	0	·	G	3	8	·	0	N	·	*	*	*

VALVE BASIC CODE

SIZE

G38 = GAS G3/8

FIXED FLOW SETTING

(l/min with 1 decimal)

FRS0	
3 l/min	030
4 l/min	040
5 l/min	050
6 l/min	060
7 l/min	070
8 l/min	080
9 l/min	090
10 l/min	100
11 l/min	110
14 l/min	150
16 l/min	160
18 l/min	180
20 l/min	200
23 l/min	230
28 l/min	280

NOTE

Customized fixed flow can be provided upon request.

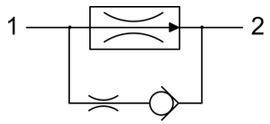
Specifications may change without notice.

FRSO.G12 VALVE SERIES

GAS Insert - 250 bar

Direct acting - Pressure Compensated

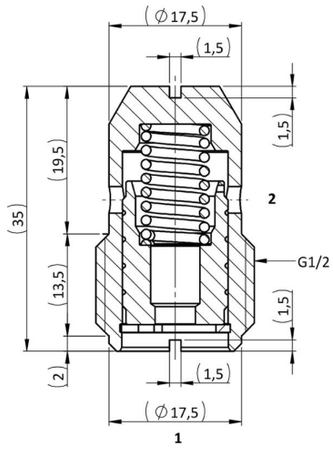
HYDRAULIC SYMBOL



DESCRIPTION

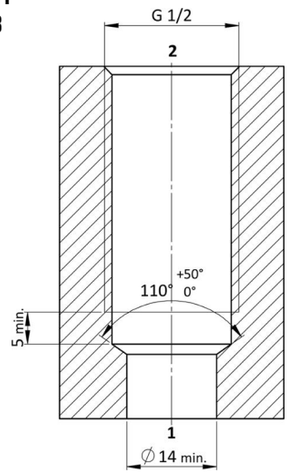
A direct acting, screw-in insert type, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

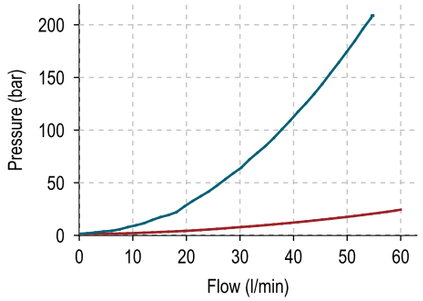


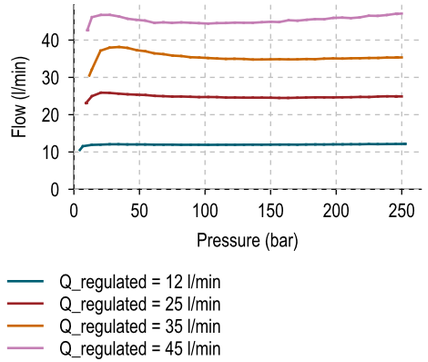
CAVITY

VH053



PERFORMANCE DETAILS





NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to 1 max working pressure 210 bar)
MAXIMUM FLOW	45 l/min
EXTERNAL COMPONENT TREATMENT	Oxide burnished
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	8-12 Nm
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
WEIGHT	0,054 kg

ORDERING CODE

F	R	S	0	·	G	1	2	·	0	N	·	*	*	*

VALVE BASIC CODE

SIZE
G12 = GAS G1/2

FIXED FLOW SETTING
(l/min with 1 decimal)

FRS0	
12 l/min	120
16 l/min	160
20 l/min	200
25 l/min	250
30 l/min	300
35 l/min	350
40 l/min	400
45 l/min	450

NOTE

Customized fixed flow can be provided upon request.

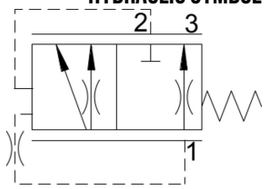
Specifications may change without notice.

FRP*.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Pressure Compensated

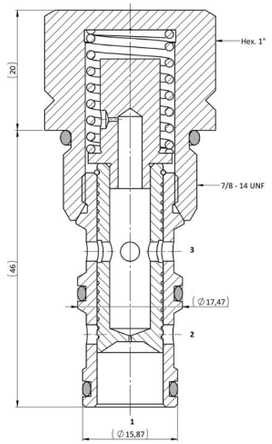
HYDRAULIC SYMBOL



DESCRIPTION

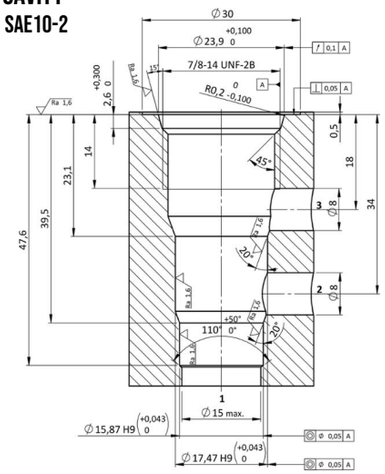
A screw-in, cartridge style, direct acting, 3-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 3 flow path is largely independent of the system pressure or in the the bypass-way and is determined by the dimension of a calibrated orifice. The FRP0.S10 is a priority type regulator, delivering the pump flow to port 3 first, then bypassing excess to port 2. All ports may be fully pressurized.
Flow out of priority port 3 may vary based on input flow amount, particularly with lower temperatures and increased fluid viscosities.
The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

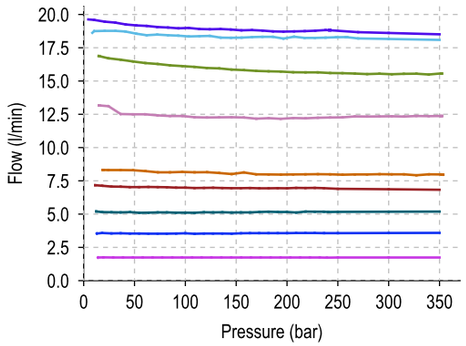


CAVITY

SAE10-2



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings. p,Q curves are recorded at TOil = 40°C and 46 cSt.

LEGEND

- Q_regulated = 5 l/min
- Q_regulated = 7 l/min
- Q_regulated = 8 l/min
- Q_regulated = 12 l/min
- Q_regulated = 16 l/min
- Q_regulated = 1,7 l/min
- Q_regulated = 18 l/min
- Q_regulated = 19 l/min
- Q_regulated = 3,5 l/min

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - Standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm Hex.1"
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.049 (standard sealing NBR-BUNA-N)
WEIGHT	0,143 kg

ORDERING CODE

F	R	P	*	·	S	1	0	·	0	N	·	*	*	*	*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 12-25 l/min

1 = 0,3-11 l/min

SIZE

S10 = 7/8 UNF with Ø15,87 nose size

FIXED FLOW SETTING
(l/min with 1 decimal)

STEEL WIRE OPTION

***W = If requested, leave blank if not.

FRP0		FRP1	
12 l/min	120	0,6 l/min	006
13 l/min	130	0,8 l/min	008
14 l/min	140	0,4 l/min	004
15 l/min	150	1 l/min	010
16 l/min	160	2 l/min	020
17 l/min	170	3 l/min	030
18 l/min	180	4 l/min	040
19 l/min	190	5 l/min	050
20 l/min	200	6 l/min	060
21 l/min	210	7 l/min	070
22 l/min	220	8 l/min	080
23 l/min	230	9 l/min	090
24 l/min	240	10 l/min	100
25 l/min	250	11 l/min	110
		0,3 l/min	003

NOTE

Customized fixed flow can be provided upon request

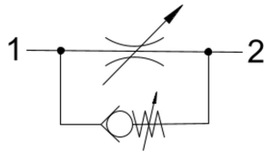
Specifications may change without notice.

FCRO.S06 VALVE SERIES

SAE06 Cartridge - 350 bar

Direct acting - Poppet Type

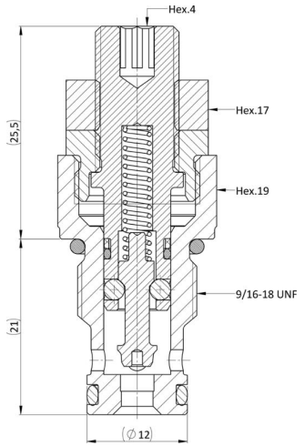
HYDRAULIC SYMBOL



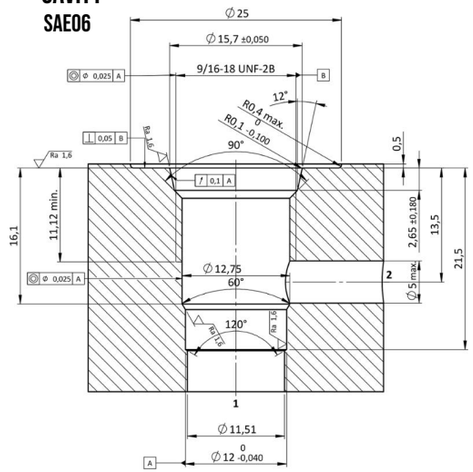
DESCRIPTION

A direct acting, screw-in, cartridge style, 1-way flow control valve with free reverse flow.
The valve acts as an adjustable flow regulator from port 2 to 1.
From port 1 to 2 the valve has a spring-biased check, closed until sufficient pressure is applied.
This allows the valve to have 2 settings : Adjustable flow regulator with reverse free flow (2vs1); Adjustable check valve (1vs2).

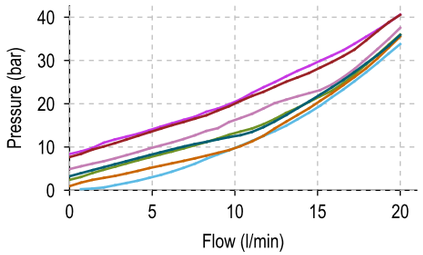
CROSS SECTION

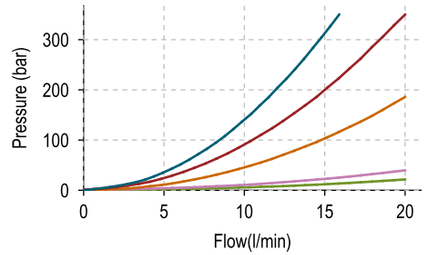


CAVITY SAE06



PERFORMANCE DETAILS





Spring B - 1vs2
Spring G - 1vs2
Spring N - 1vs2
Spring P - 1vs2
Spring S - 1vs2
Spring V - 1vs2
Spring Y - 1vs2

0,25 Turns - 2vs1
0,5 Turns - 2vs1
1 Turn - 2vs1
1,5 Turns - 2vs1
2 Turns - 2vs1

NOTE
The p/Q performance illustraded in the chart are the same in both directions.
p/Q curve is recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	0,75 cm^3 / min @ 10 bar - (2vs1 - valve fully closed) 0,75 cm^3 / min @ 350 bar - (2vs1 - valve fully closed)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-27 Nm Hex.19
TIGHTENING TORQUE NUT	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.207 (standard sealing NBR-BUNA-N)
WEIGHT	0,058 kg

ORDERING CODE

F	C	R	0	·	S	0	6	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE
S06 = 9/16-18 UNF with Ø12 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,5
N	1
S	2,5
B	3
P	5
G	8
V	9

FLOW ADJUSTMENT
W = Top plastic knob + plastic counter knob
V = Top plastic knob
0 = Hex. allen head

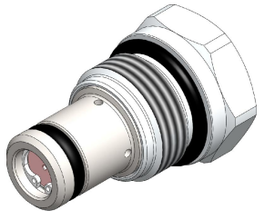
00* = Standard configuration.
10* = Fine regulation.

Specifications may change without notice.

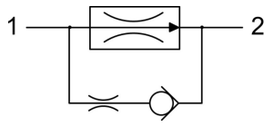
FRC*.S08 VALVE SERIES

SAE08 Cartridge - 250 bar

Direct acting - Pressure Compensated



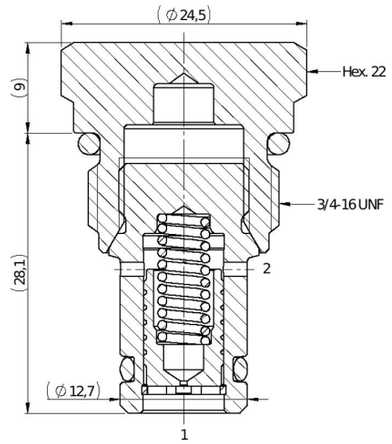
HYDRAULIC SYMBOL



DESCRIPTION

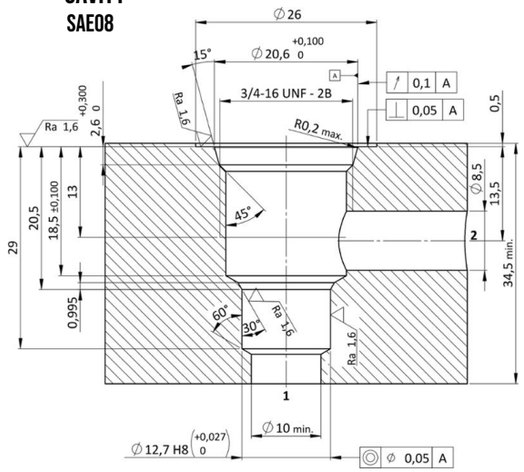
A screw-in, cartridge style, direct acting, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

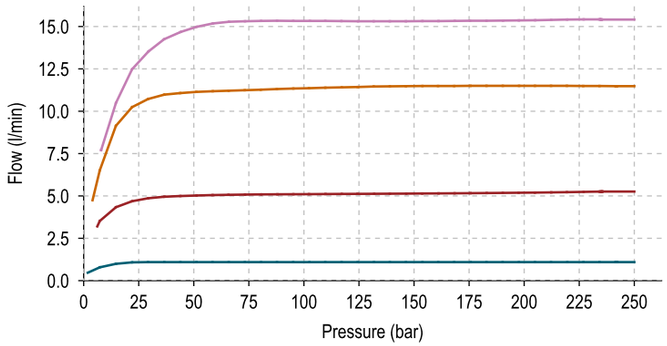


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

LEGEND

- Q_regulated = 1 l/min
- Q_regulated = 5 l/min
- Q_regulated = 11 l/min
- Q_regulated = 15 l/min

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to1 max working pressure 160 bar)
MAXIMUM FLOW	15 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 (standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg

ORDERING CODE

F	R	C	*	·	S	0	8	·	0	N	·	*	*	*	*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 2-15 l/min

1 = 0,6-1,8 l/min

SIZE

S08 = 3/4-16 UNF with Ø12,7 nose size

FIXED FLOW SETTING
(l/min with 1 decimal)

FRC0		FRC1	
2 l/min	020	0,6 l/min	006
3 l/min	030	0,8 l/min	008
4 l/min	040	1,0 l/min	010
5 l/min	050	1,2 l/min	012
6 l/min	060	1,4 l/min	014
7 l/min	070	1,6 l/min	016
8 l/min	080	1,8 l/min	018
9 l/min	090		
10 l/min	100		
11 l/min	110		
12 l/min	120		
15 l/min	150		

STEEL WIRE OPTION

W = if requested, leave blanck if not

NOTE

Customized fixed flow can be provided upon request.

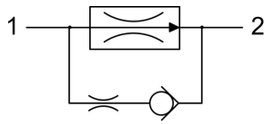
Specifications may change without notice.

FRC*.S10 VALVE SERIES

SAE Cartridge - 250 bar

Direct acting - Pressure Compensated

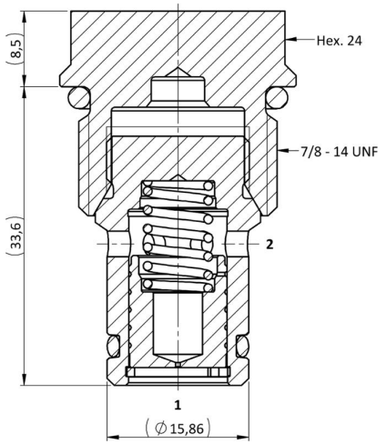
HYDRAULIC SYMBOL



DESCRIPTION

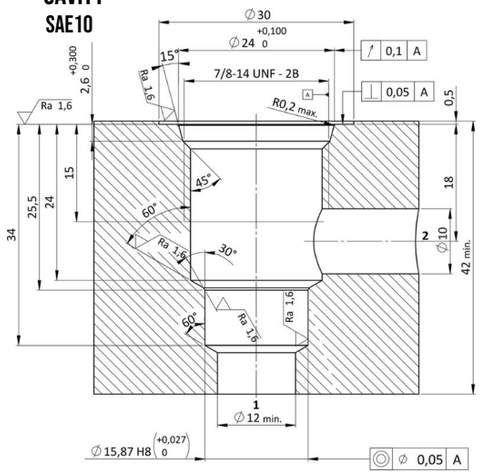
A screw-in, cartridge style, direct acting, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure and is determined by the dimension of a calibrated orifice. The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

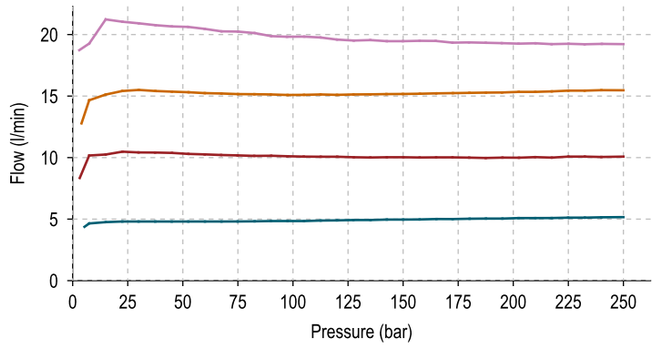


CAVITY

SAE10



PERFORMANCE DETAILS



NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings.
p,Q curves are recorded from 1 to 2 port at TOil = 40°C and 46 cSt.

LEGEND

- Q_regulated = 5 l/min
- Q_regulated = 10 l/min
- Q_regulated = 15 l/min
- Q_regulated = 19 l/min

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar (2 to 1 max working pressure 160 bar)
MAXIMUM FLOW	20 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg

ORDERING CODE

F	R	C	*	·	S	1	0	·	0	N	·	*	*	*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 2,5-20 l/min

1 = 1,2-2,1 l/min

SIZE

S10 = 7/8-14 UNF with Ø15,86 nose size

FIXED FLOW SETTING

(l/min with 1 decimal)

FRC0		FRC1	
2,5 l/min	025	1,2 l/min	012
3 l/min	030	1,4 l/min	014
4 l/min	040	1,6 l/min	016
5 l/min	050	1,8 l/min	018
6 l/min	060	2 l/min	020
7 l/min	070	2,1 l/min	021
8 l/min	080		
9 l/min	090		
10 l/min	100		
11 l/min	110		
12 l/min	120		
16 l/min	160		
18 l/min	180		
20 l/min	200		

NOTE

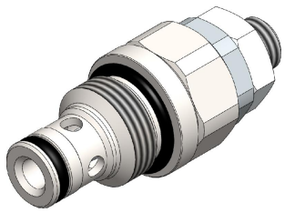
Customized fixed flow can be provided upon request.

Specifications may change without notice.

FRTO.S08 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Poppet Type

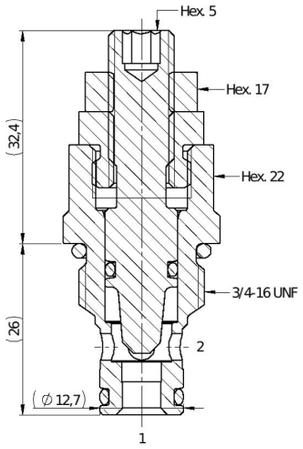


HYDRAULIC SYMBOL

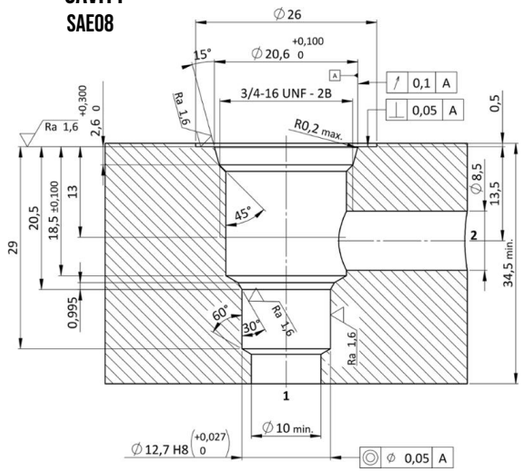
DESCRIPTION

A cartridge style, screw in, non pressure compensated, adjustable flow restrictor valve. Once the flow is adjusted to desired value, both the 1 to 2 and 2 to 1 flow paths are permitted.

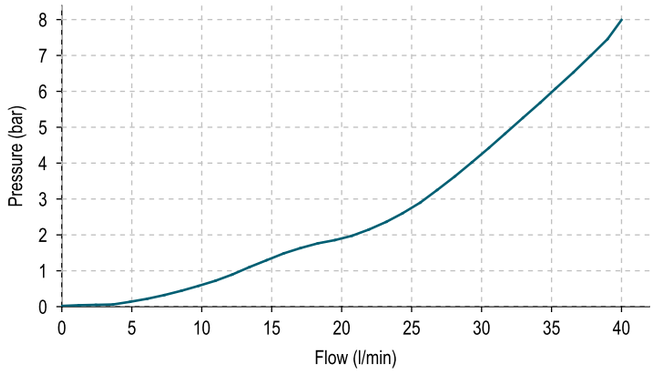
CROSS SECTION



CAVITY SAE08



PERFORMANCE DETAILS



NOTE

The p/Q performance illustraded in the chart are the same in both directions. p/Q curve is recorded at TOil = 40°C and 46 cSt.

LEGEND

1vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.22
TIGHTENING TORQUE NUT	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 (standard sealing NBR-BUNA-N)
WEIGHT	0,100 kg

ORDERING CODE

F	R	T	0	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE

S08 = 3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW ADJUSTMENT

W = Top plastic knob + plastic counter knob

V = Top plastic knob

0 = Hex allen head

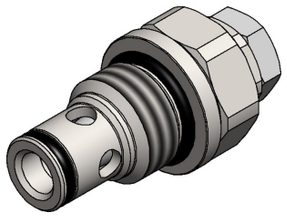
000 = Standard configuration.
100 = Fine regulation

Specifications may change without notice.

FRTO.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Poppet Type

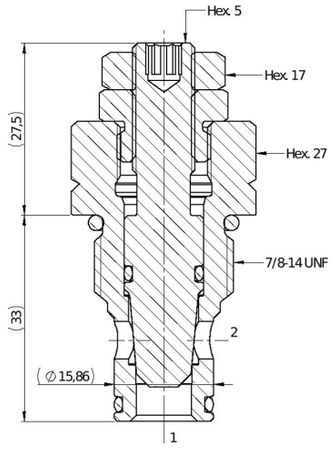


HYDRAULIC SYMBOL

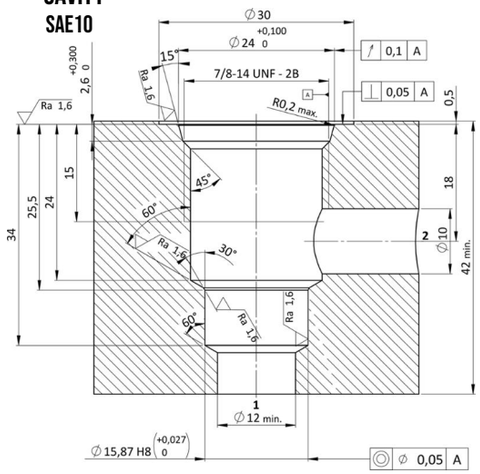
DESCRIPTION

A cartridge style, screw in, non pressure compensated, adjustable flow restrictor valve. Once the flow is adjusted to desired value, both the 1 to 2 and 2 to 1 flow paths are permitted.

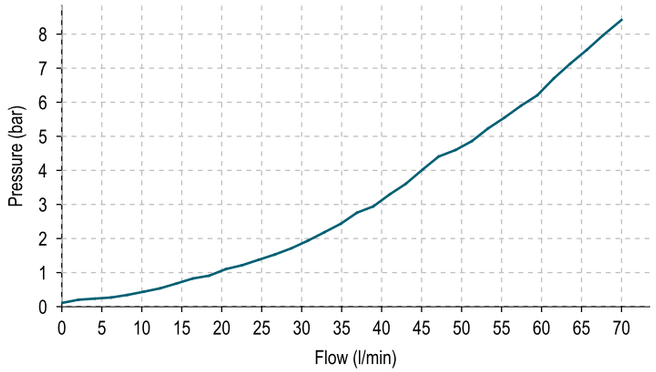
CROSS SECTION



CAVITY SAE10



PERFORMANCE DETAILS



NOTE

The p/Q performance illustraded in the chart are the same in both directions. p/Q curve is recorded at TOil = 40°C and 46 cSt.

LEGEND

1vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	70 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.27
TIGHTENING TORQUE NUT	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
WEIGHT	0,154 kg

ORDERING CODE

F	R	T	0	·	S	1	0	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE

S10 = 7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW ADJUSTMENT

W = Top plastic knob + plastic counter knob

V = Top plastic knob

0 = Hex allen head

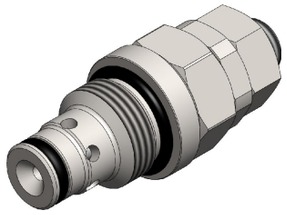
000 = Standard configuration.
100 = Fine regulation

Specifications may change without notice.

FRT4.S08 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Poppet Type

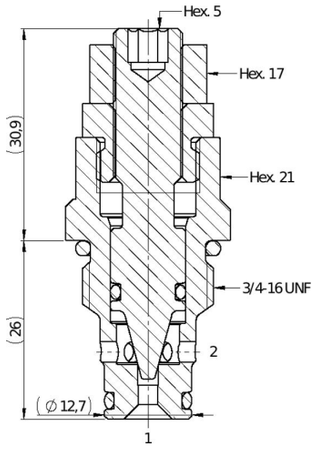


HYDRAULIC SYMBOL

DESCRIPTION

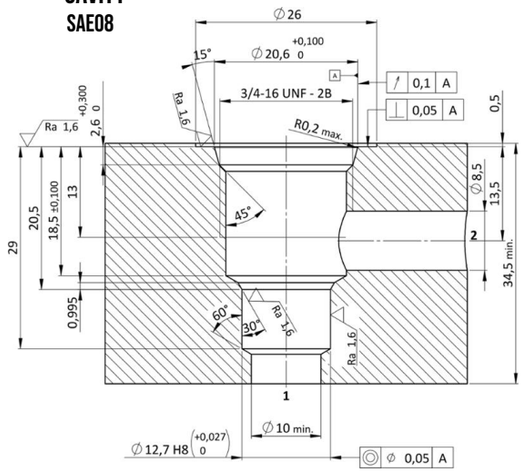
A cartridge style, screw in, non pressure compensated, adjustable flow restrictor valve. Once the flow is adjusted to desired value, both the 1 to 2 and 2 to 1 flow paths are permitted. Smaller sealing area for finer flow adjustment.

CROSS SECTION

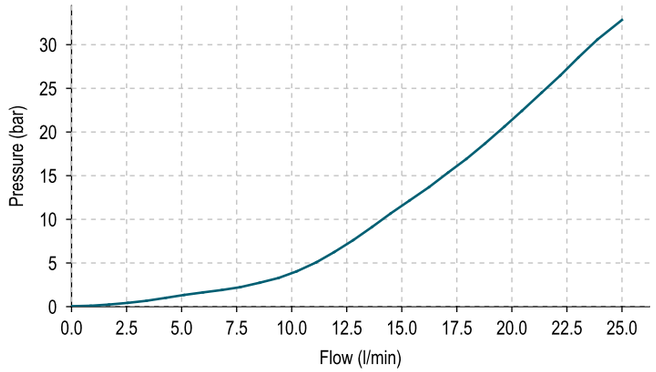


CAVITY

SAE08



PERFORMANCE DETAILS



NOTE

The p/Q performance illustraded in the chart are the same in both directions. p/Q curve is recorded at TOil = 40°C and 46 cSt.

LEGEND

1vs2

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	25 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.21
TIGHTENING TORQUE NUT	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 (standard sealing NBR-BUNA-N)
WEIGHT	0,100 kg

ORDERING CODE

F	R	T	4	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE

S08 = 3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW ADJUSTMENT

W = Top plastic knob + plastic counter knob

V = Top plastic knob

0 = Hex allen head

000 = Standard configuration.
100 = Fine regulation

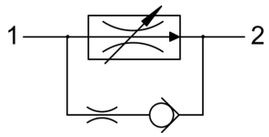
Specifications may change without notice.

FCA0.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Pressure Compensated

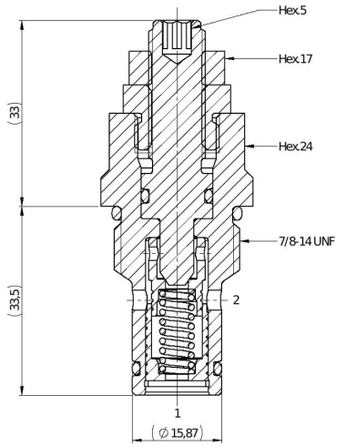
HYDRAULIC SYMBOL



DESCRIPTION

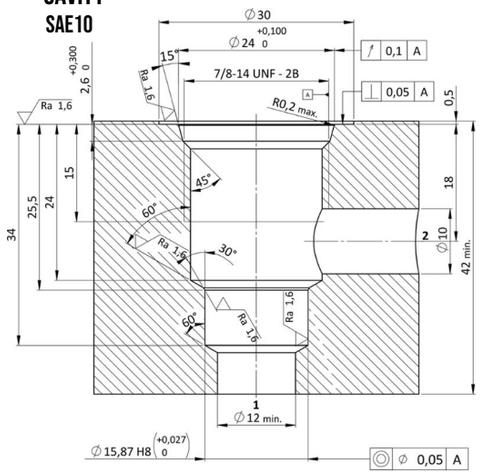
A direct acting, screw-in insert type, 2-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 2 flow path is largely independent of the system pressure. The valve can be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

CROSS SECTION

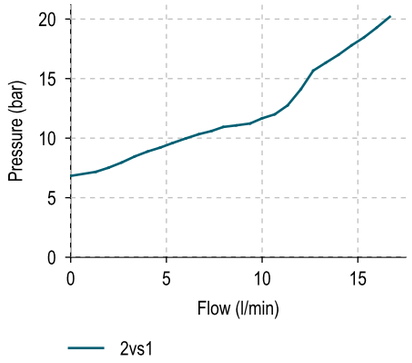


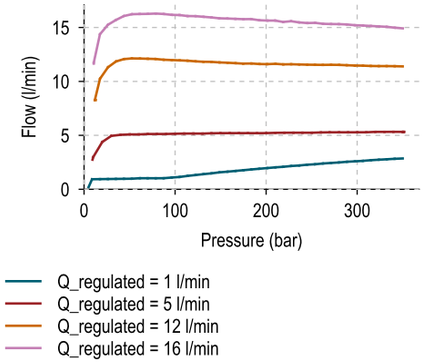
CAVITY

SAE10



PERFORMANCE DETAILS





NOTE

The performance chart illustrates flow handling capacity for significant spring bias options.
p/Q curves are recorded at TOil = 40°C and 46 cSt.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar (2 to 1 max working pressure 160 bar)
MAXIMUM FLOW	16 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TIGHTENING TORQUE NUT	15-20 Nm Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.001 (standard sealing NBR-BUNA-N)
WEIGHT	0,150 kg

ORDERING CODE

F	C	A	0	·	S	1	0	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE

S10 = 7/8-14 UNF with Ø15,87 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW ADJUSTMENT

0 = Hex Allen Head

V = Top plastic knob

W = Top plastic knob + plastic counter knob

000 = Standard configuration.
100 = Fine regulation

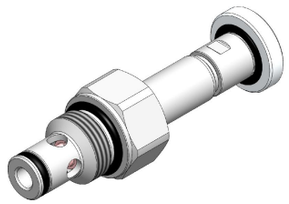
Specifications may change without notice.

SVS0.S08 VALVE SERIES

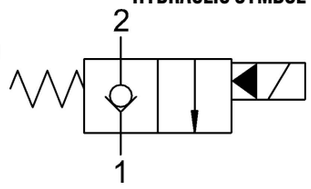
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



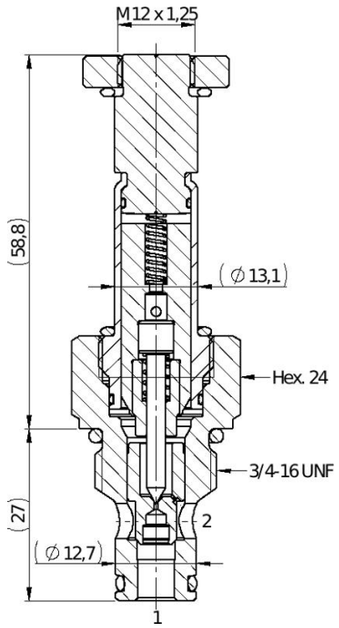
HYDRAULIC SYMBOL



DESCRIPTION

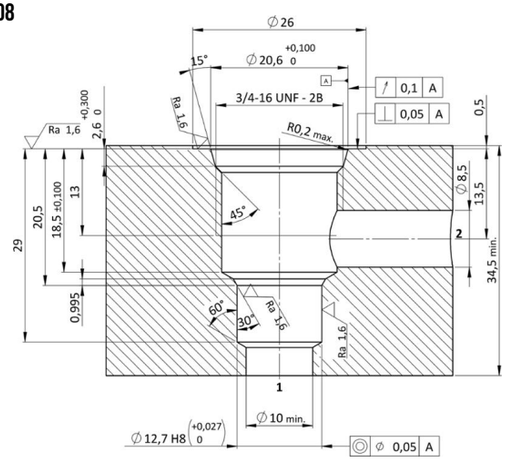
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVS0.S08 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens the 2 to 1 flow path. In this operation mode, flow from 1 to 2 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	S	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M18	METRIC M18x1,5 with Ø12,9 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

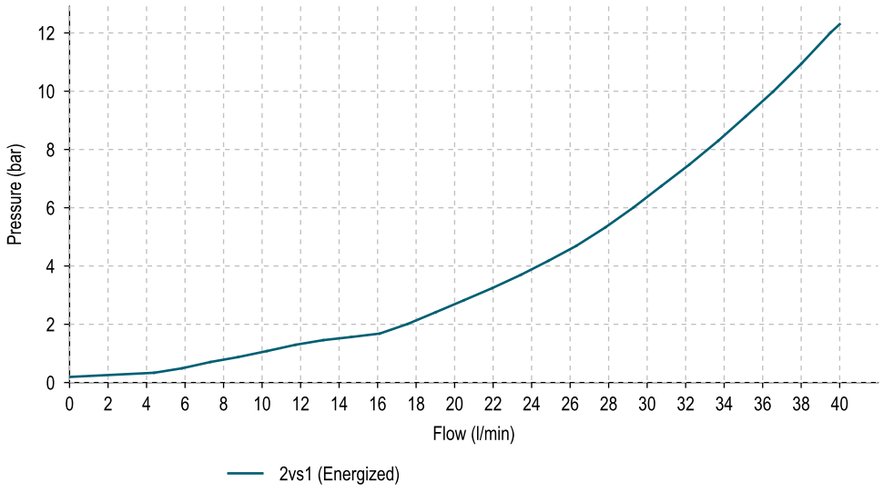
Specifications may change without notice.

Rev. 1

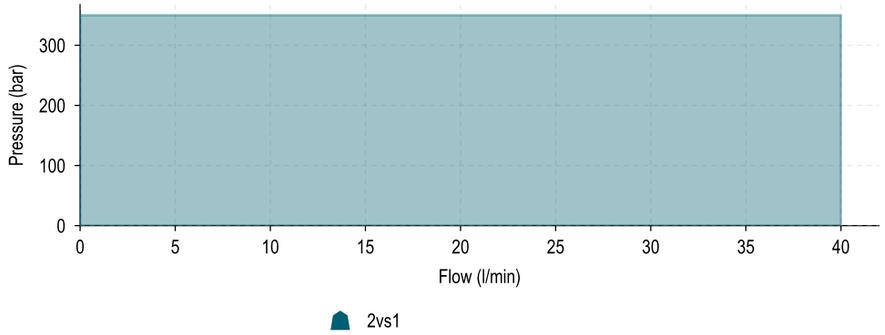
SVSO.SO8 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized).
p,Q curve is recorded at Toil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



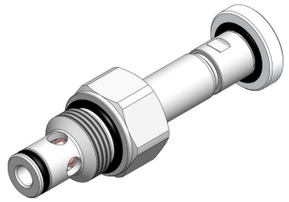
SVSG.S08 VALVE SERIES

SAE Cartridge - 210 bar

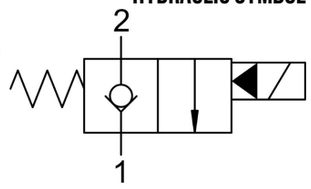
NC Single Lock Pilot Operated

Poppet type

This new NC on-off solenoid cartridge combines the benefits of a pilot operated concept to the very fast response time to be used in lower flow applications.



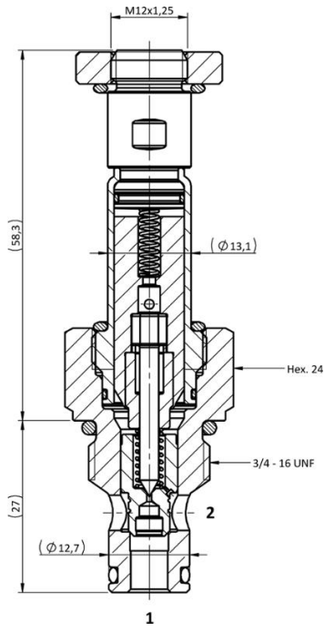
HYDRAULIC SYMBOL



DESCRIPTION

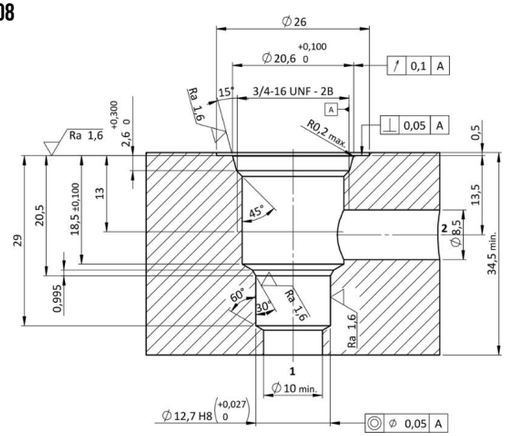
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVSG.S08 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens the 2 to 1 flow path. In this operation mode, flow from 1 to 2 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	210 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 210 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	80 ms
SWITCH OFF TIME	20 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,130 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	S	G	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

NOTE

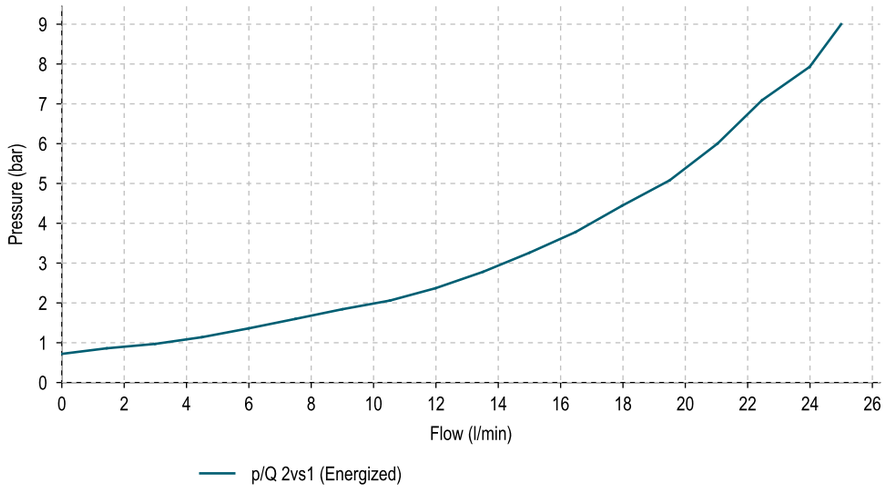
Customized filters can be done upon request.

Specifications may change without notice.

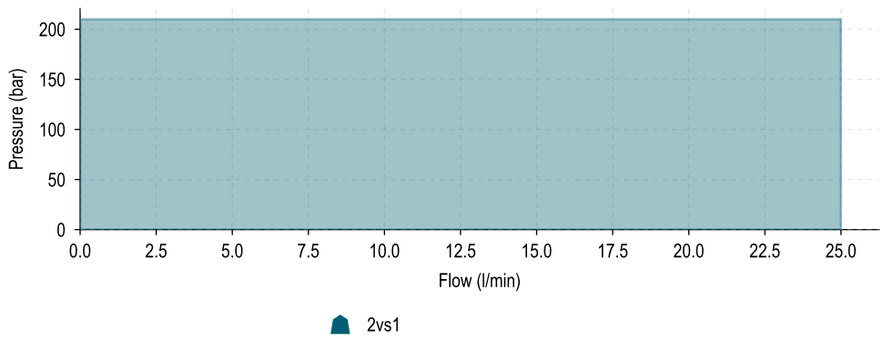
SVSG.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized).
p,Q curve is recorded at Toil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

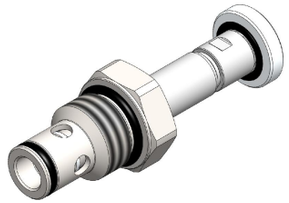


SVS0.S10 VALVE SERIES

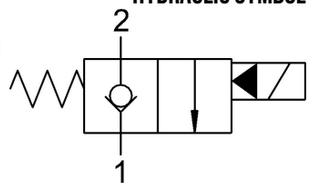
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



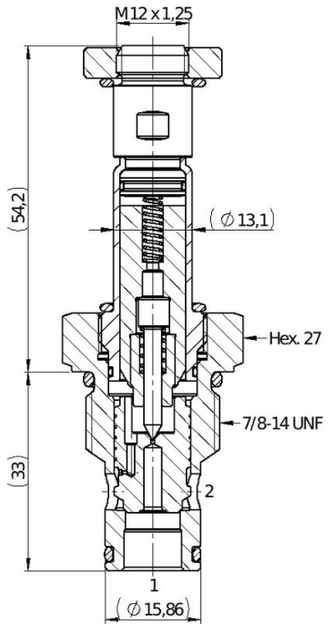
HYDRAULIC SYMBOL



DESCRIPTION

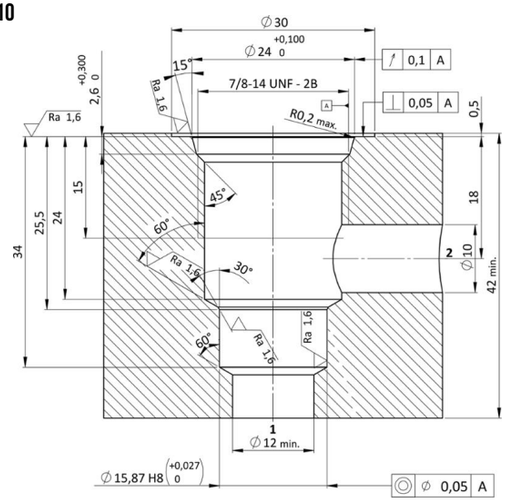
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVS0.S10 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens the 2 to 1 flow path. In this operation mode, flow from 1 to 2 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,139 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	S	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

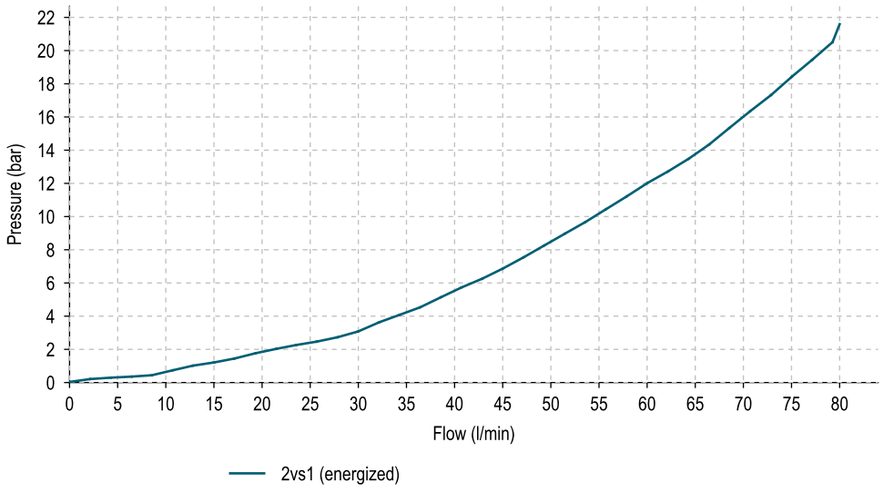
Specifications may change without notice.

Rev. 1

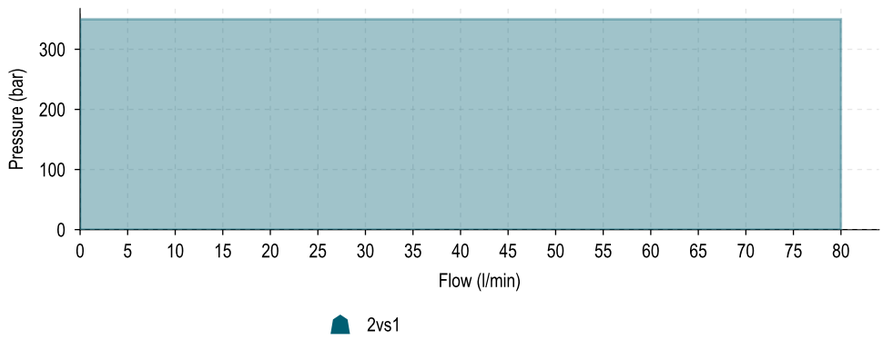
SVSO.S10 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized).
p,Q curve is recorded at Toil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

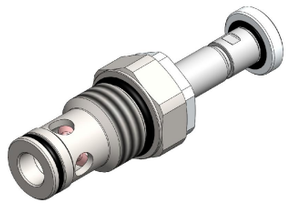


SVS0.S12 VALVE SERIES

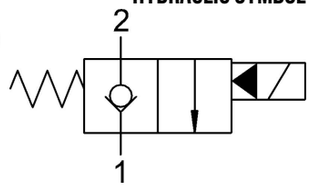
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



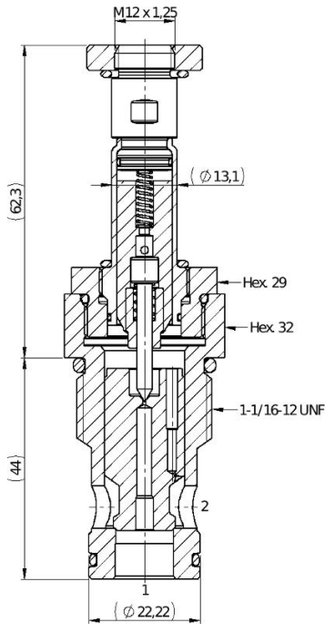
HYDRAULIC SYMBOL



DESCRIPTION

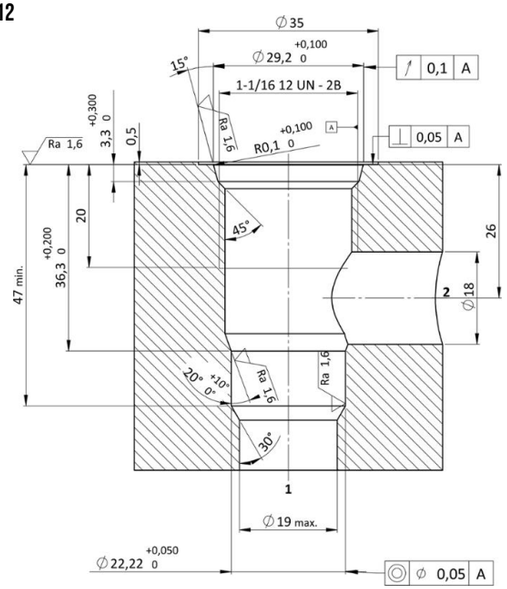
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVS0.S12 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens the 2 to 1 flow path. In this operation mode, flow from 1 to 2 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE12



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	150 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	40 ms
SWITCH OFF TIME	90 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	85-95 Nm Hex.32
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.077 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,254 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	S	0	·	S	1	2	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

1-1/16-12 UN with Ø22,22 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
N	No filter

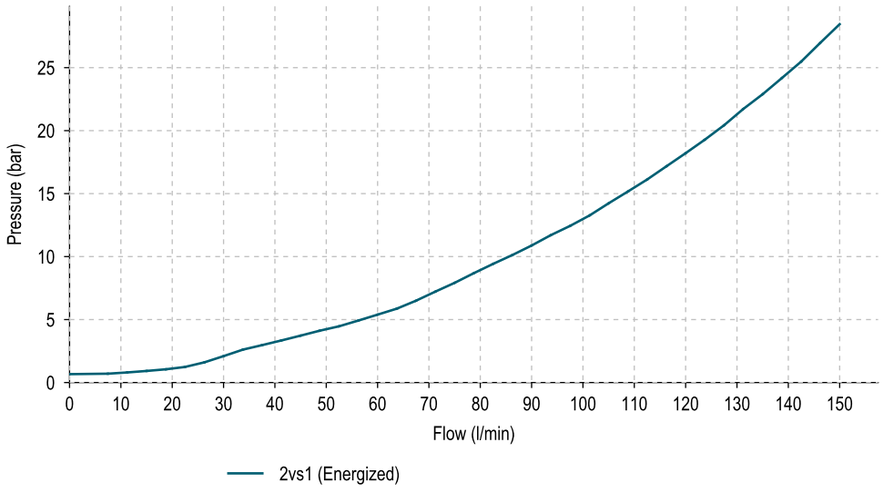
Specifications may change without notice.

Rev. 2

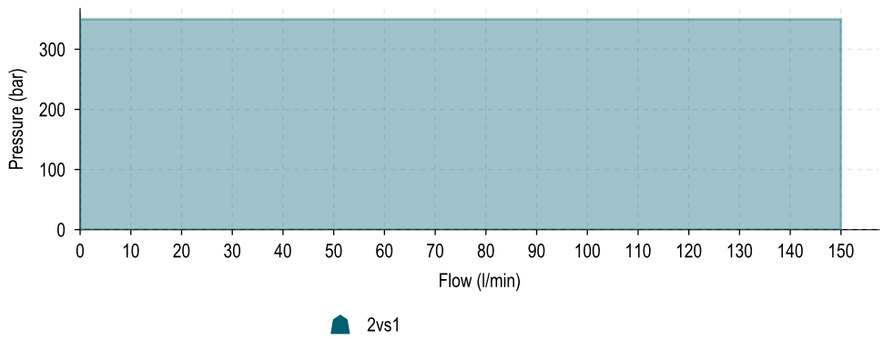
SVSO.S12 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized).
p,Q curve is recorded at Toil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

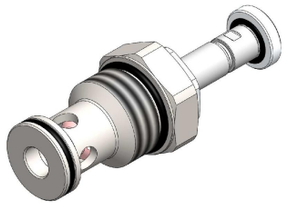


SVS0.G01 VALVE SERIES

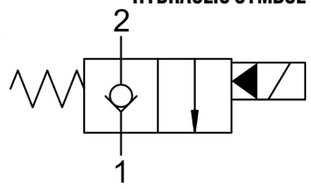
GAS Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



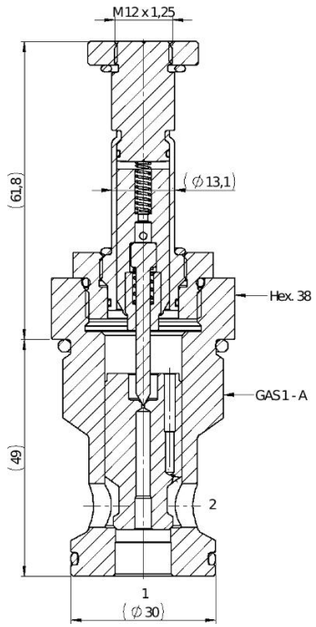
HYDRAULIC SYMBOL



DESCRIPTION

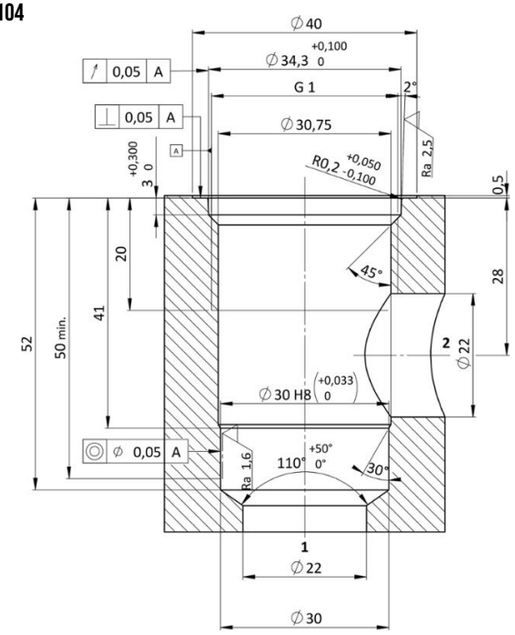
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVS0.G01 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens the 2 to 1 flow path. In this operation mode, flow from 1 to 2 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH104



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	150 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	40 ms
SWITCH OFF TIME	90 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	130-150 Nm Hex.38
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.122 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,370 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	S	0	·	G	0	1	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

GAS G1 with Ø 30 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

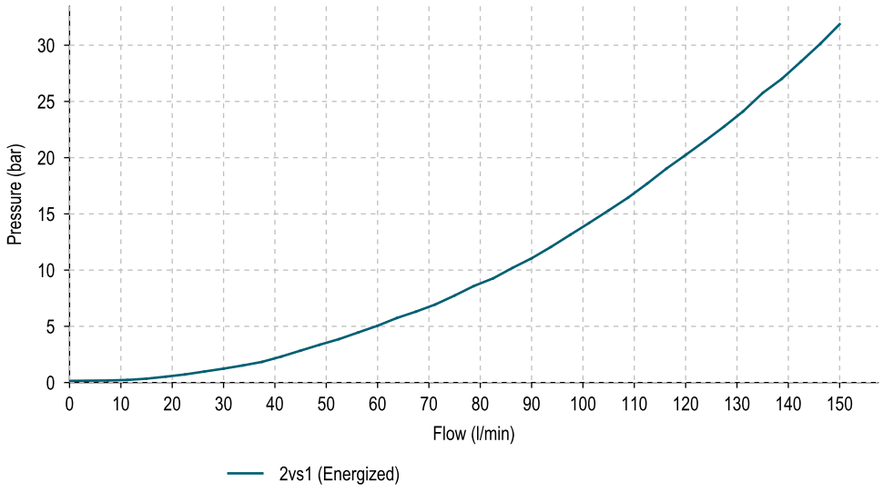
Specifications may change without notice.

Rev. 1

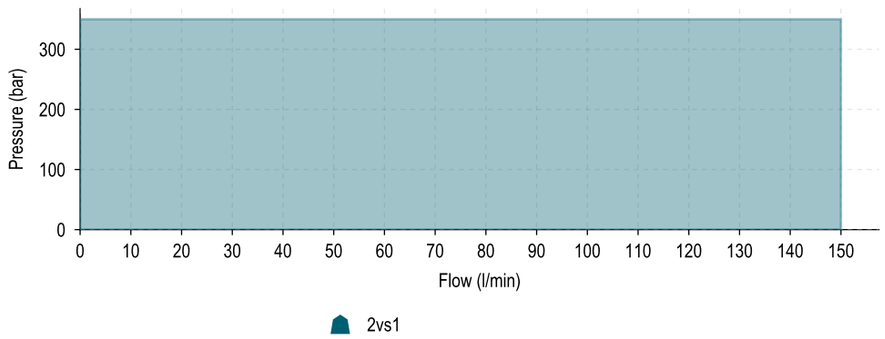
SVSO.G01 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized).
p,Q curve is recorded at Toil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

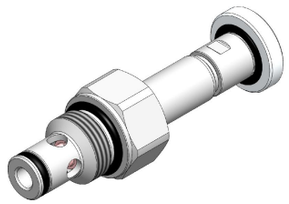


SVT0.S08 VALVE SERIES

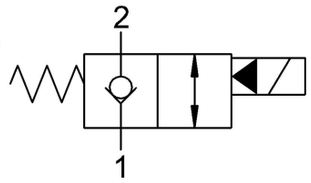
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



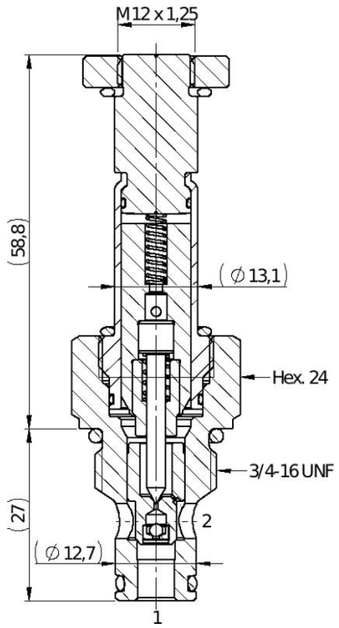
HYDRAULIC SYMBOL



DESCRIPTION

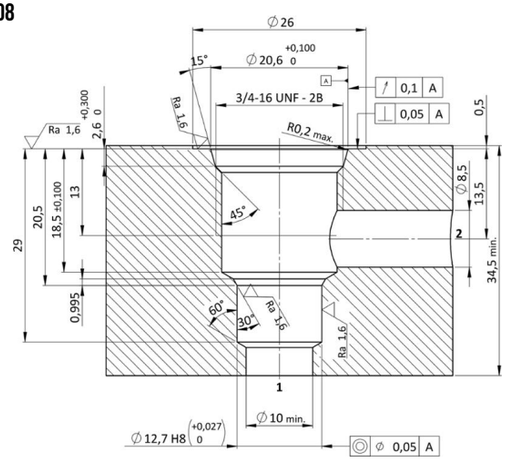
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.S08 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and the 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M18	METRIC M18x1,5 with Ø12,9 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

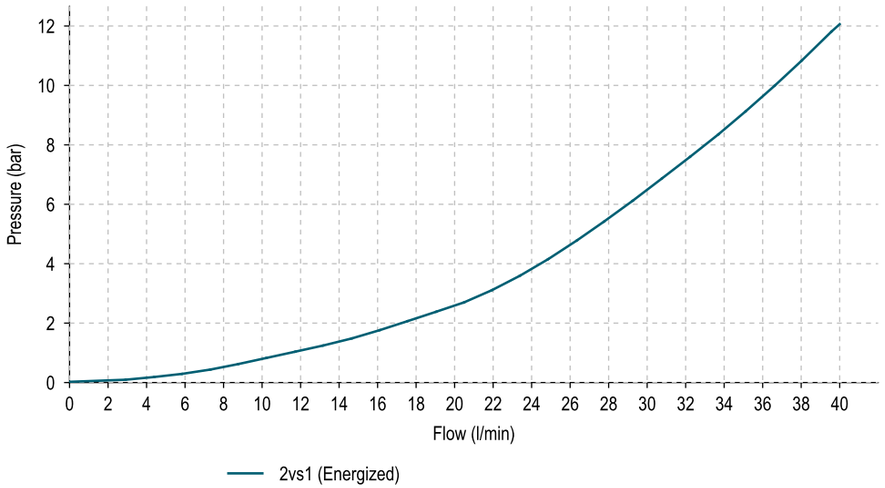
Specifications may change without notice.

Rev. 1

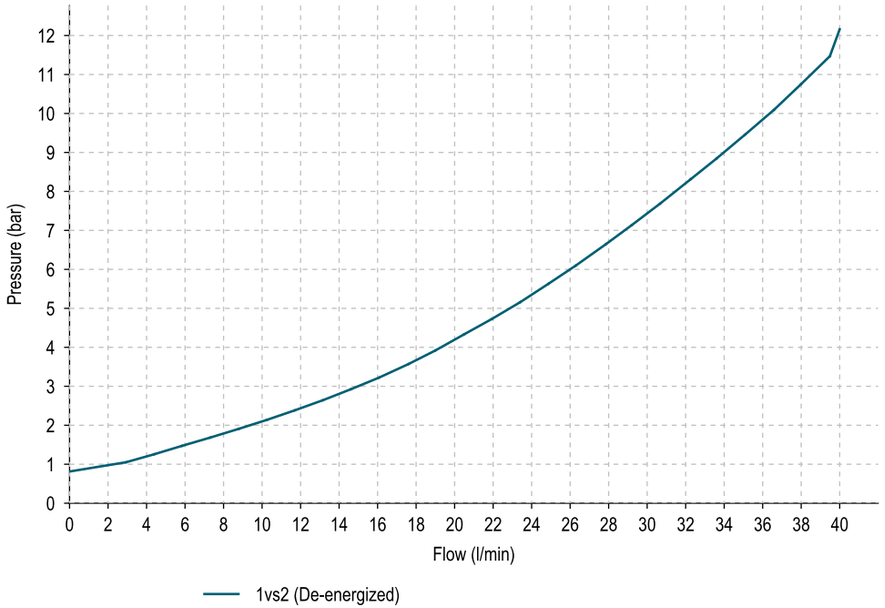
SVTO.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

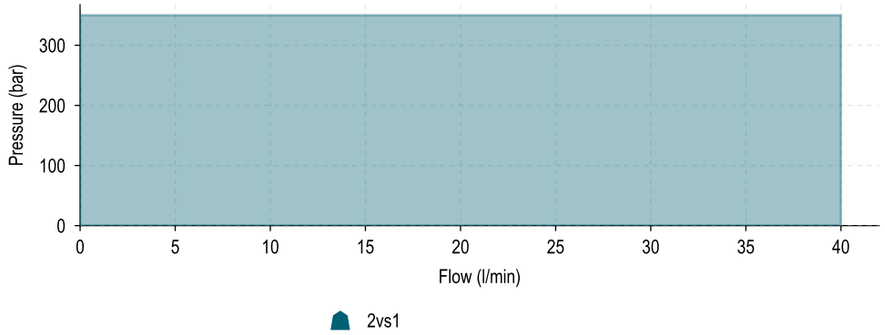
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



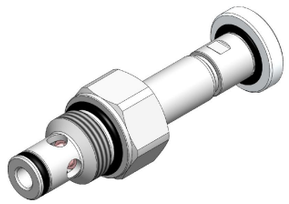
Rev. 1

SVT0.S09 VALVE SERIES

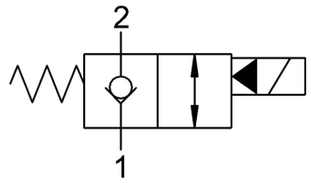
Hybrid SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



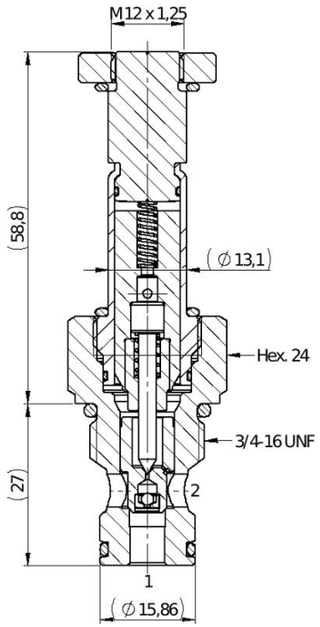
HYDRAULIC SYMBOL



DESCRIPTION

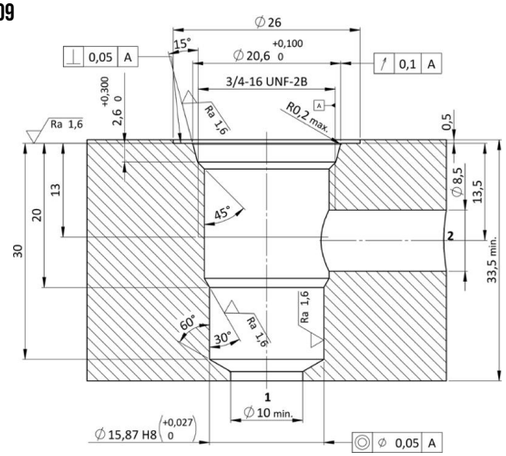
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.S09 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and the 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE09



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	S	0	9	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M18	METRIC M18x1,5 with Ø12,9 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

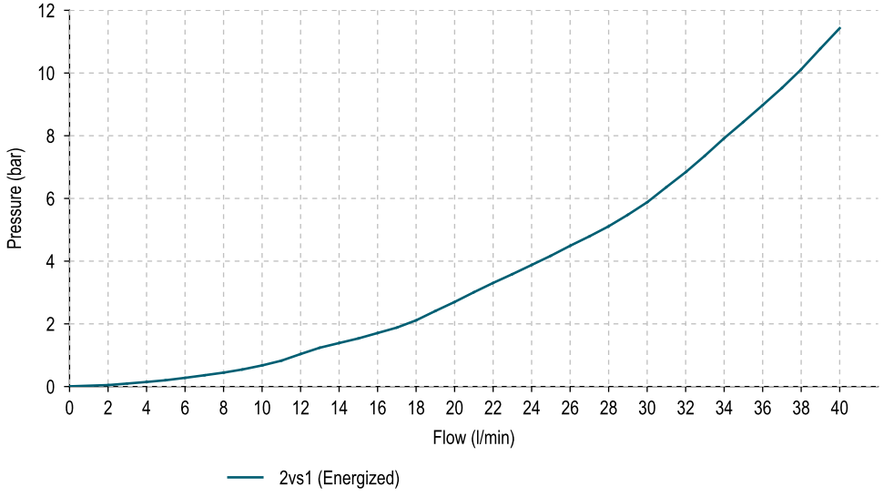
Specifications may change without notice.

Rev. 1

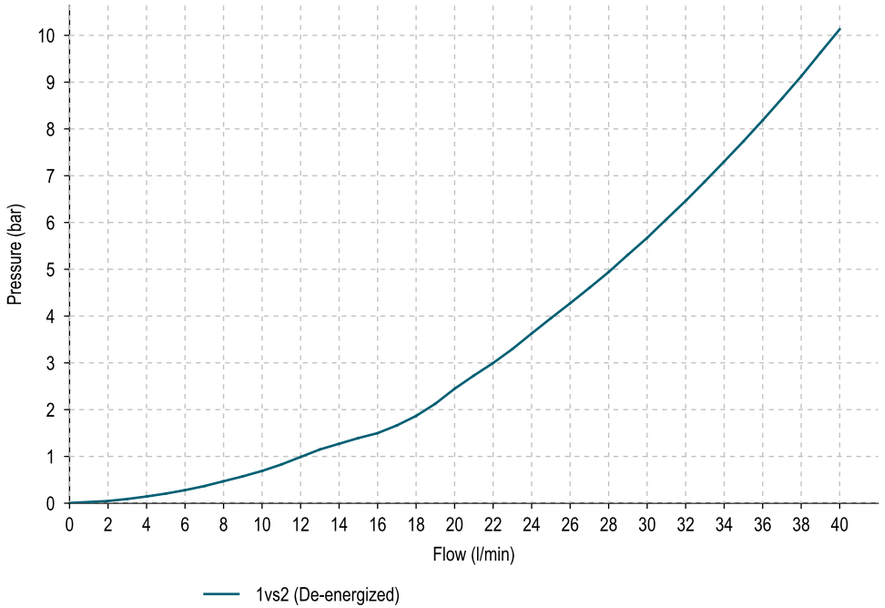
SVTO.S09 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

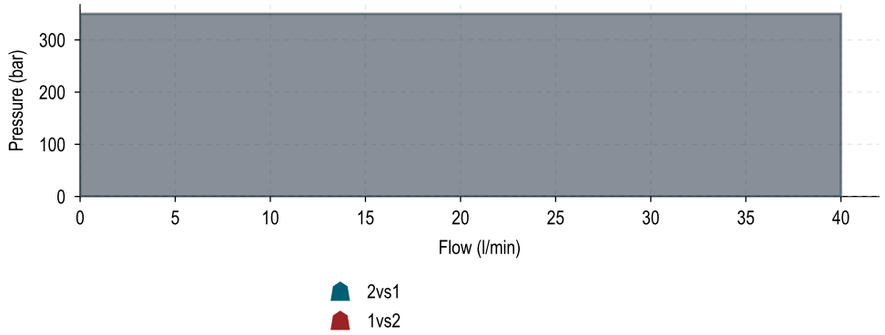
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS

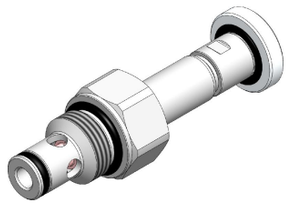


SVT0.M18 VALVE SERIES

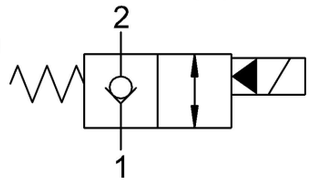
METRIC Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



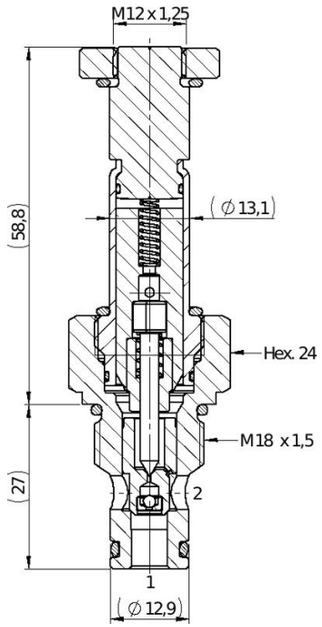
HYDRAULIC SYMBOL



DESCRIPTION

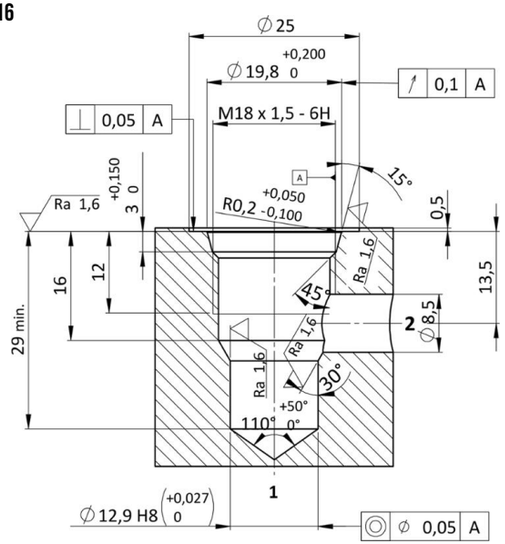
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.M18 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and the 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH116



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.134 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	M	1	8	·	0	*	·	*	0	*
VALVE BASIC CODE					SIZE				MARKING			FILTRATION		

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M18	METRIC M18x1,5 with Ø12,9 nose size
M20	METRIC M20x1,5 with Ø15 nose size

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

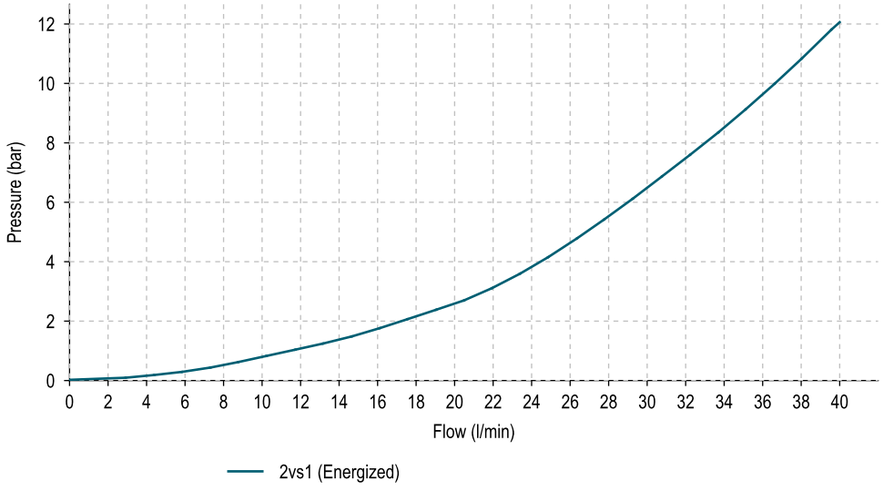
Specifications may change without notice.

Rev. 1

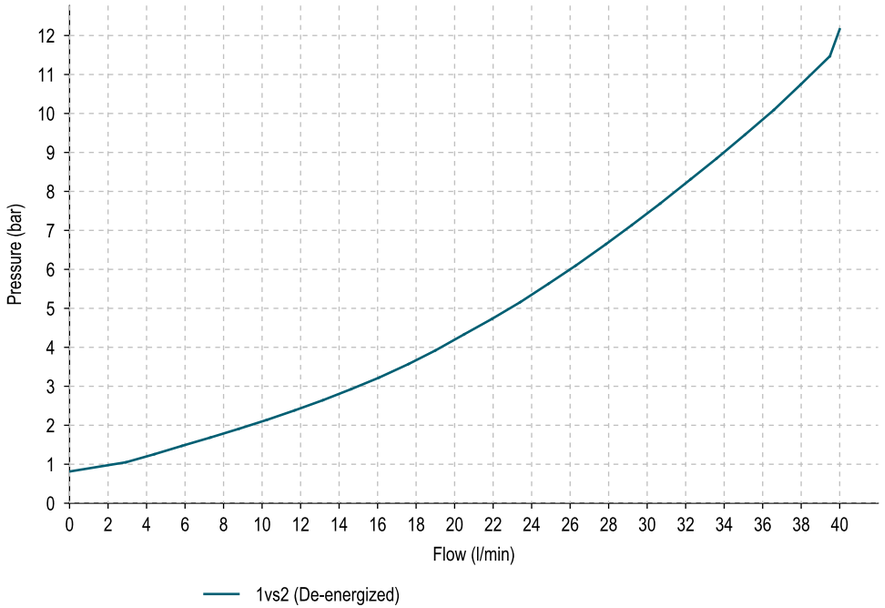
SVTO.M18 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

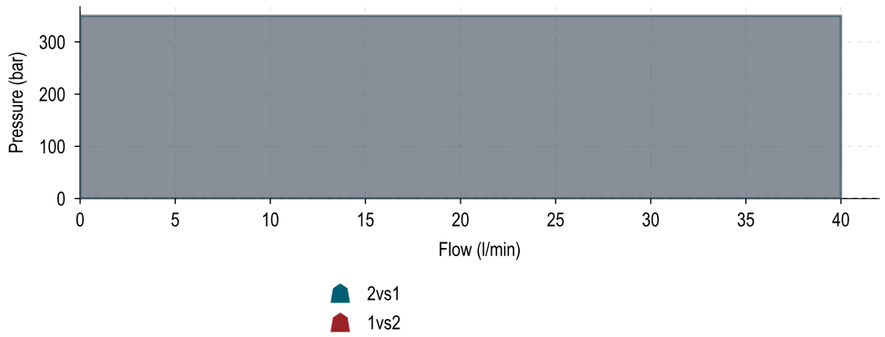
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



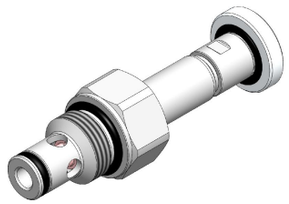
Rev. 1

SVT0.M20 VALVE SERIES

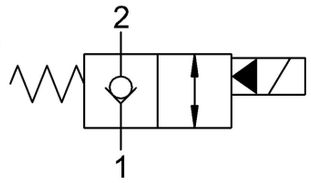
METRIC Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



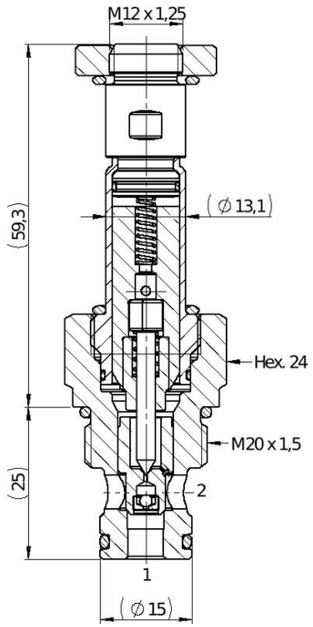
HYDRAULIC SYMBOL



DESCRIPTION

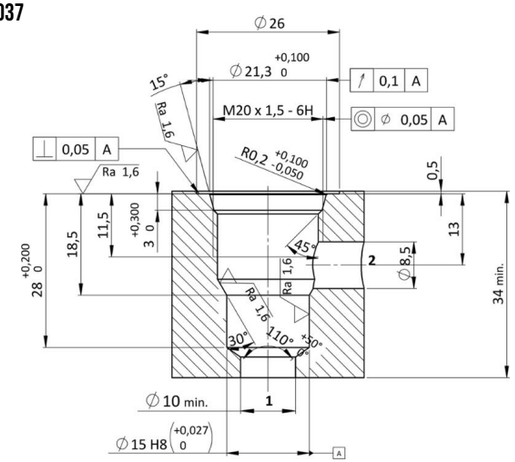
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.M20 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and the 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH037



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.135 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	M	2	0	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M18	METRIC M18x1,5 with Ø12,9 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

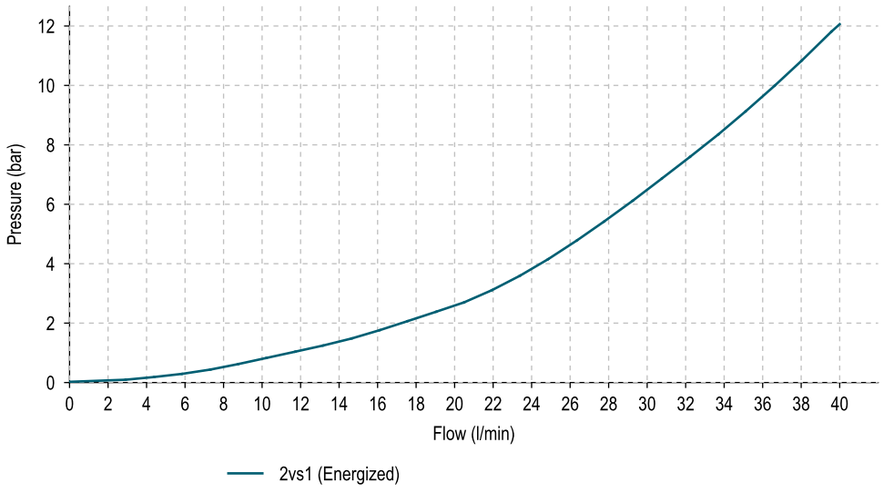
Specifications may change without notice.

Rev. 1

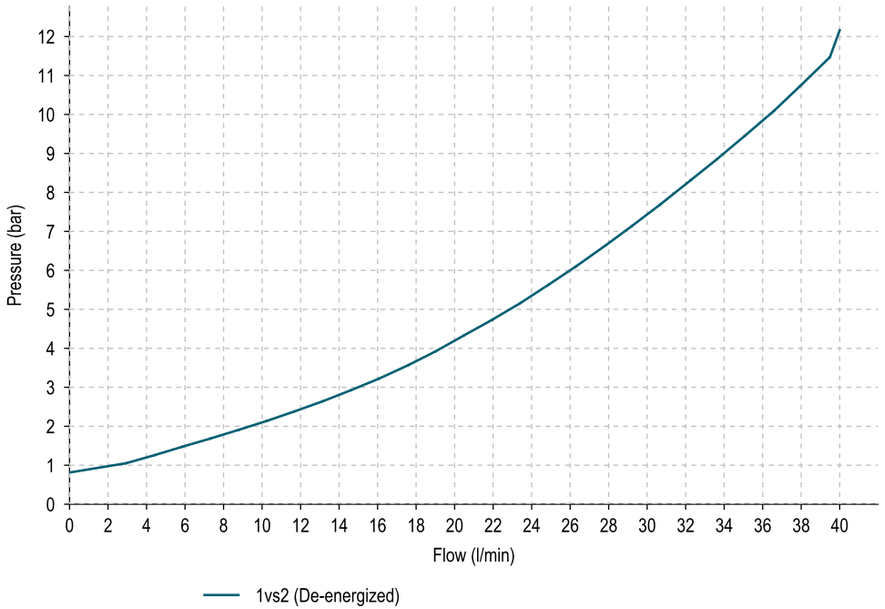
SVTO.M20 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

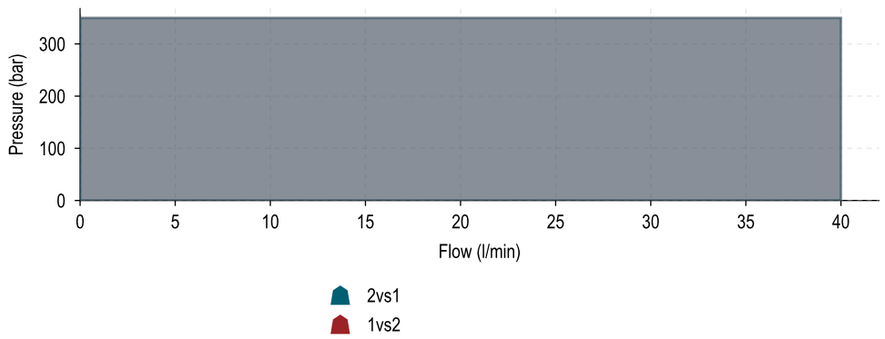
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS

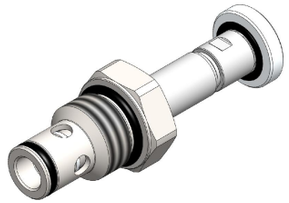


SVT0.S10 VALVE SERIES

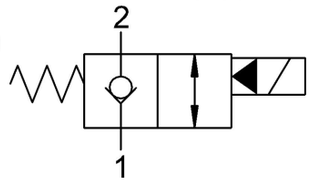
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



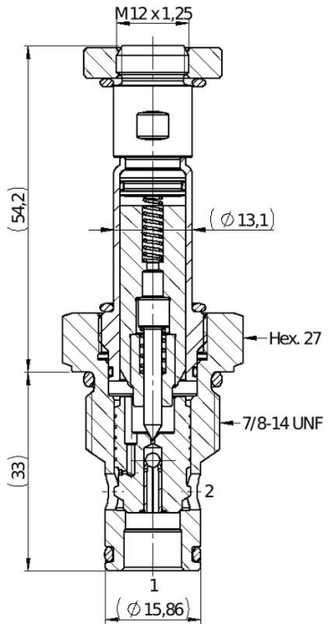
HYDRAULIC SYMBOL



DESCRIPTION

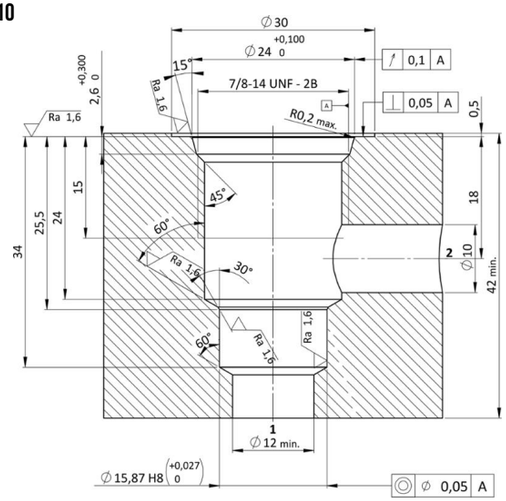
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.S10 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and the 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,139 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
N	No filter

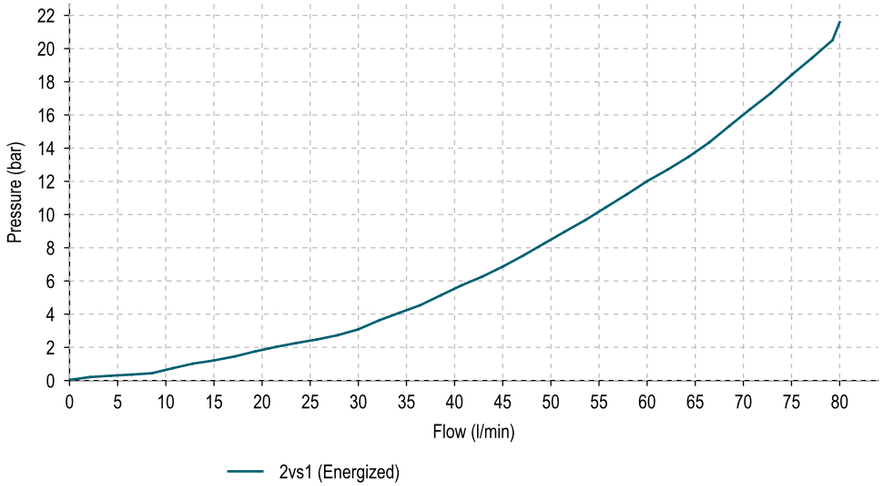
Specifications may change without notice.

Rev. 2

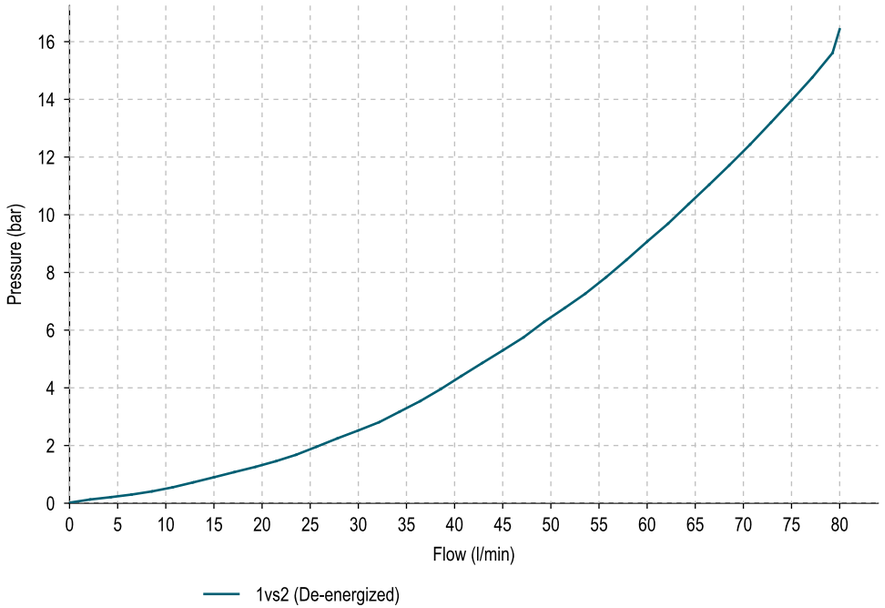
SVTO.S10 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

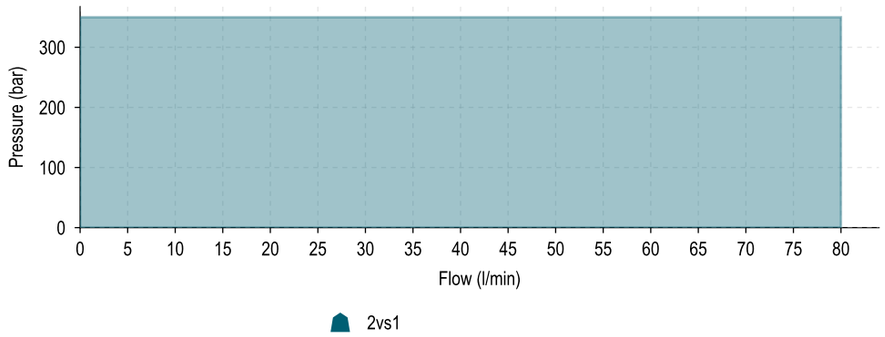
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



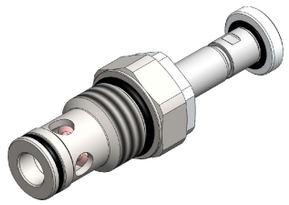
Rev. 2

SVT0.S12 VALVE SERIES

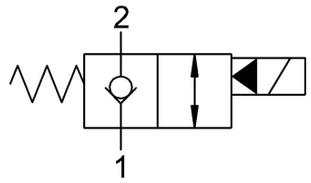
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



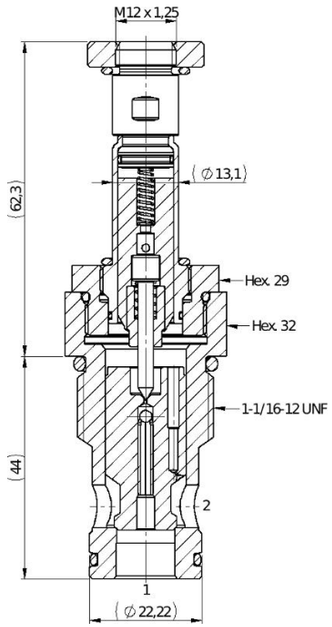
HYDRAULIC SYMBOL



DESCRIPTION

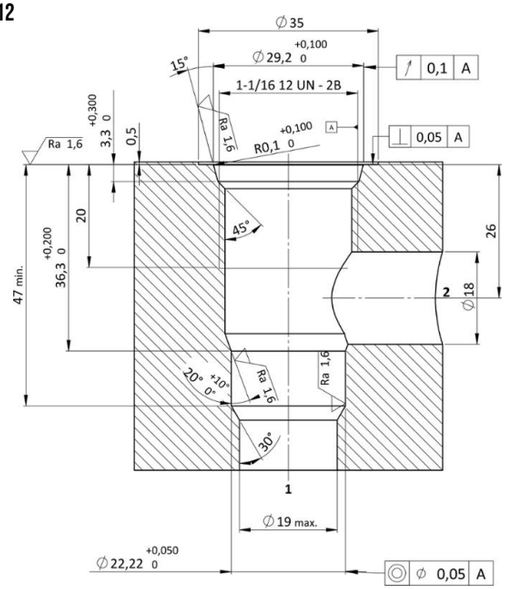
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.S12 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE12



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	150 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	40 ms
SWITCH OFF TIME	90 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	85-95 Nm Hex.32
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.077 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,254 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	S	1	2	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

1-1/16-12 UN with Ø22,22 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
N	No filter

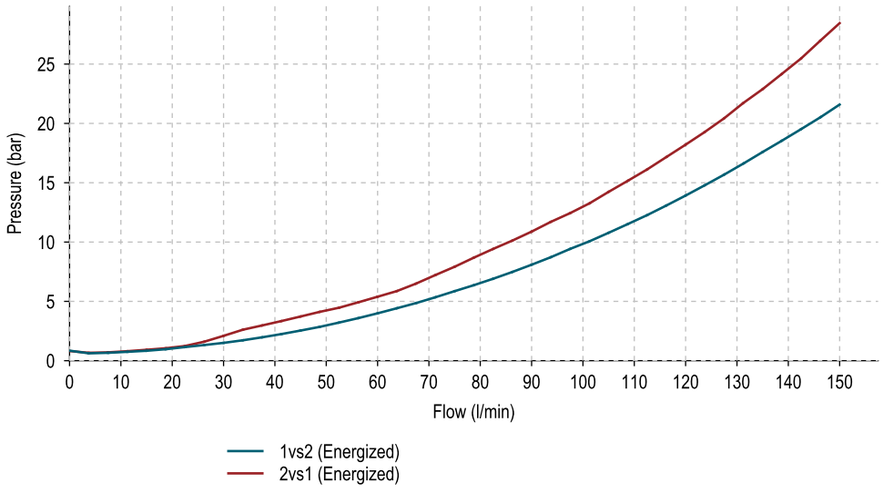
Specifications may change without notice.

Rev. 2

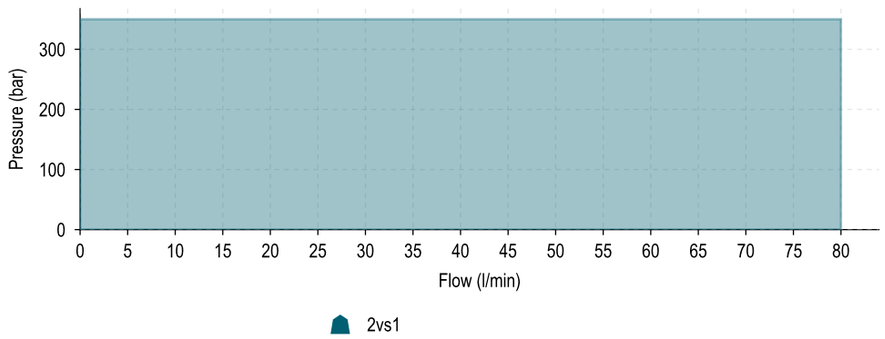
SVTO.S12 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

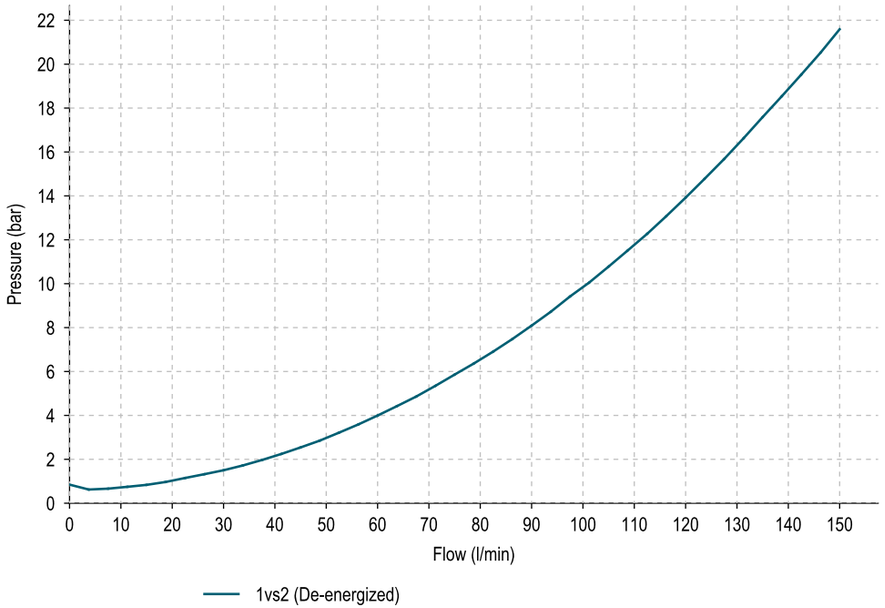
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED

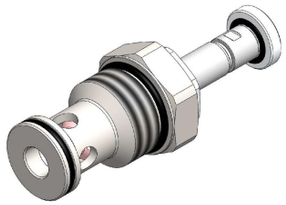


SVT0.G01 VALVE SERIES

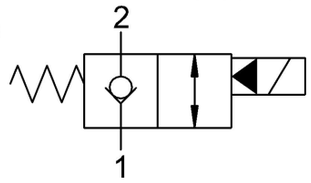
GAS Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



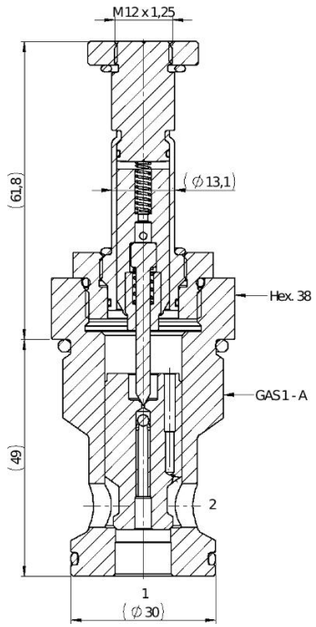
HYDRAULIC SYMBOL



DESCRIPTION

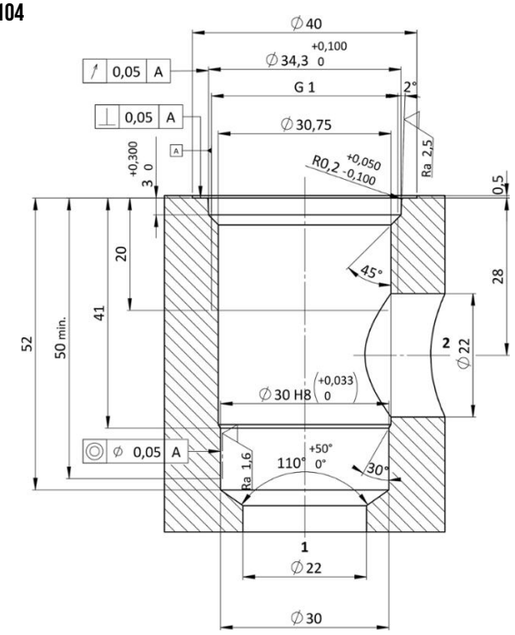
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVT0.G01 acts as check valve allowing free flow from 1 to 2, while blocking from 2 to 1. When the coil is energized the poppet lifts and opens both the 2 to 1 and 1 to 2 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH104



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	150 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	40 ms
SWITCH OFF TIME	90 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	130-150 Nm Hex.38
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.122 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,370 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	T	0	·	G	0	1	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

GAS G1 with Ø 30 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
N	No filter

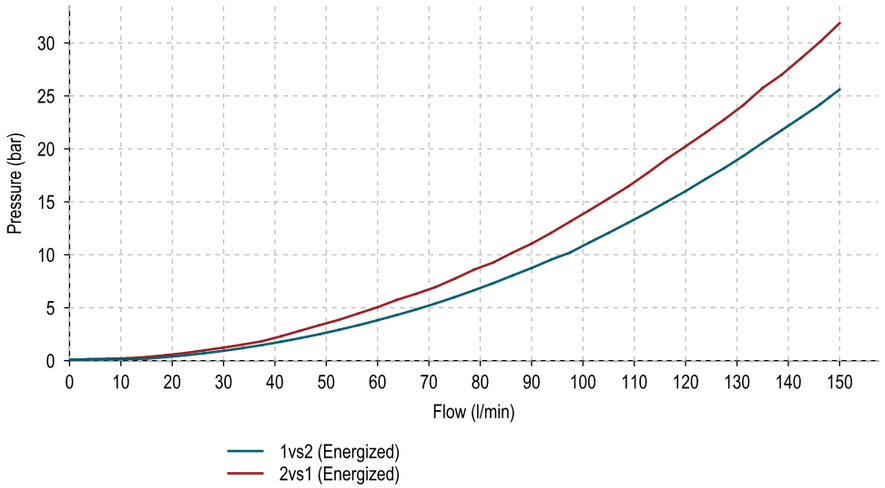
Specifications may change without notice.

Rev. 2

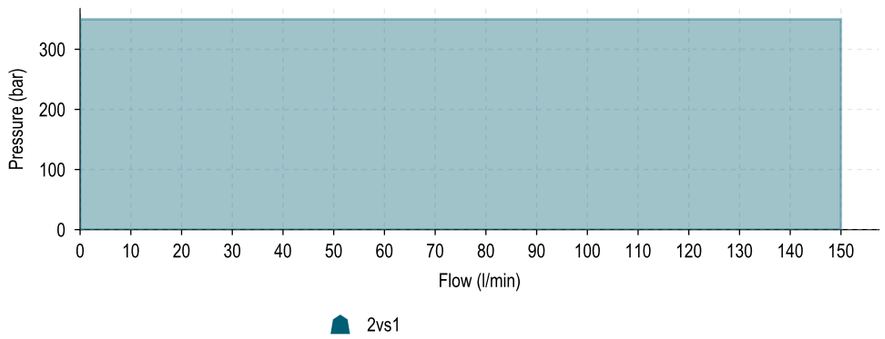
SVTO.G01 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 de-energized, 2 to 1 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

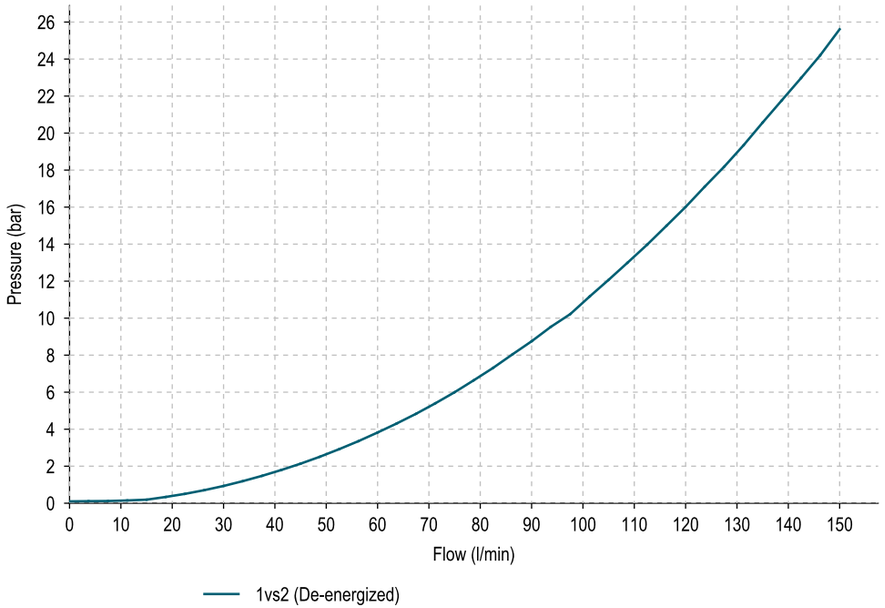
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED

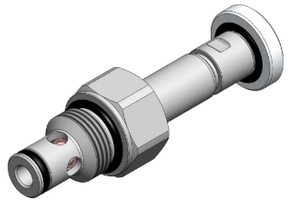


SVG0.S08 VALVE SERIES

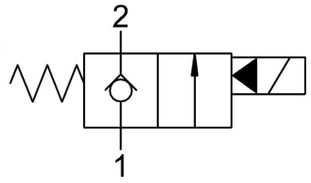
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



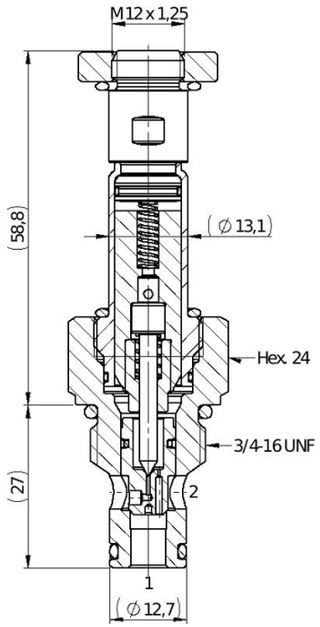
HYDRAULIC SYMBOL



DESCRIPTION

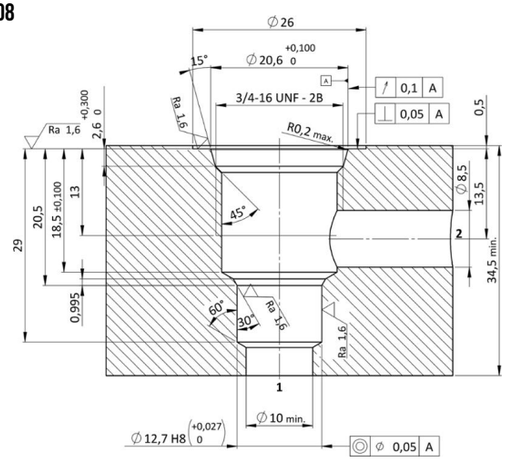
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVG0.S08 acts as check valve allowing free flow from 2 to 1, while blocking from 1 to 2. When the coil is energized the poppet lifts and opens the 1 to 2 flow path. In this operation mode, flow from 2 to 1 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	60 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	G	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,87 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

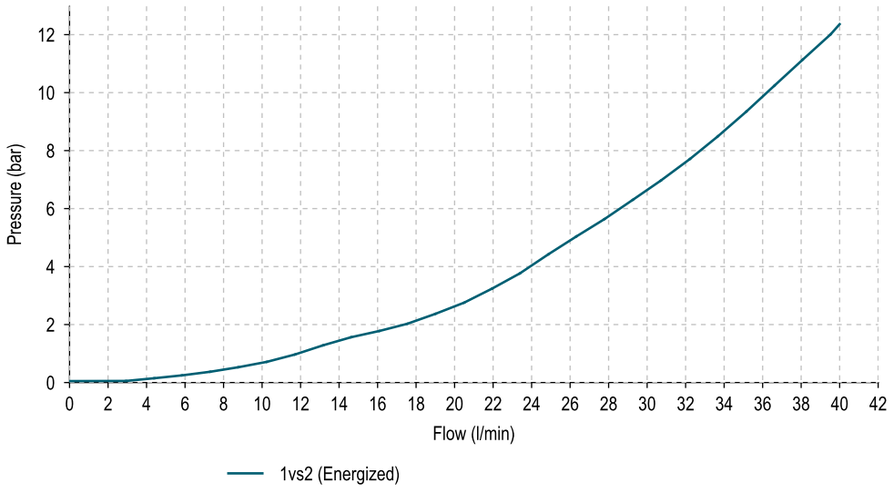
Specifications may change without notice.

Rev. 1

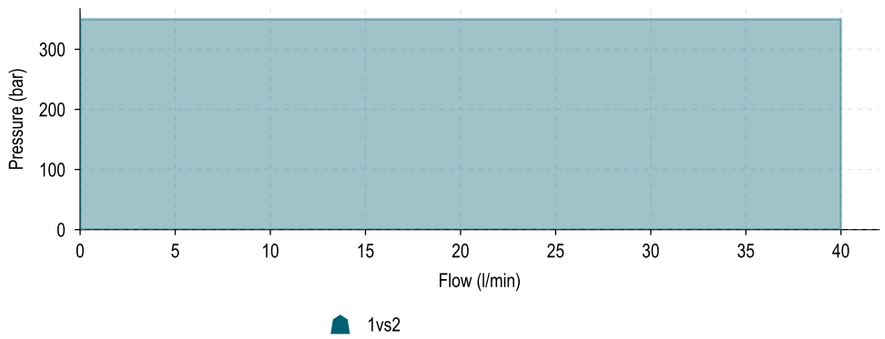
SVGO.S08 GRAPHS

The performance chart illustrates flow handling capacity one direction 1 to 2 (energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



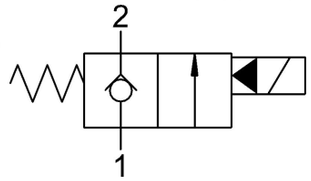
SVG0.S10 VALVE SERIES

SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type

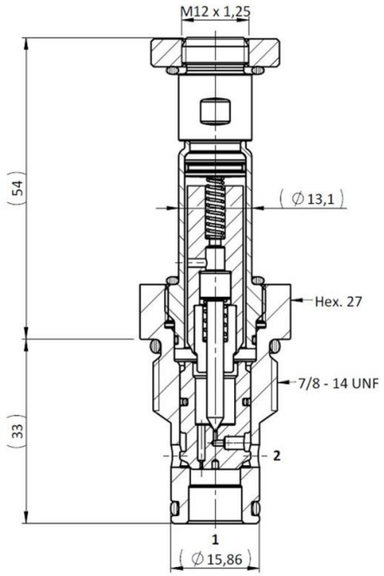
HYDRAULIC SYMBOL



DESCRIPTION

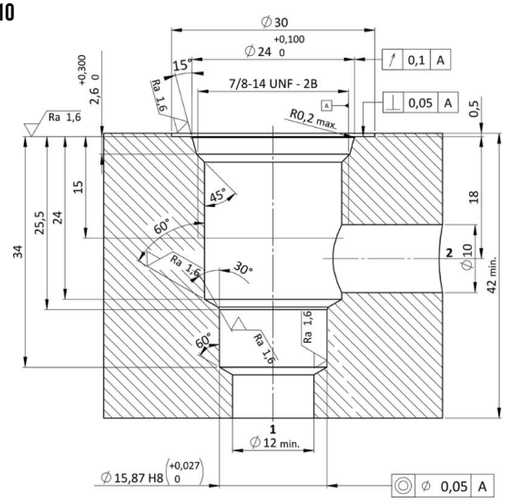
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVG0.S10 acts as check valve allowing free flow from 2 to 1, while blocking from 1 to 2. When the coil is energized the poppet lifts and opens the 1 to 2 flow path. In this operation mode, flow from 2 to 1 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	50 ms
SWITCH OFF TIME	70 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	20W (for more details see page 769 - 781)
WEIGHT	0,130 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	G	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
N	No filter

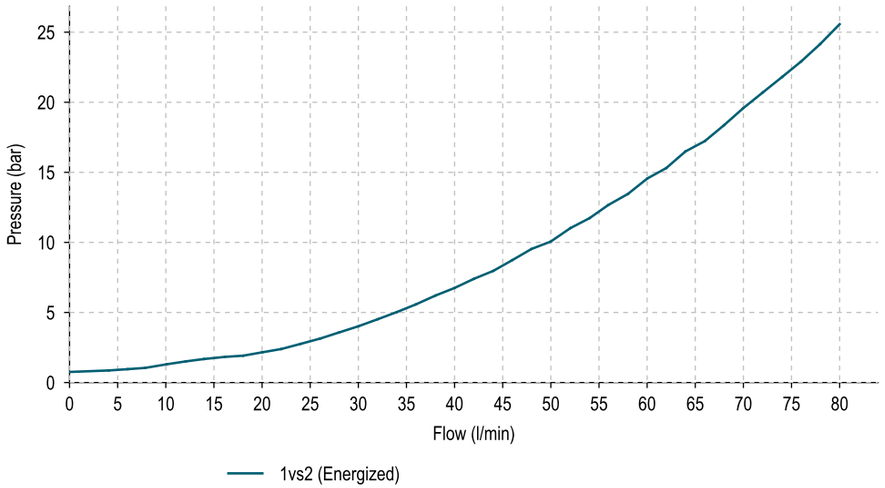
Specifications may change without notice.

Rev. 1

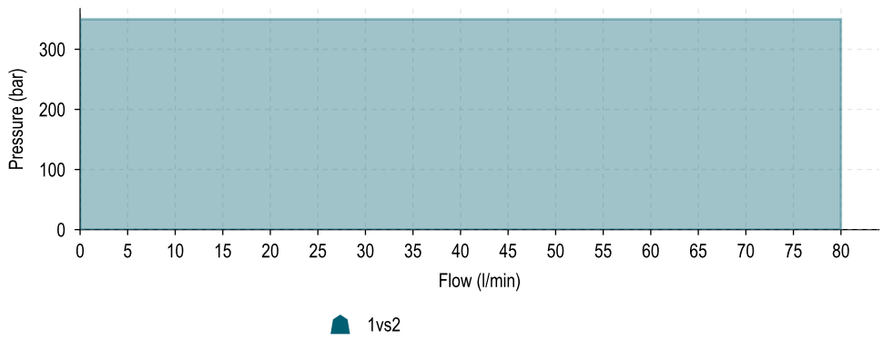
SVGO.S10 GRAPHS

The performance chart illustrates flow handling capacity one direction 1 to 2 (energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

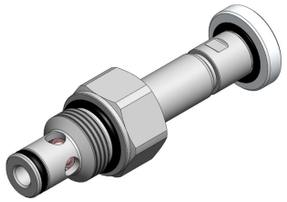


SVGB.S08 VALVE SERIES

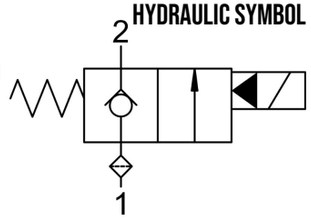
SAE Cartridge - 250 bar

NC Single Lock Pilot Operated

Poppet type



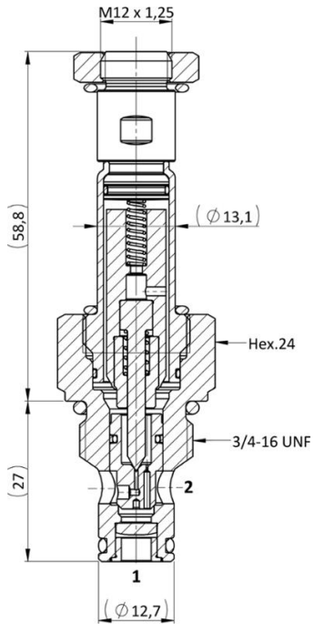
HYDRAULIC SYMBOL



DESCRIPTION

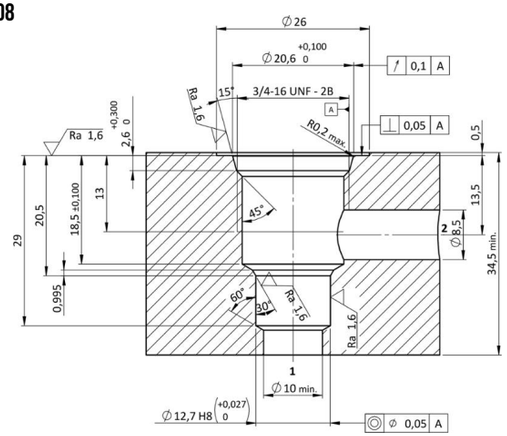
Solenoid operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve, with axial filter in port 1. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVGB. S08 acts as check valve allowing free flow from 2 to 1, while blocking from 1 to 2. When the coil is energized the poppet lifts and opens the 1 to 2 flow path. In this operation mode, flow from 2 to 1 is severely restricted. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. High pressure drop caused by filter in port 1.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 10 bar 0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	60 ms
SWITCH OFF TIME	120 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,117 kg

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

ORDERING CODE

S	V	G	B	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

FILTRATION

Model code	Type of filter
A	Axial filter (mesh size 250 µm)

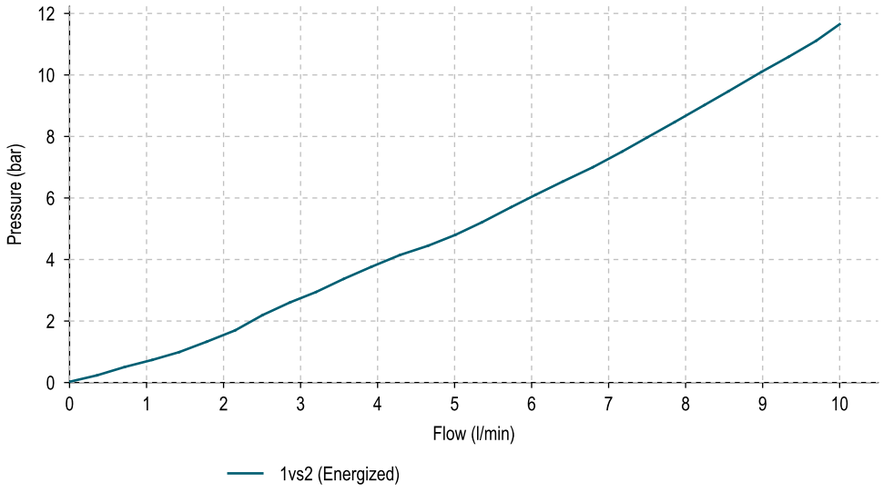
Specifications may change without notice.

Rev. 1

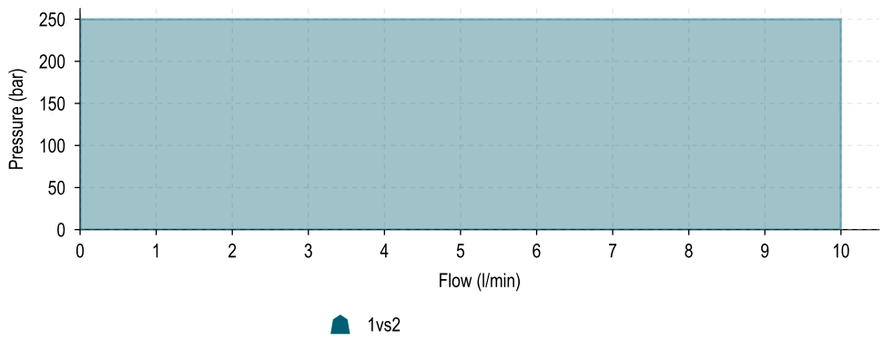
SVGB.S08 GRAPHS

The performance chart illustrates flow handling capacity one direction 1 to 2 (energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

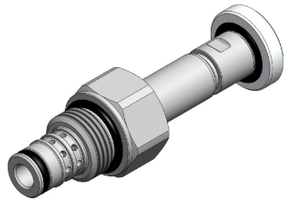


SVR0.S08 VALVE SERIES

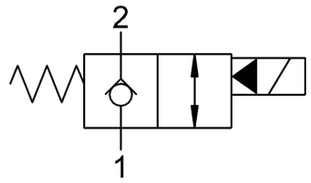
SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type



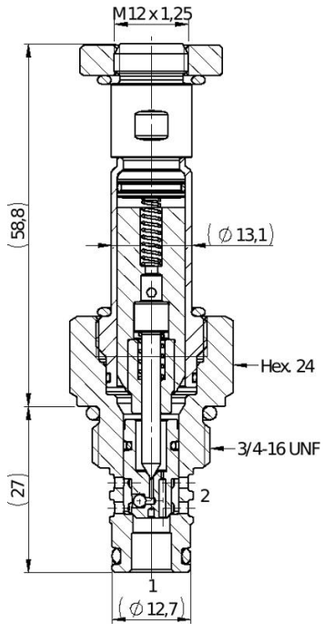
HYDRAULIC SYMBOL



DESCRIPTION

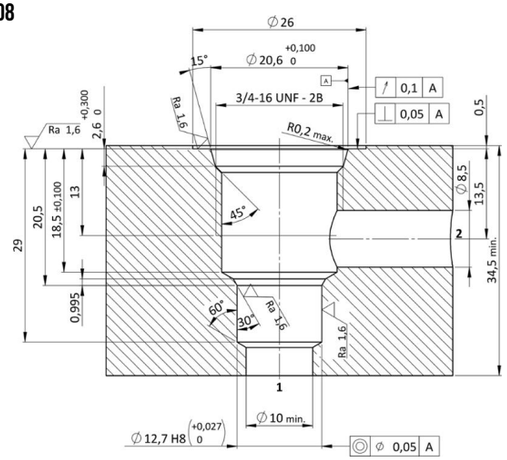
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVR0.S08 acts as check valve allowing free flow from 2 to 1, while blocking from 1 to 2. When the coil is energized the poppet lifts and opens both the 1 to 2 and the 2 to 1 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	R	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4 -16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

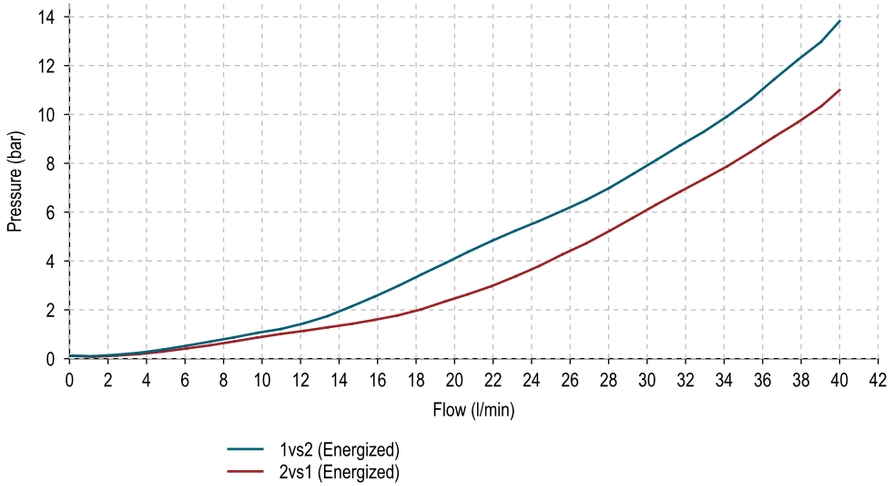
Specifications may change without notice.

Rev. 1

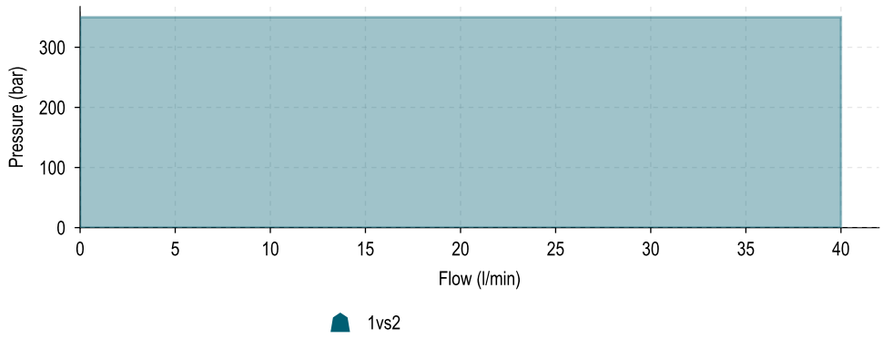
SVRO.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (2 to 1 de-energized, 1 to 2 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

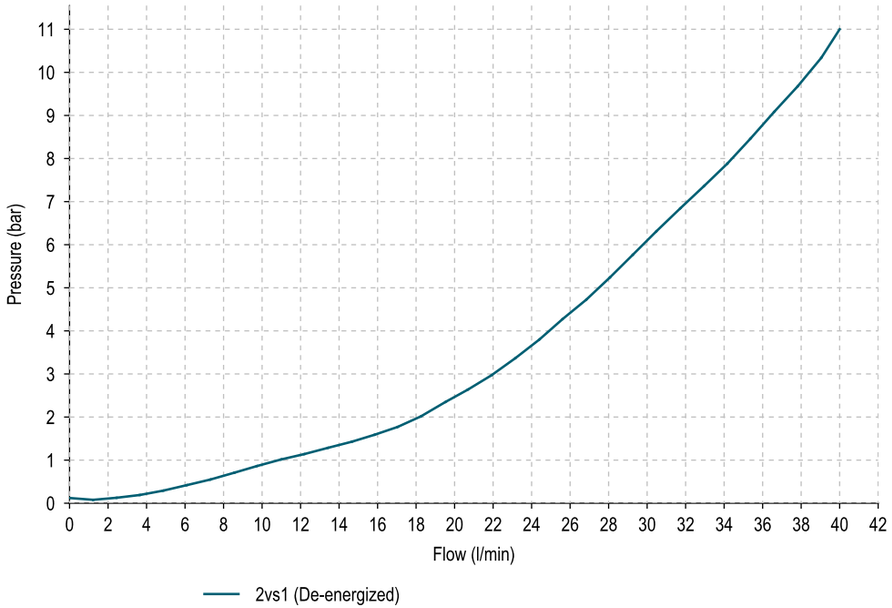
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



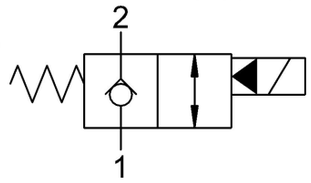
SVR0.S10 VALVE SERIES

SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Poppet type

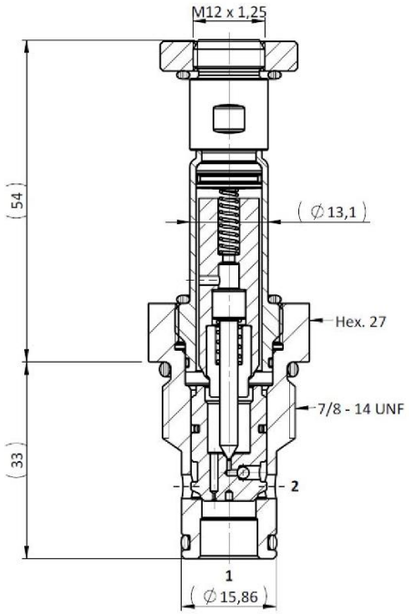
HYDRAULIC SYMBOL



DESCRIPTION

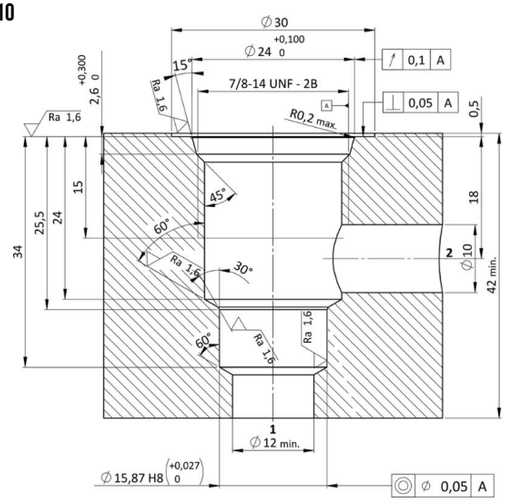
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVR0.S10 acts as check valve allowing free flow from 2 to 1, while blocking from 1 to 2. When the coil is energized the poppet lifts and opens both the 1 to 2 and the 2 to 1 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	50 ms
SWITCH OFF TIME	70 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	20W (for more details see page 769 - 781)
WEIGHT	0,130 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V R 0	·	S 1 0	·	0 *	·	N 0 *

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

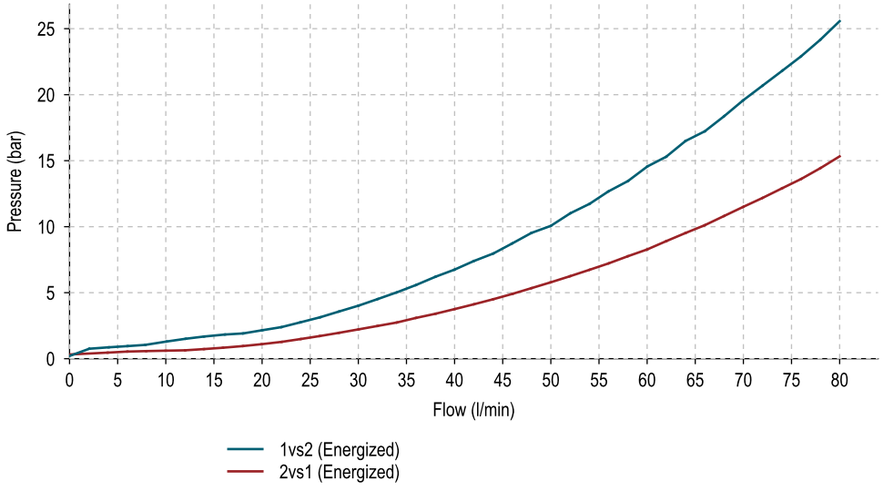
MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

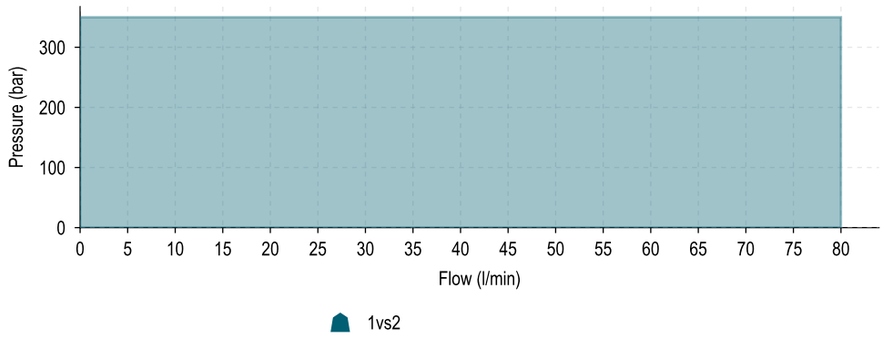
SVRO.S10 GRAPHS

The performance chart illustrates flow handling capacity in both directions (2 to 1de-energized, 1 to 2 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

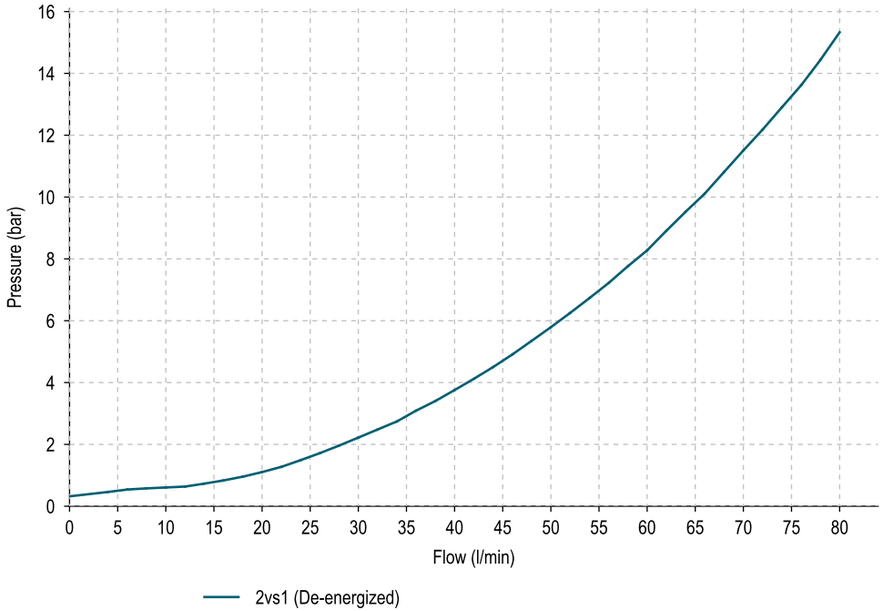
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



Rev. 1

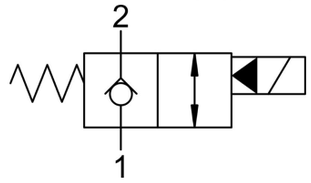
SVR4.S10 VALVE SERIES

SAE Cartridge - 350 bar

NC Single Lock Pilot Operated

Reduced Overall Dimension

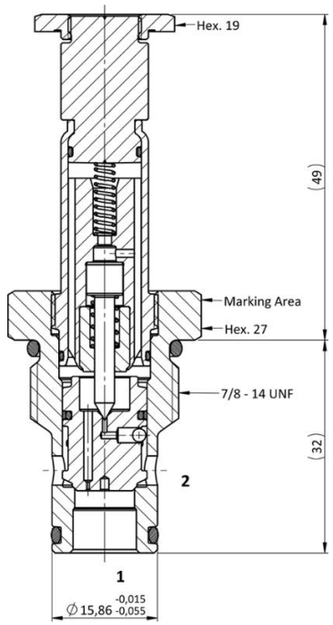
HYDRAULIC SYMBOL



DESCRIPTION

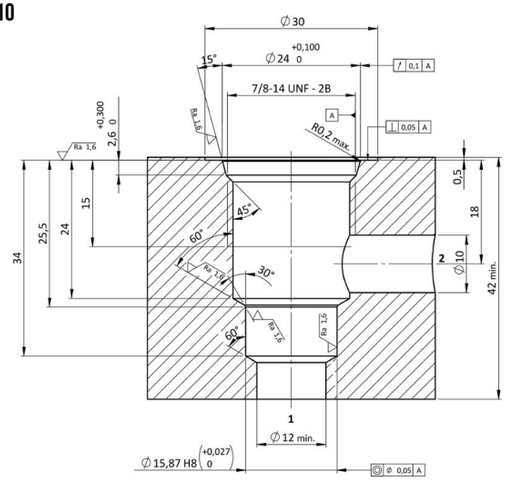
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVR4.S10 acts as check valve allowing free flow from 2 to 1, while blocking from 1 to 2. When the coil is energized the poppet lifts and opens both the 1 to 2 and the 2 to 1 flow paths. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 30 bar 0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	50 ms
SWITCH OFF TIME	80 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restriction
INSTALLATION TORQUE	45-50 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	SO VG 46 cSt
SEAL KIT CODE	SK.032 (standard sealing NBR-BUNA-N)
COIL	20,5W (for more details see page 769 - 781)
WEIGHT	0,129 kg

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

ORDERING CODE

S	V	R	4	·	S	1	0	·	0	0	·	*	0	0

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø 15,86 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request

FILTRATION

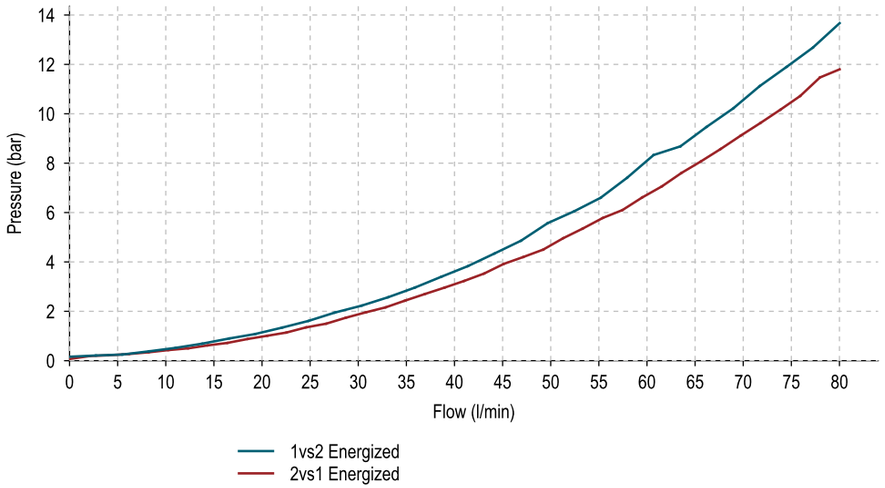
Model code	Type of filter
N	No filter

Specifications may change without notice.

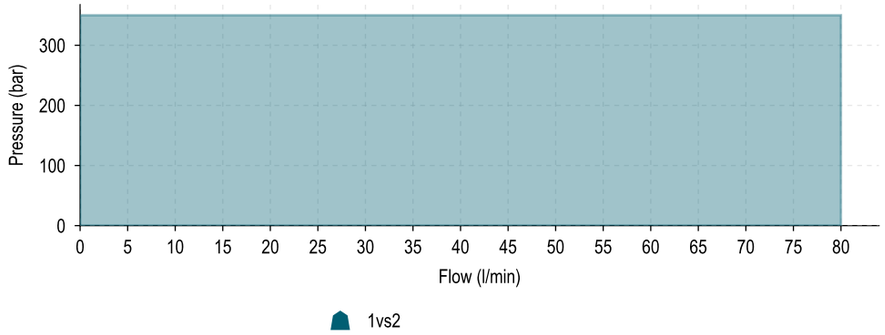
SVR4.S10 GRAPHS

The performance chart illustrates flow handling capacity in both directions (2 to 1 de-energized, 1 to 2 energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

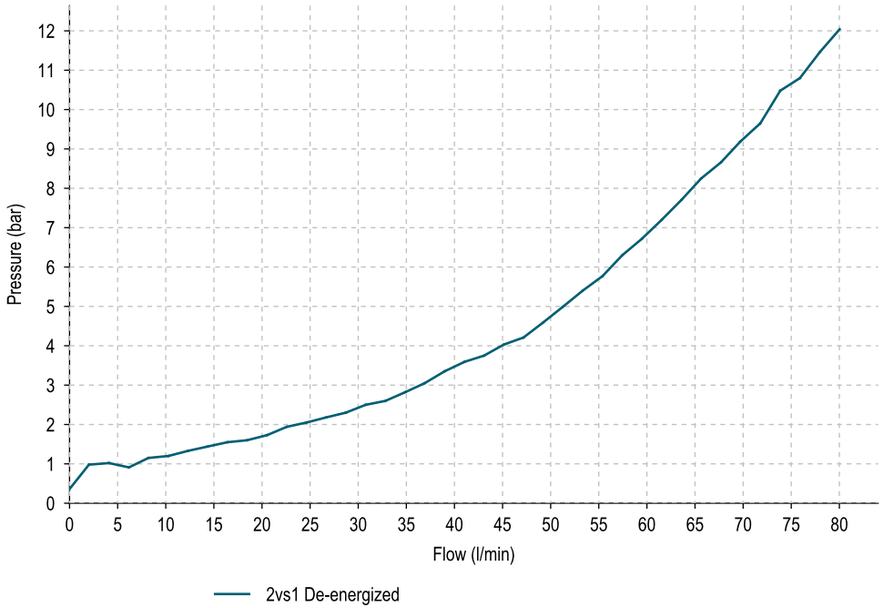
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED

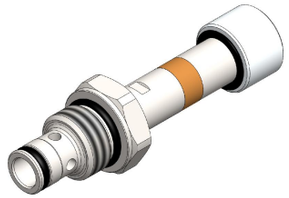


SVD0.S08 VALVE SERIES

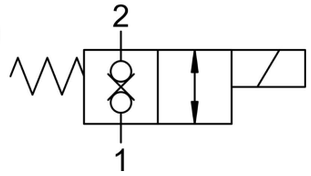
SAE Cartridge - 250 bar

NC Double Lock Direct Acting

Poppet type



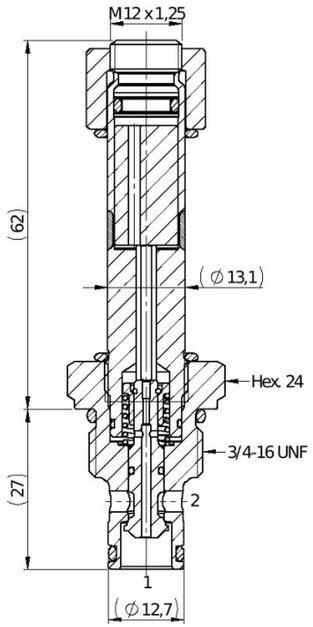
HYDRAULIC SYMBOL



DESCRIPTION

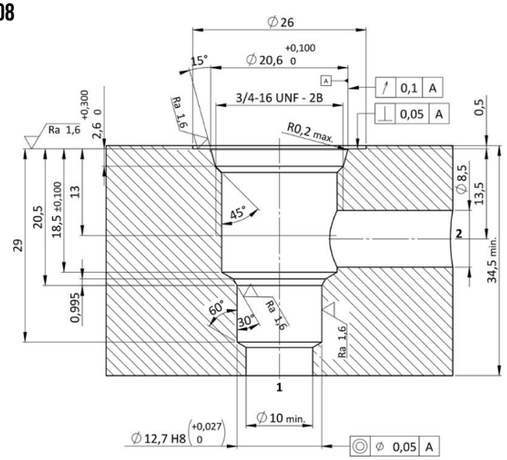
A solenoid valve operated, 2-way 2-positions, normally closed, direct acting poppet type, bi-directional blocking, screw-in cartridge valve. Special design for low leakage in load holding applications. When the coil is de-energized, the SVD0.S08 blocks flow in both directions. Once the coil is energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	15 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	20 ms
SWITCH OFF TIME	40 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,120 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	D	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M18	METRIC M18x1,5 with Ø12,9 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw
C	Special Screw

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

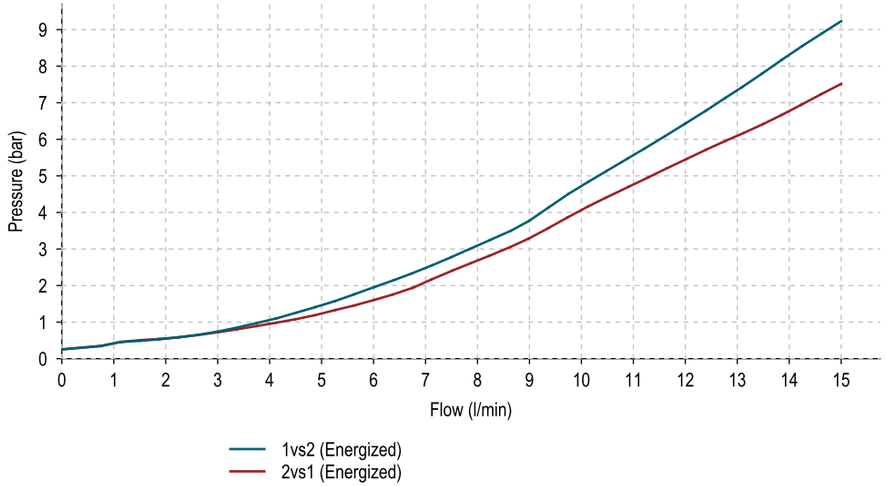
Customized filters can be done upon request.

Specifications may change without notice.

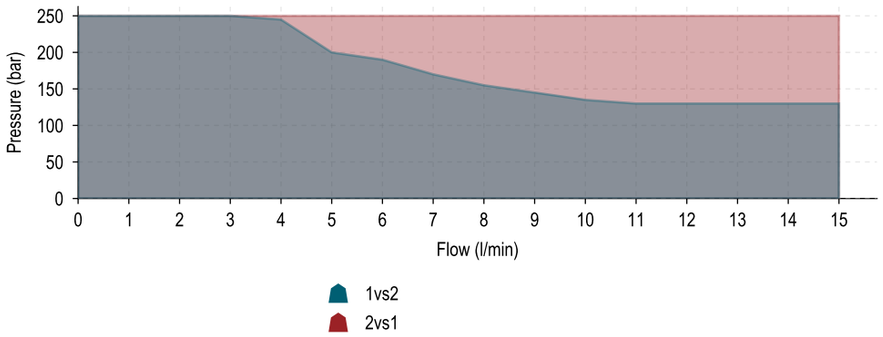
SVDO.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

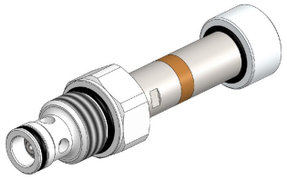


SVD0.S10 VALVE SERIES

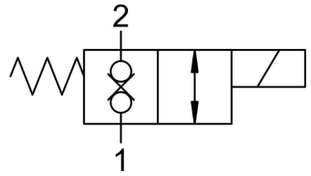
SAE Cartridge - 250 bar

NC Double Lock Direct Acting

Poppet type



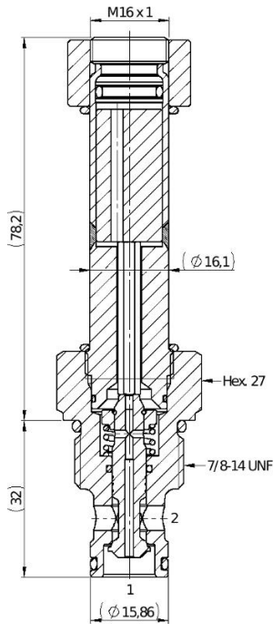
HYDRAULIC SYMBOL



DESCRIPTION

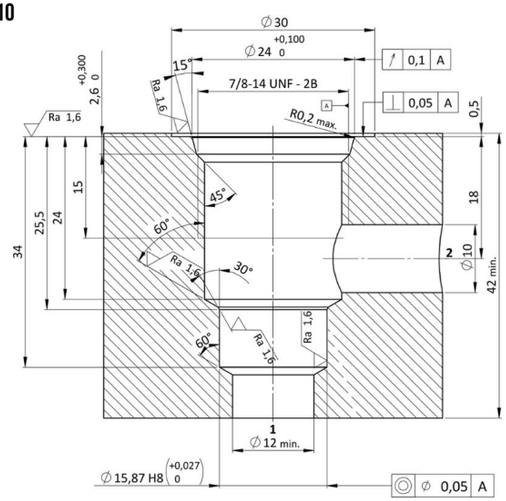
A solenoid valve operated, 2-way 2-positions, normally closed, direct acting poppet type, bi-directional blocking, screw-in cartridge valve. Special design for low leakage in load holding applications. When the coil is de-energized, the SVD0.S10 blocks flow in both directions. Once the coil is energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	35 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	20 ms
SWITCH OFF TIME	40 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	45-50 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,225 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	D	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

MANUAL OVERRIDE

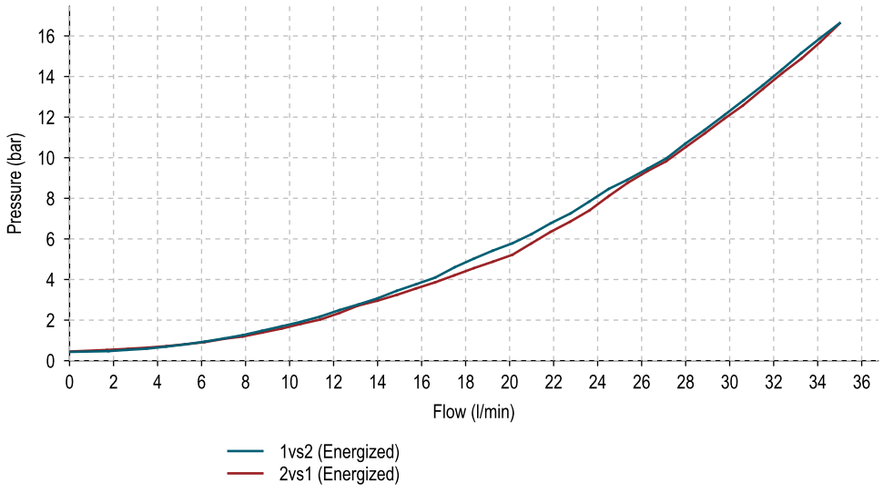
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

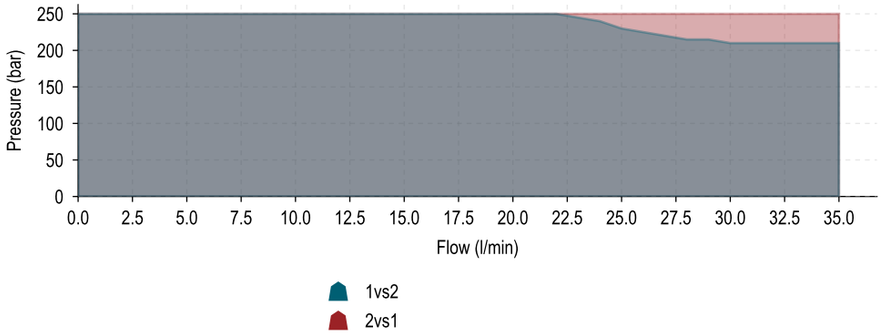
SVDO.S10 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

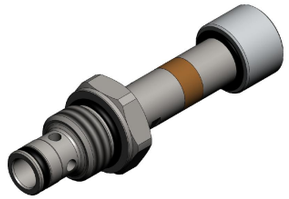


SVD5.S08 VALVE SERIES

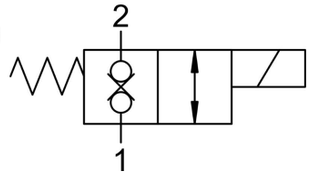
SAE Cartridge - 250 bar

NC Double Lock Direct Acting

Poppet type



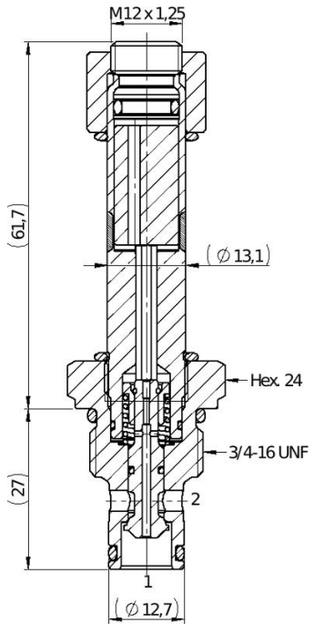
HYDRAULIC SYMBOL



DESCRIPTION

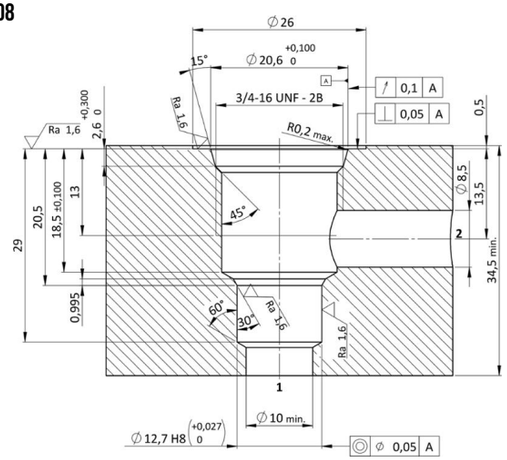
A solenoid valve operated, 2-way 2-positions, normally closed, direct acting poppet type, bi-directional blocking, screwin cartridge valve. Special design for low leakage in load holding applications. When the coil is de-energized, the SVD5.S08 blocks flow in both directions. Once the coil is energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	20 ms
SWITCH OFF TIME	40 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,120 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	D	5	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

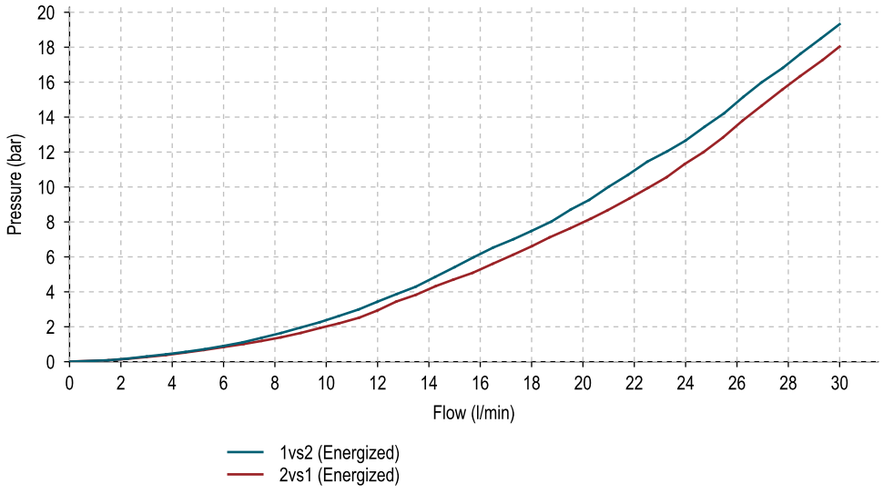
Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw
C	Special Screw

Specifications may change without notice.

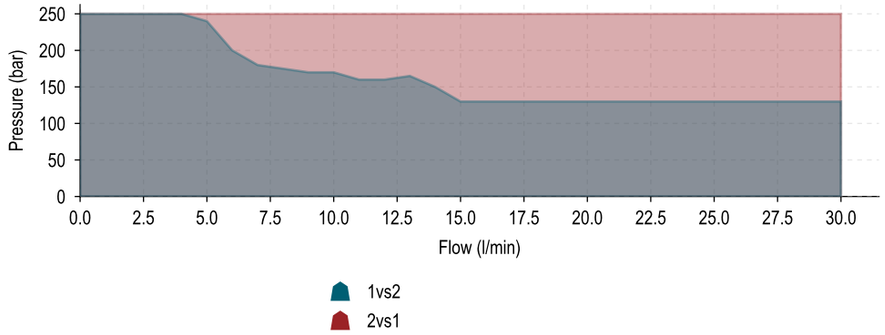
SVD5.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



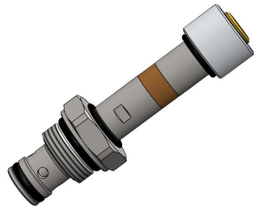
SVD7.M20 VALVE SERIES

METRIC Cartirdge - 250 bar

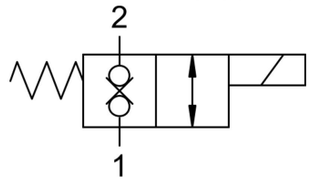
NC Double Lock Direct Acting

Poppet type

Special cavity



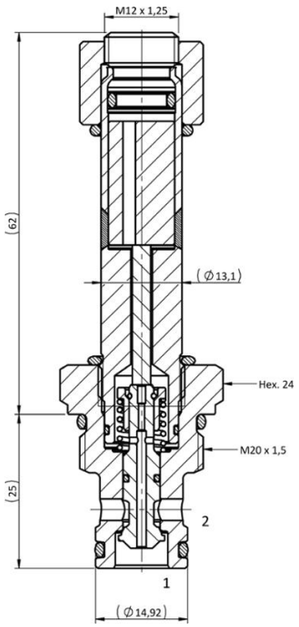
HYDRAULIC SYMBOL



DESCRIPTION

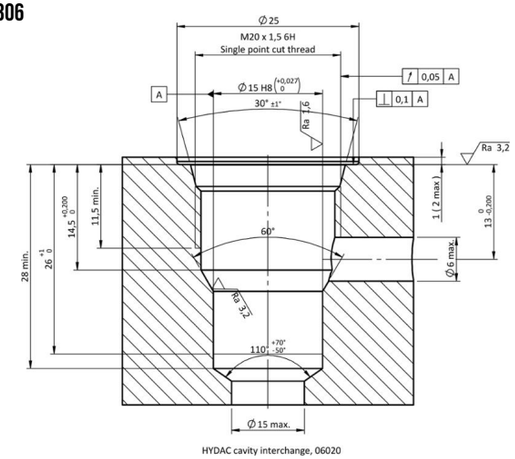
A solenoid valve operated, 2-way 2-positions, normally closed, direct acting poppet type, bi-directional blocking, screwin cartridge valve. Special design for low leakage in load holding applications. When the coil is de-energized, the SVD7.M20 blocks flow in both directions. Once the coil is energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH306



HYDAC cavity interchange, 06020

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	15 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 30 bar 0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn-Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	60 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.140 and SK.027 (Coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,122 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected

S	V	D	7	·	M	2	0	·	0	*	·	*	0	*

VALVE BASIC CODE

7= Standard. S= Inductive position switch upon request

SIZE

MARKING

0 = Standard factory marking. Customized marking can be done upon request

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

MANUAL OVERRIDE

Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw
C	Special Screw

NOTE

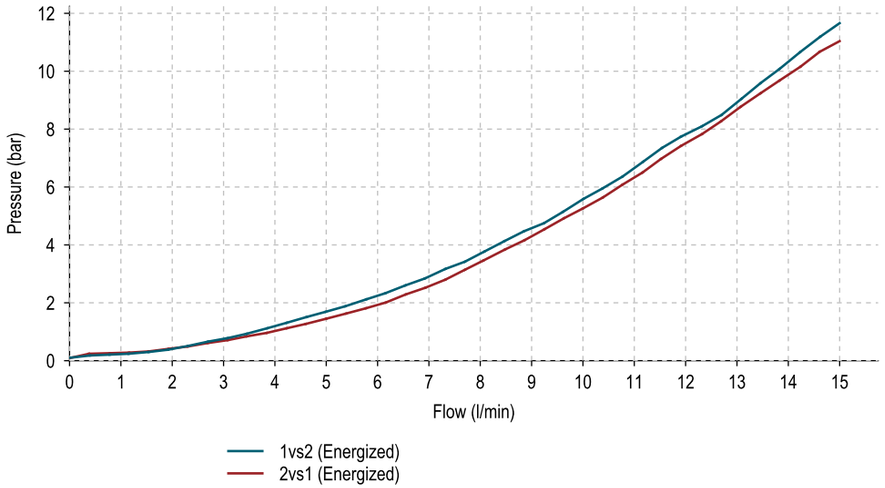
Customized filters can be done upon request

Specifications may change without notice.

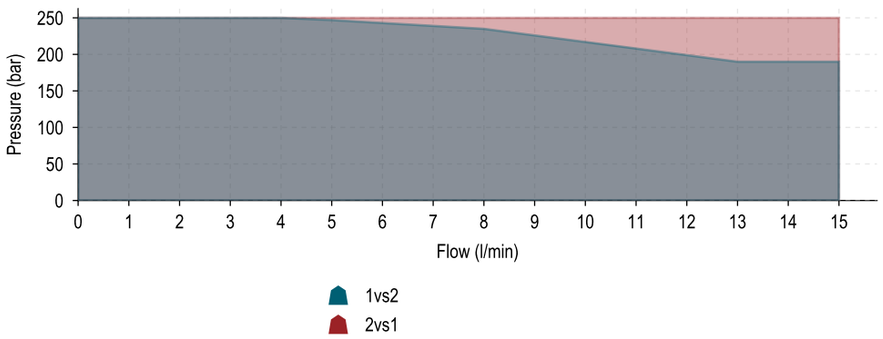
SVD7.M20 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

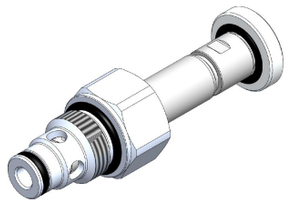


SVZ0.S08 VALVE SERIES

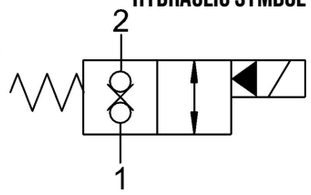
SAE Cartridge - 350 bar

NC Double Lock Pilot Operated

Poppet type



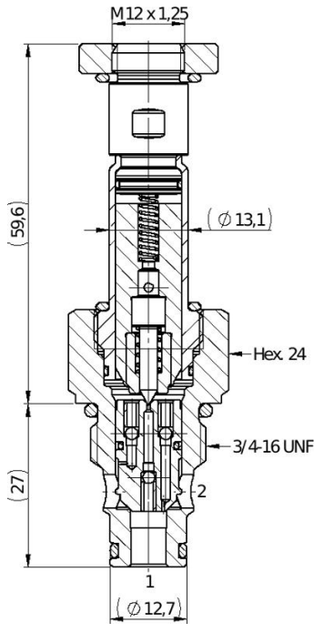
HYDRAULIC SYMBOL



DESCRIPTION

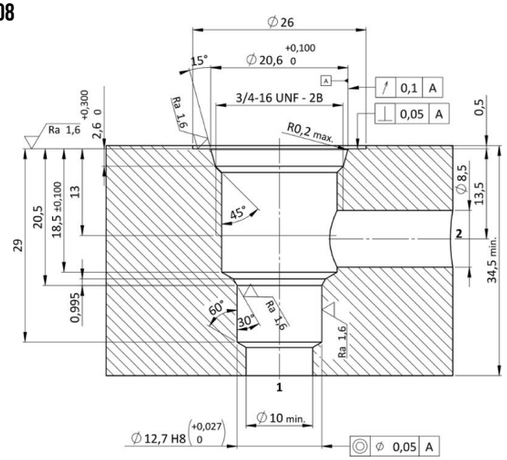
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, bi-directional blocking, screw-in cartridge valve. Special design for low leakage in load holding applications. Tipically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVZ0.S08 blocks flow in both directions. Once the coil is energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	60 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,120 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	Z	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
H	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

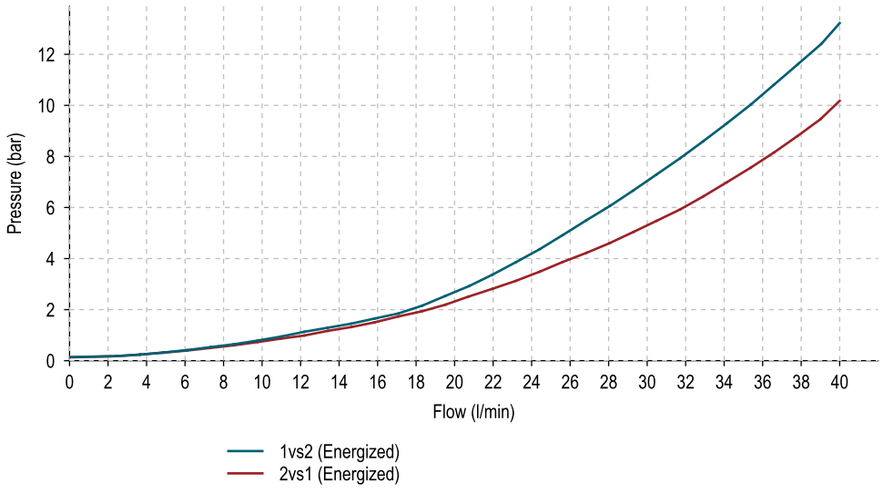
Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold (max. operating pressure: 300 bar)
9	Pull and Hold with screw 10-32 UNF (max. operating pressure: 300 bar)
A	Pull and Hold with screw M8 (max. operating pressure: 300 bar)

Specifications may change without notice.

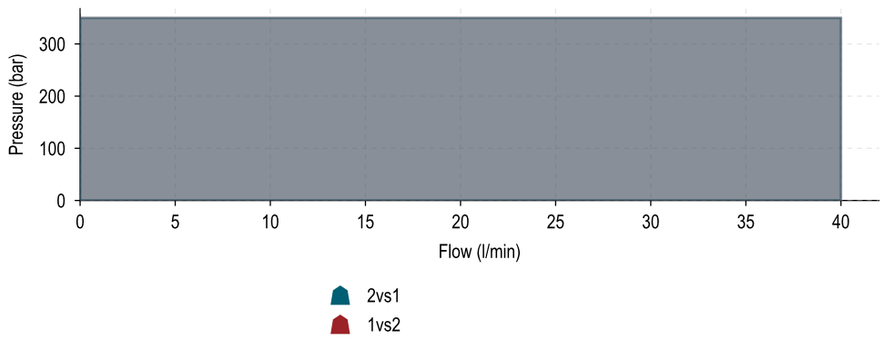
SVZO.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

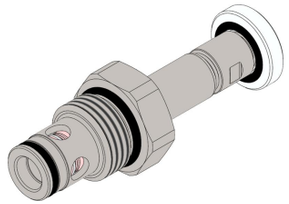


SVZ0.S10 VALVE SERIES

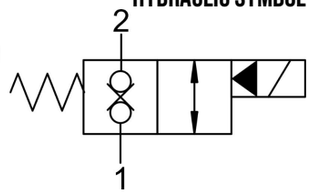
SAE Cartridge - 350 bar

NC Double Lock Pilot Operated

Poppet type



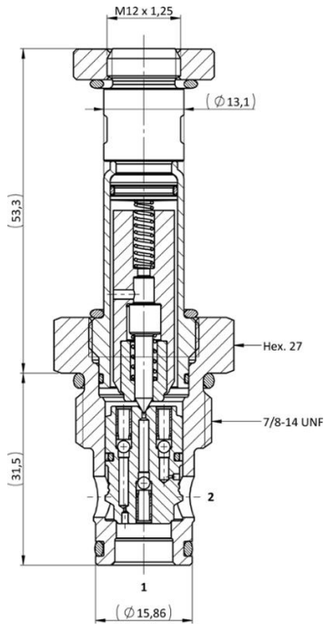
HYDRAULIC SYMBOL



DESCRIPTION

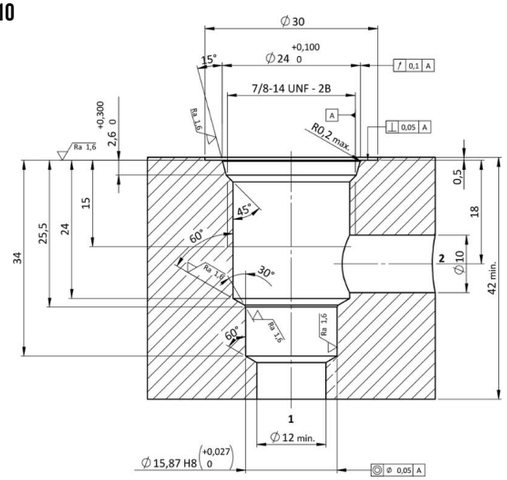
A solenoid valve operated, 2-way 2-positions, normally closed, piloted poppet type, bi-directional blocking, screw-in cartridge valve. Special design for low leakage in load holding applications. Tipically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVZ0.S10 blocks flow in both directions. Once the coil is energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	40 ms
SWITCH OFF TIME	70 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,141 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected

S	V	Z	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

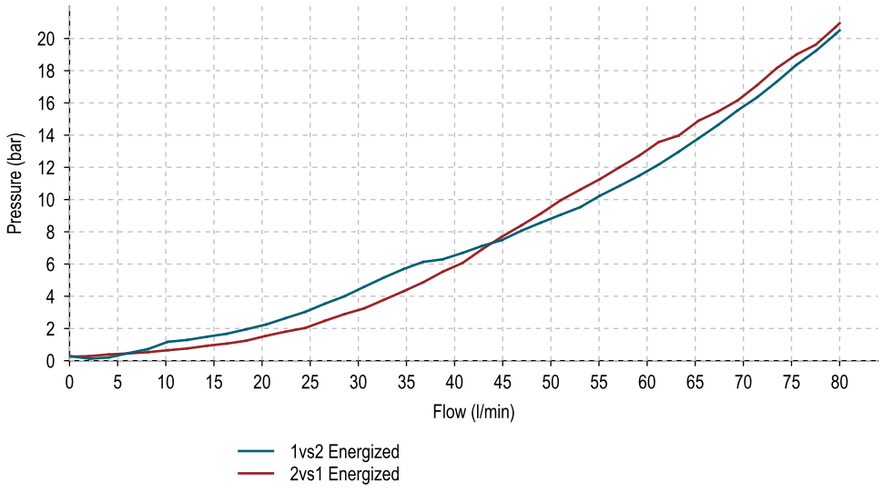
Model code	Type of override
0	No override
1	Screw
2	Push and Twist
6	Pull and Hold
9	Pull and Hold with screw 10-32 UNF
A	Pull and Hold with screw M8

Specifications may change without notice.

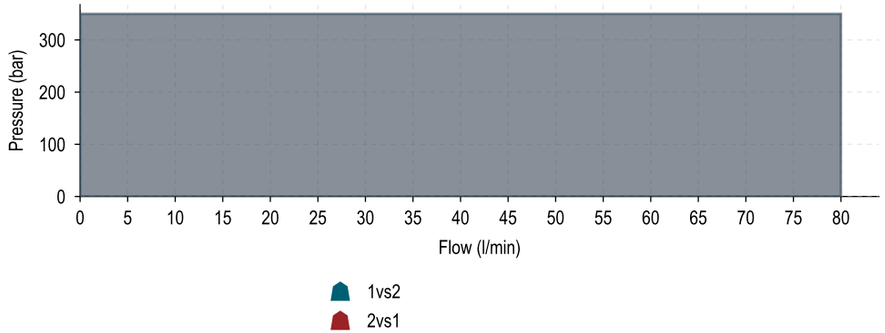
SVZO.S10 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt

ENERGIZED



PERFORMANCE LIMITS



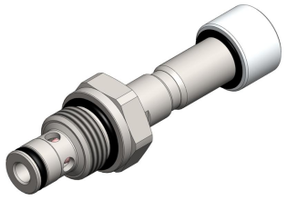
SV20.S08 VALVE SERIES

SAE Cartridge - 350 bar

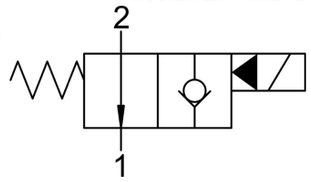
NO Single Lock Pilot Operated

Poppet type

New release: New version of 2/2 NO solenoid valve. It will replace the old version SVJ0.S08 with better performances and reliability.



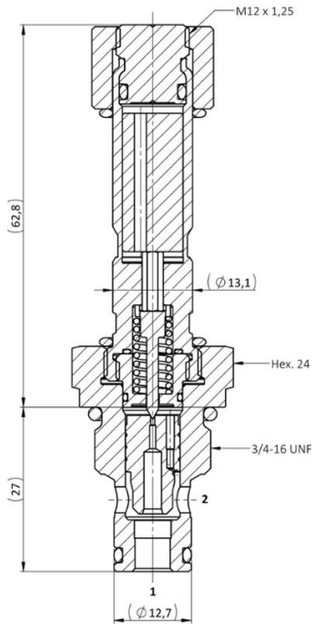
HYDRAULIC SYMBOL



DESCRIPTION

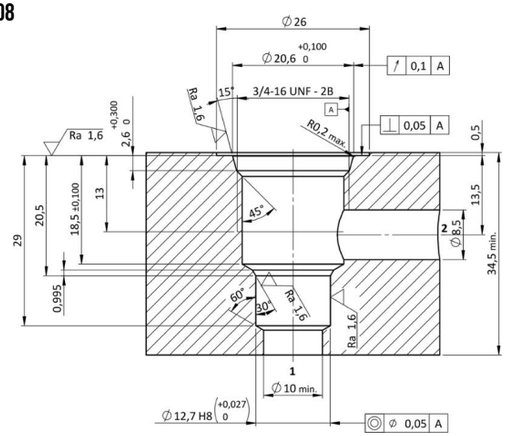
Solenoid operated, 2-way 2-positions, normally open, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SV20.S08 allows flow from 2 to 1, while flow from 1 to 2 is severely restricted. When the coil is energized the valve closes, blocking flow from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 30 bar 0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	40 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,124 kg

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

ORDERING CODE

S	V	2	0	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

0=Standard. S= Inductive position switch upon customer request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size
M20	METRIC M20x1,5 with Ø15 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request

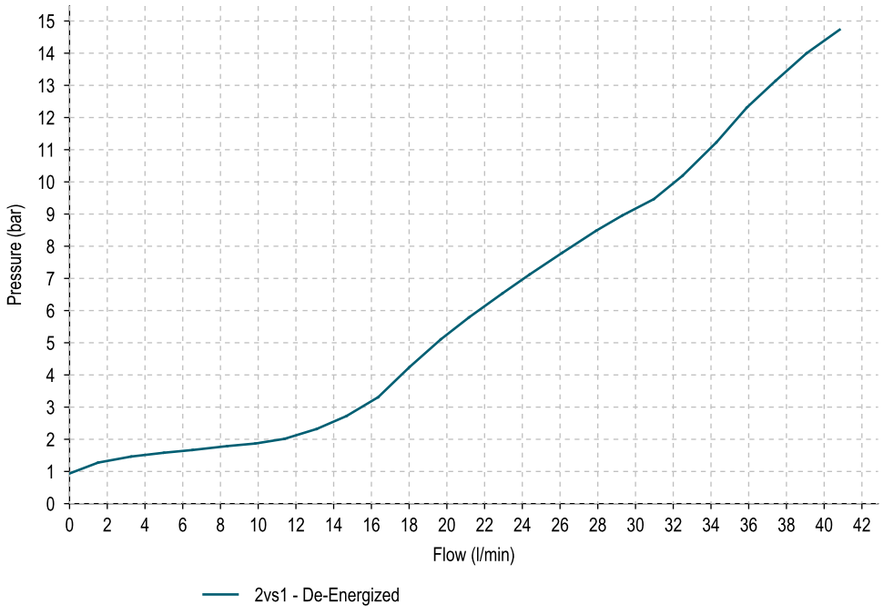
Specifications may change without notice.

Rev. 1

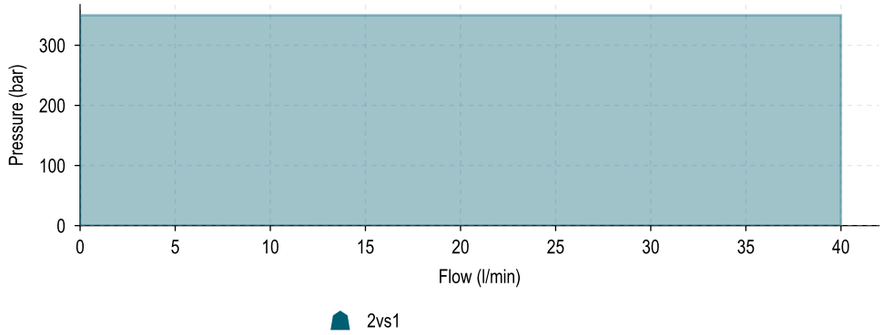
SV20.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (de-energized).
p/Q curve is recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

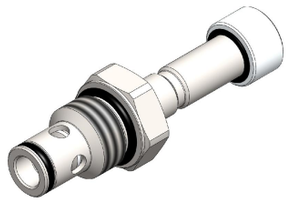


SVJ0.S10 VALVE SERIES

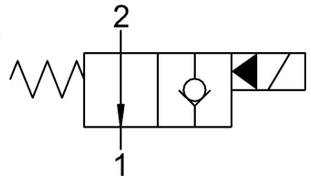
SAE Cartridge - 350 bar

NO Single Lock Pilot Operated

Poppet type



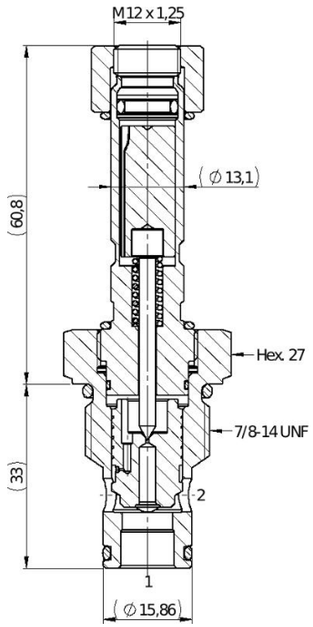
HYDRAULIC SYMBOL



DESCRIPTION

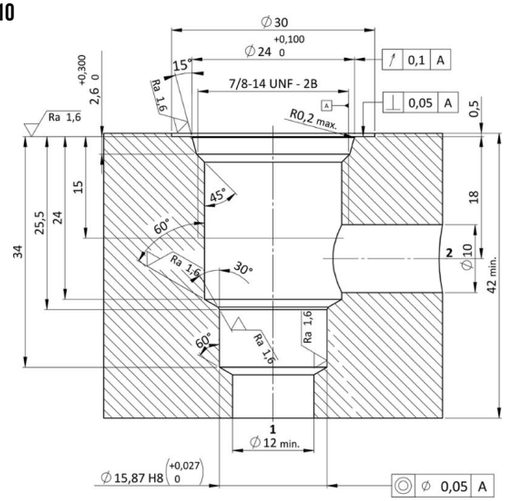
A solenoid valve operated, 2-way 2-positions, normally open, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVJ0.S10 allows flow from 2 to 1, while flow from 1 to 2 is severely restricted. When the coil is energized the valve closes, blocking flow from 2 to 1. In this mode, flow from 1 to 2 is allowed once the pressure overcomes the force of the solenoid. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	100 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,164 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	J	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

MANUAL OVERRIDE

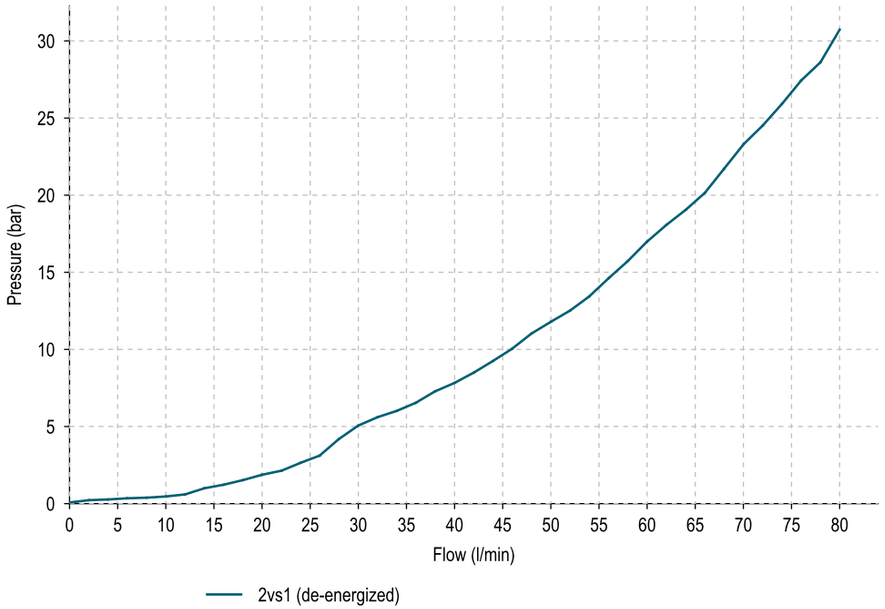
Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

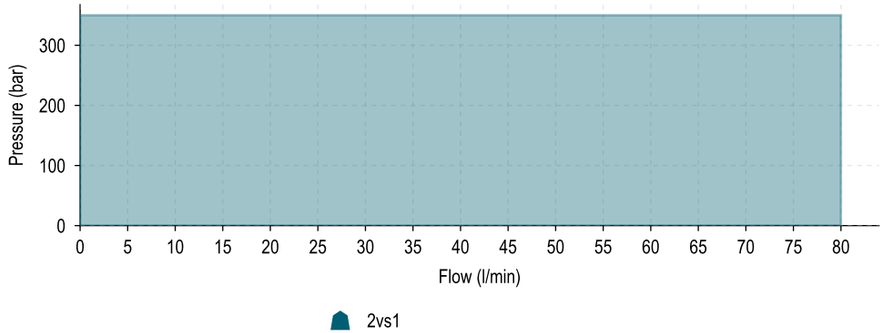
SVJO.S10 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS



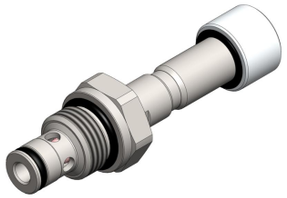
SV10.S08 VALVE SERIES

SAE Cartridge - 350 bar

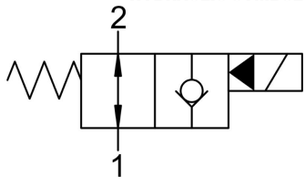
NO Single Lock Pilot Operated

Poppet type

New release: New version of 2/2 NO solenoid valve. it will replace the old version SVK0.S08 with better performances and reliability.



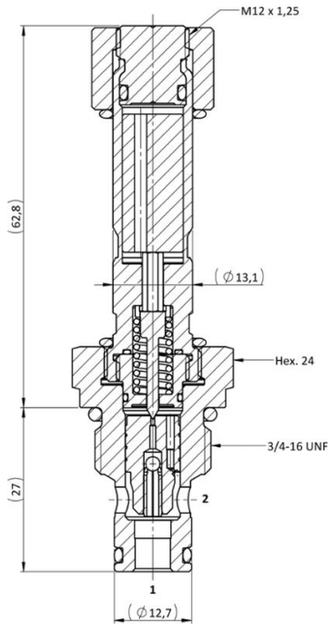
HYDRAULIC SYMBOL



DESCRIPTION

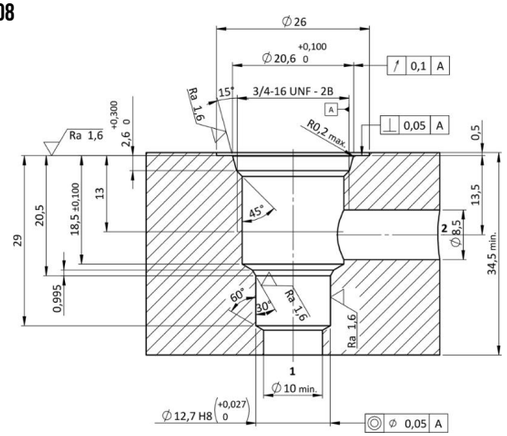
Solenoid operated, 2-way 2-positions, normally open, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SV10.S08 allows flow bidirectionally from 2 to 1, and from 1 to 2. When the coil is energized the valve closes, blocking flow from 2 to 1. In this mode, flow from 1 to 2 is allowed once the pressure overcomes the force of the solenoid. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 30 bar 0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	30 ms
SWITCH OFF TIME	40 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,124 kg

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

ORDERING CODE

S	V	1	0	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request

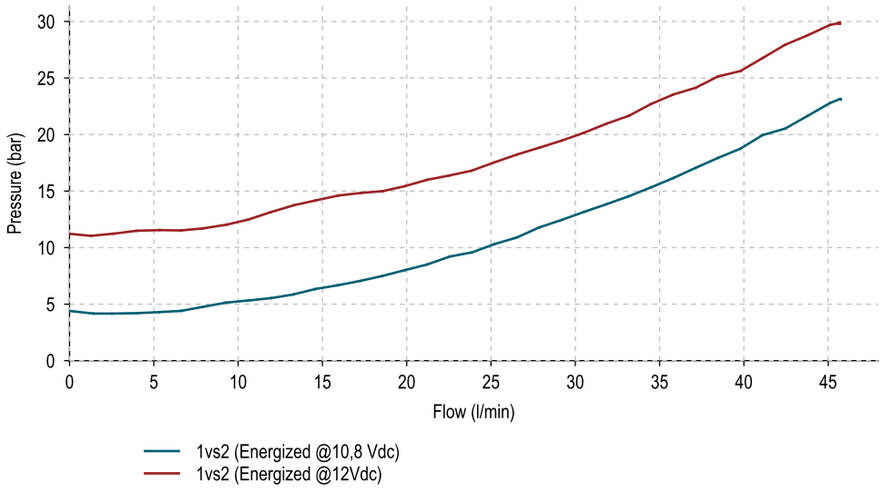
Specifications may change without notice.

Rev. 1

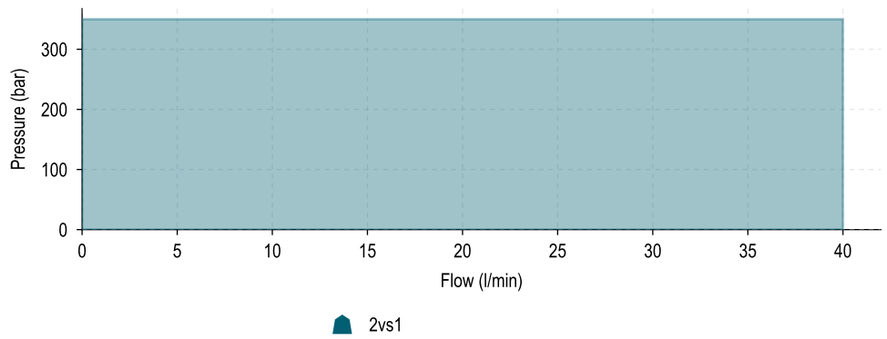
SV10.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions 1 to 2 (de-energized/energized) and 2 to 1 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

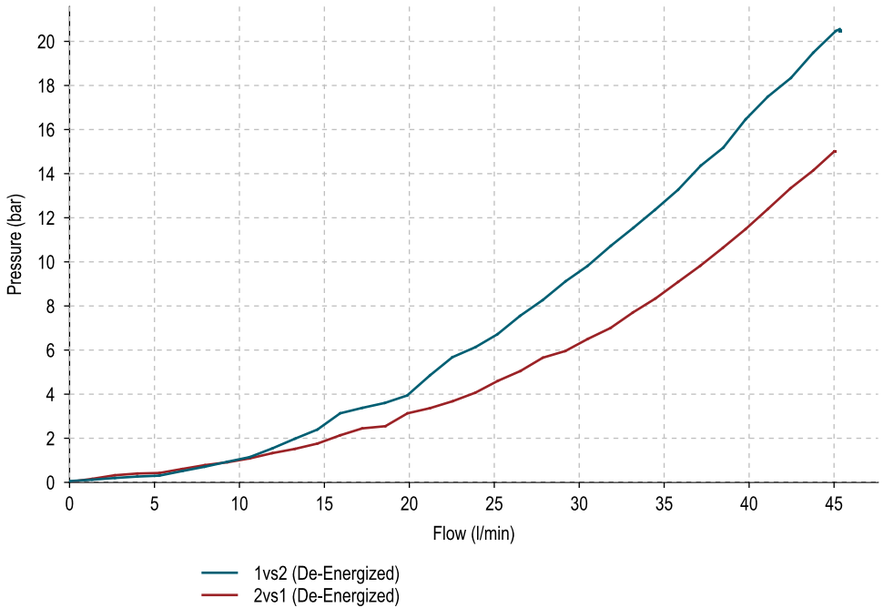
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



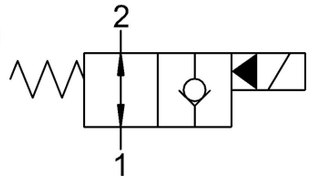
SVK0.S10 VALVE SERIES

SAE Cartridge - 350 bar

NO Single Lock Pilot Operated

Poppet type

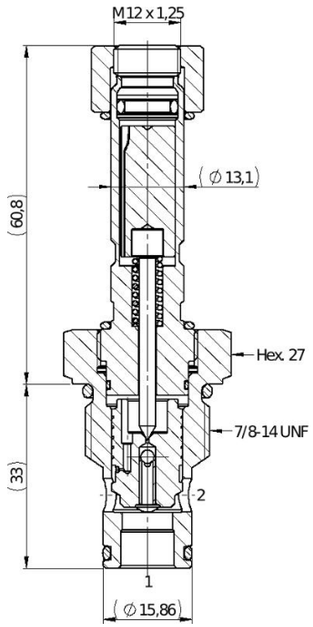
HYDRAULIC SYMBOL



DESCRIPTION

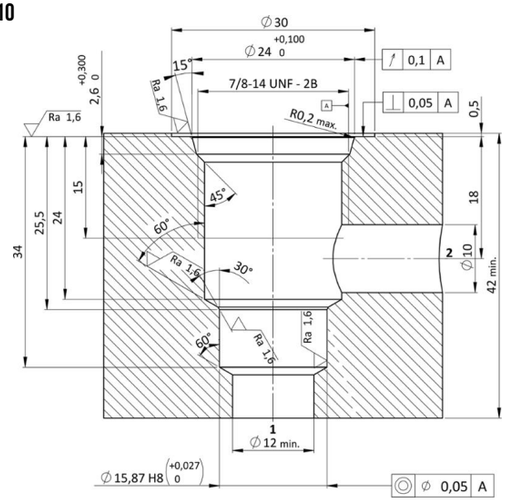
A solenoid valve operated, 2-way 2-positions, normally open, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVK0.S10 allows flow bidirectionally from 2 to 1, and from 1 to 2. When the coil is energized the valve closes, blocking flow from 2 to 1. In this mode, flow from 1 to 2 is allowed once the pressure overcomes the force of the solenoid. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	100 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,164 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	K	0	·	S	1	0	·	0	*	·	N	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

MANUAL OVERRIDE

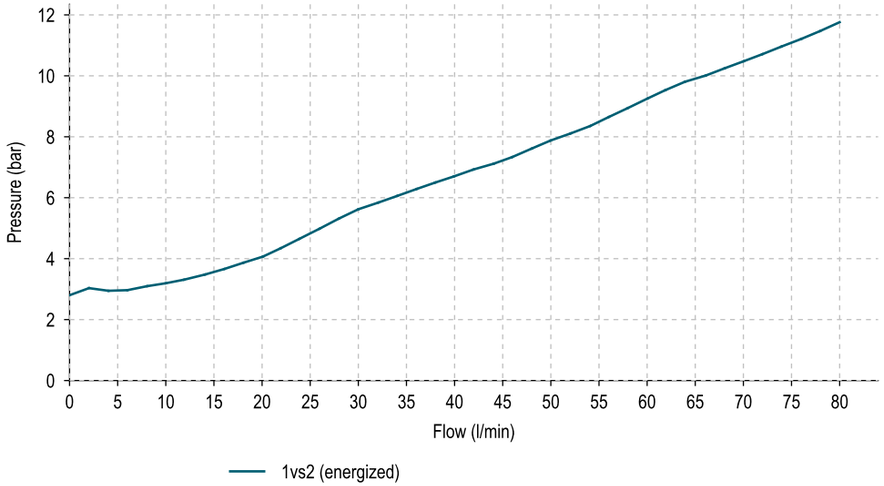
Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

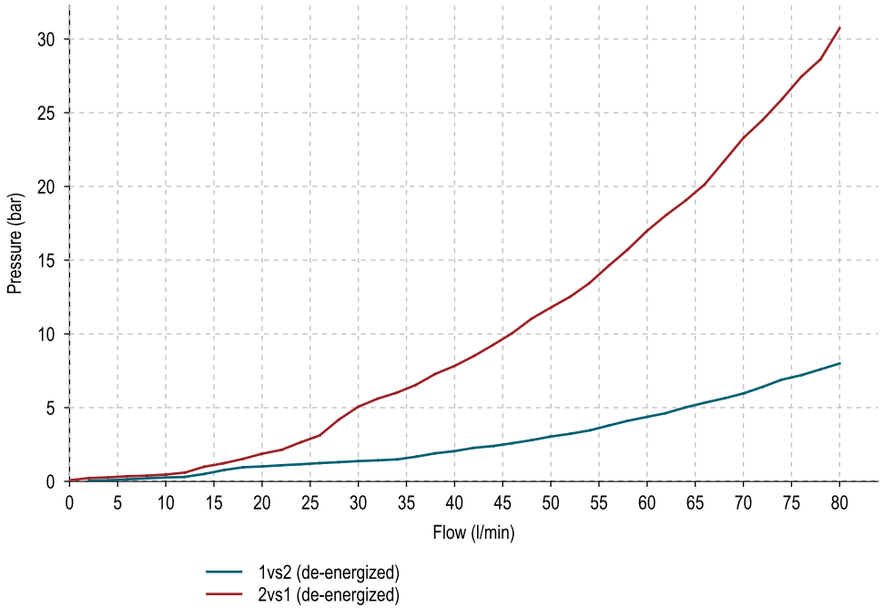
SVKO.S10 GRAPHS

The performance chart illustrates flow handling capacity in both directions 1 to 2 and 2 to 1 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

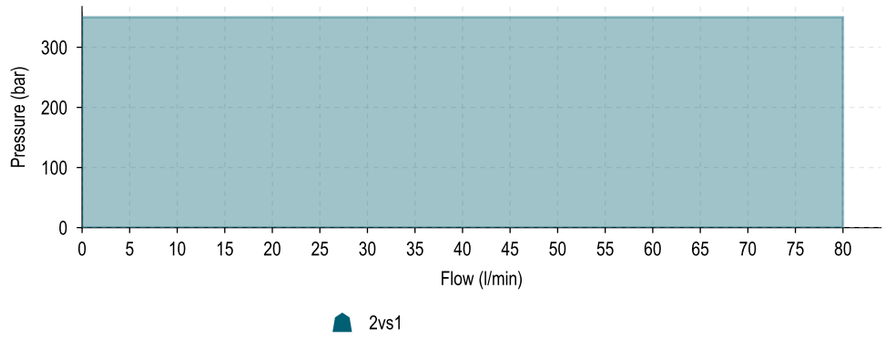
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS

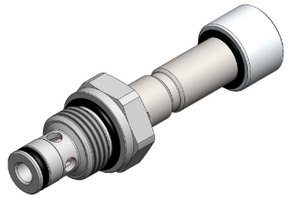


SVV0.S08 VALVE SERIES

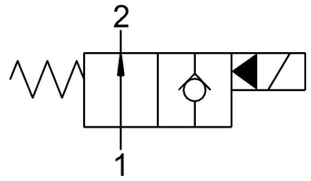
SAE Cartridge - 350 bar

NO Single Lock Pilot Operated

Poppet type



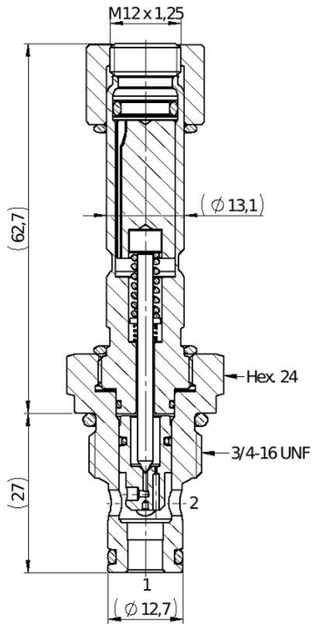
HYDRAULIC SYMBOL



DESCRIPTION

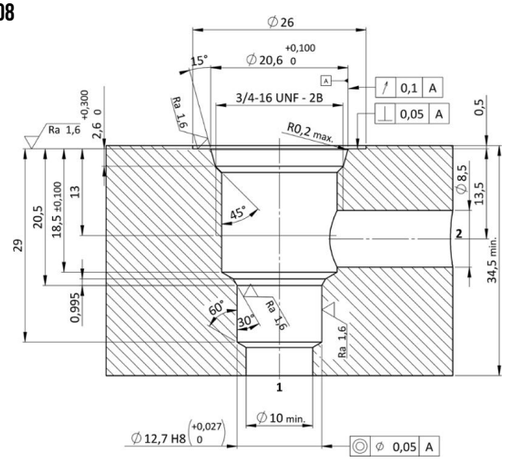
A solenoid valve operated, 2-way 2-positions, normally open, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVV0.S08 allows flow from 1 to 2, while flow from 2 to 1 is severely restricted. When the coil is energized the valve closes, blocking flow from 1 to 2. In this mode, flow from 2 to 1 is allowed once the pressure overcomes the force of the solenoid. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	100 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,125 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	V	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

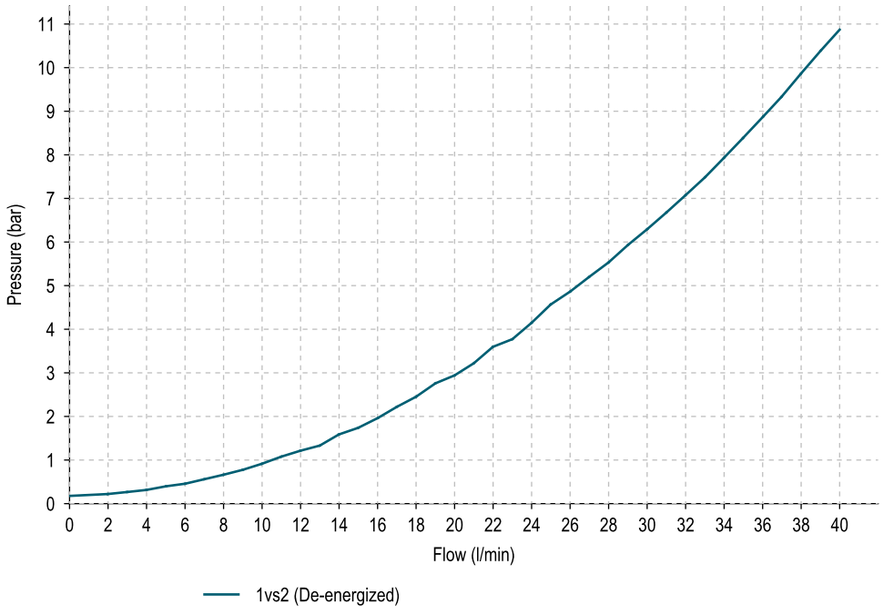
Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

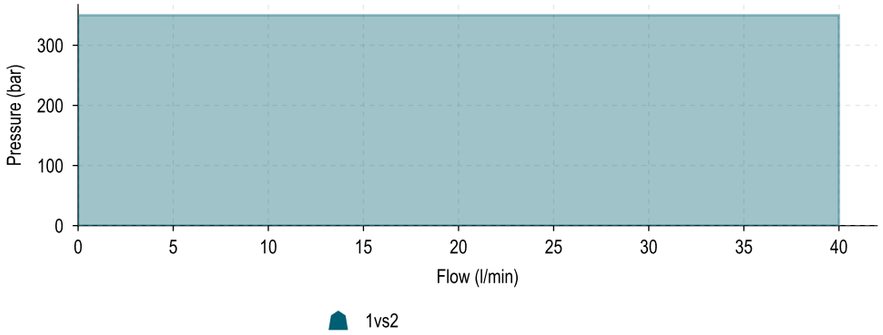
SVVO.S08 GRAPHS

The performance chart illustrates flow handling capacity 1 to 2 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

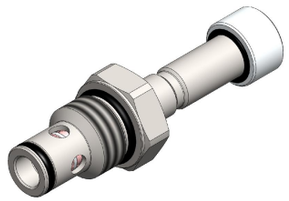


SVV0.S10 VALVE SERIES

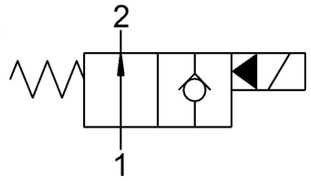
SAE Cartridge - 350 bar

NO Single Lock Pilot Operated

Poppet type



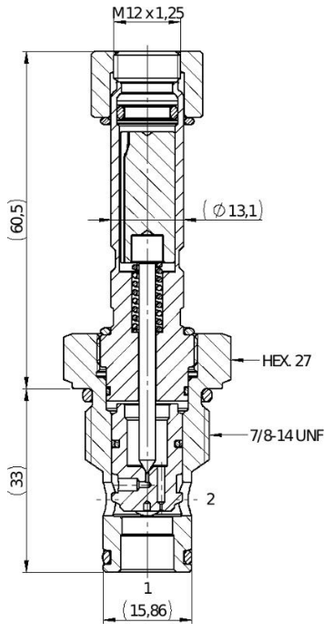
HYDRAULIC SYMBOL



DESCRIPTION

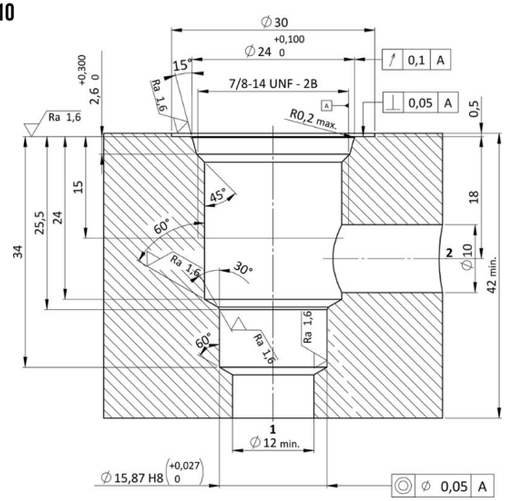
A solenoid valve operated, 2-way 2-positions, normally open, piloted poppet type, screw-in cartridge valve. Typically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the SVV0.S10 allows flow from 1 to 2, while flow from 2 to 1 is severely restricted. When the coil is energized the valve closes, blocking flow from 1 to 2. In this mode, flow from 2 to 1 is allowed once the pressure overcomes the force of the solenoid. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	80 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 30 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	70 ms
SWITCH OFF TIME	60 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	65-75 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,154 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	V	0	·	S	1	0	·	0	*	·	*	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
N	No filter

MANUAL OVERRIDE

Model code	Type of override
0	No override
2	Push and Twist
3	Push Pin
4	Push Knob
8	Screw

NOTE

Customized filters can be done upon request

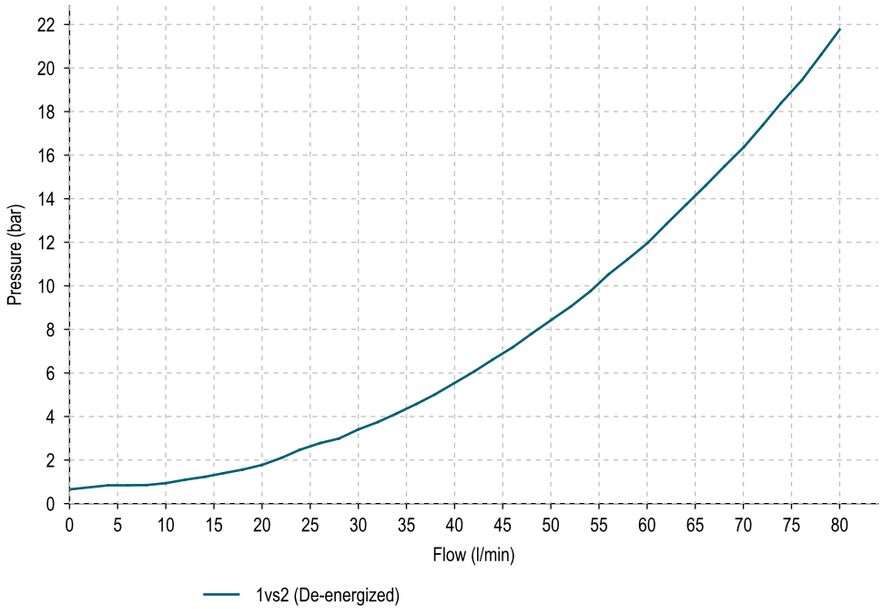
Specifications may change without notice.

Rev. 2

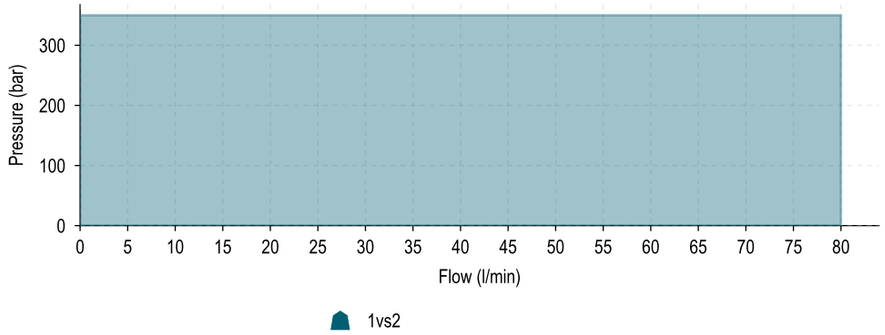
SVVO.S10 GRAPHS

The performance chart illustrates flow handling capacity 1 to 2 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

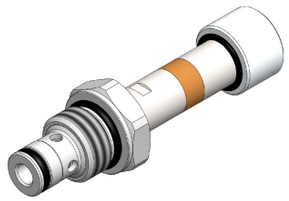


SVE0.S08 VALVE SERIES

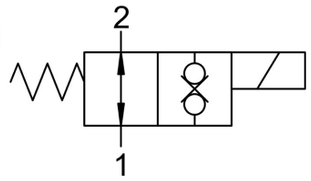
SAE Cartridge - 250 bar

NO Double Lock Direct Acting

Poppet type



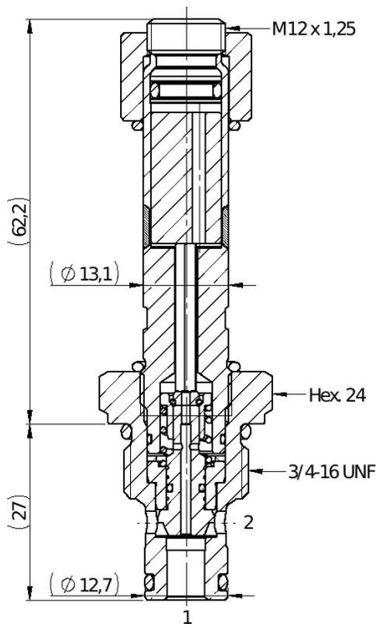
HYDRAULIC SYMBOL



DESCRIPTION

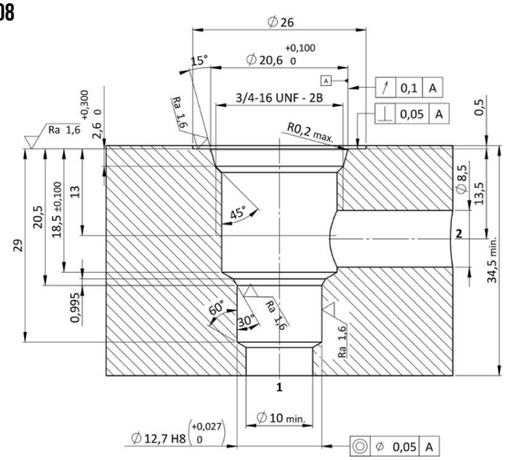
A solenoid valve operated, 2-way 2-positions, normally open, direct acting poppet type, bi-directional blocking, screw-in cartridge valve. Special design for low leakage in load holding applications. When the coil is de-energized, the SVE0.S08 allows flow in both directions. Once the coil is energized, the valve closes blocking flow from 1 to 2 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	15 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	35 ms
SWITCH OFF TIME	80 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,125 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	E	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size
S09	3/4-16 UNF with Ø15,86 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

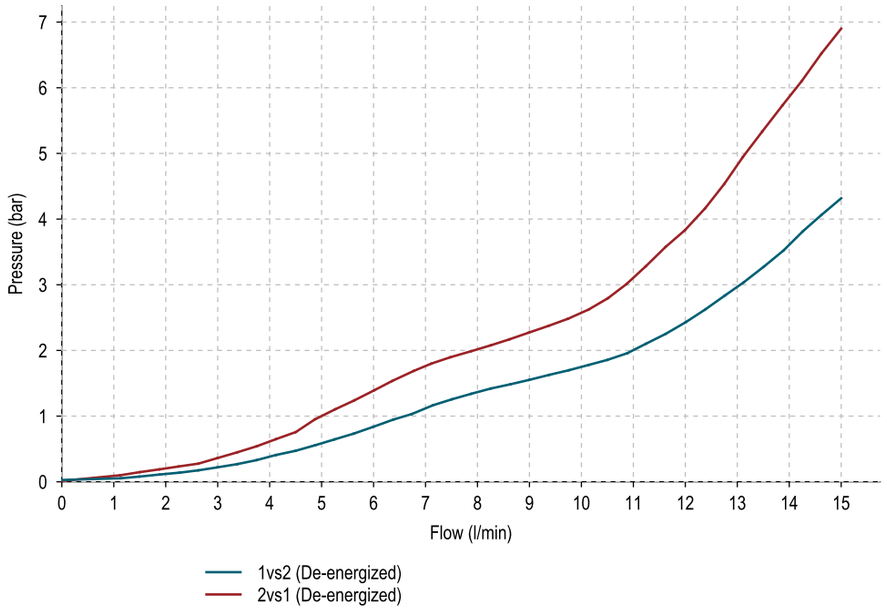
Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

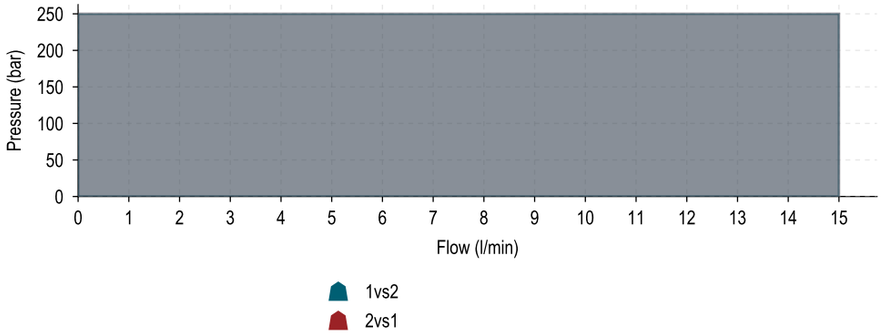
SVEO.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

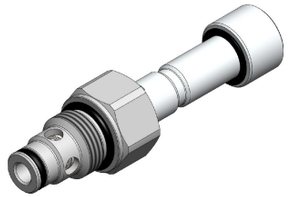


SVY0.S08 VALVE SERIES

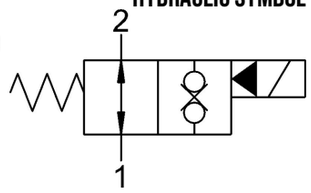
SAE Cartridge - 350 bar

NO Double Lock Pilot Operated

Poppet type



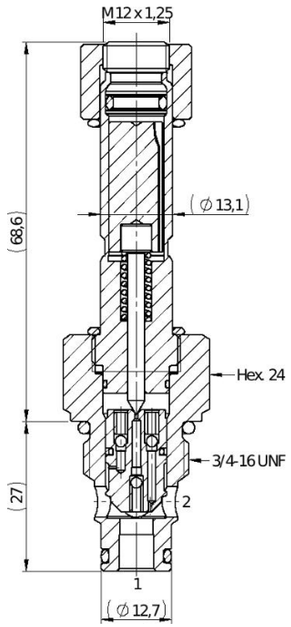
HYDRAULIC SYMBOL



DESCRIPTION

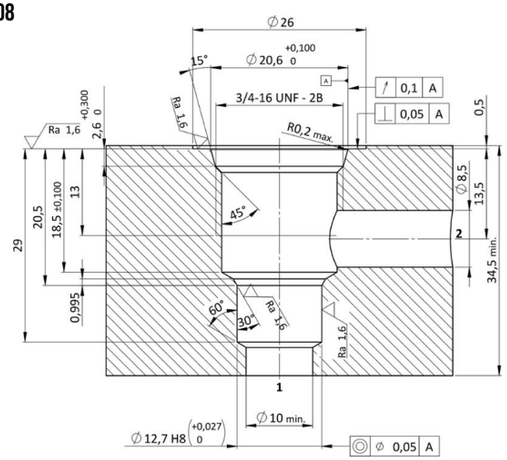
A solenoid valve operated, 2-way 2-positions, normally open, piloted poppet type, bi-directional blocking, screw-in cartridge valve. Special design for low leakage in load holding applications. Tipically used as a blocking or load holding device for high pressure circuits. When the coil is de-energized, the valve's poppet opens and allows free flow from 1 to 2 and from 2 to 1. Once the coil is energized, the SVY0.S08 blocks flow in both directions. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	40 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 350 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
SWITCH ON TIME	100 ms
SWITCH OFF TIME	50 ms
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	20W (for more details see page 769 - 781)
WEIGHT	0,148 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	Y	0	·	S	0	8	·	0	*	·	*	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

Code	Other available options
S08	3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FILTRATION

Model code	Type of filter
H	Standard filter (mesh size 280 µm)
N	No filter

NOTE

Customized filters can be done upon request.

MANUAL OVERRIDE

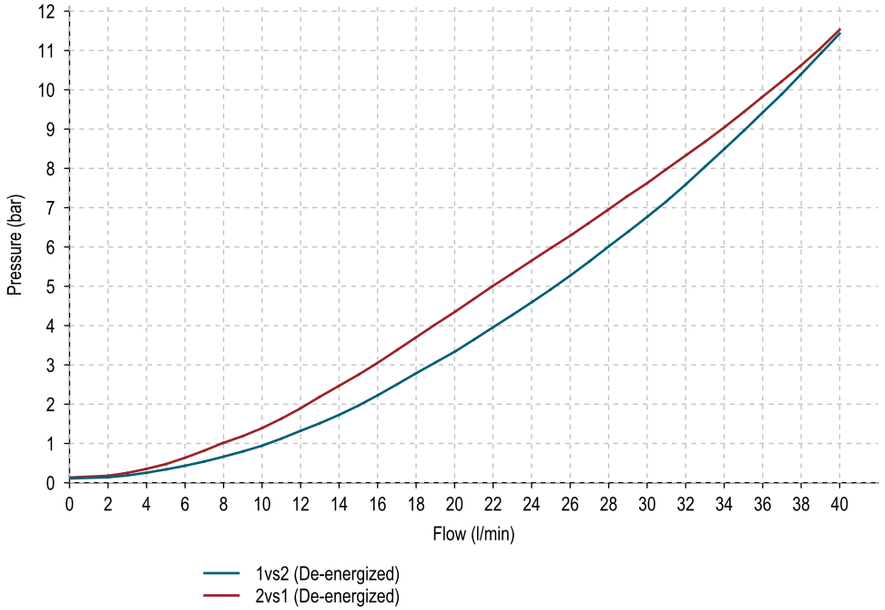
Model code	Type of override
0	No override
2	Push and Twist
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

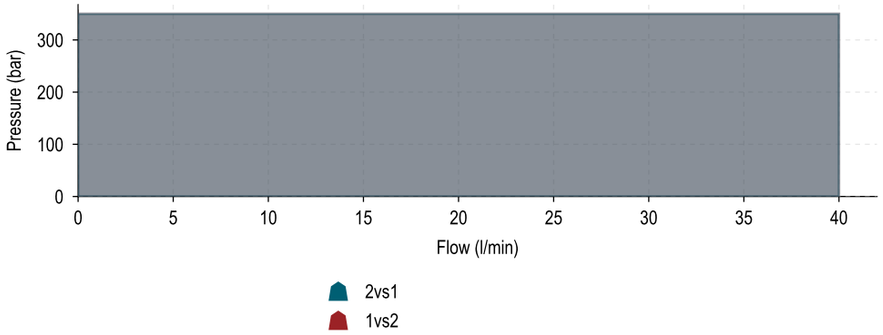
SVY0.S08 GRAPHS

The performance chart illustrates flow handling capacity in both directions (1 to 2 and 2 to 1 de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

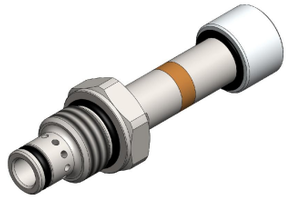


SVF0.S08 VALVE SERIES

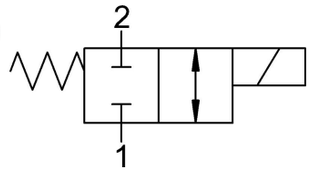
SAE Cartridge - 250 bar

Directional Valve - 2/2 Spool type

Scheme 100



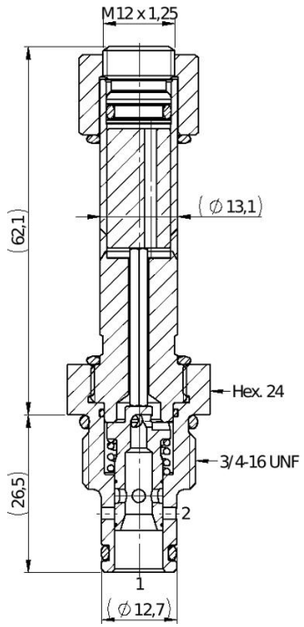
HYDRAULIC SYMBOL



DESCRIPTION

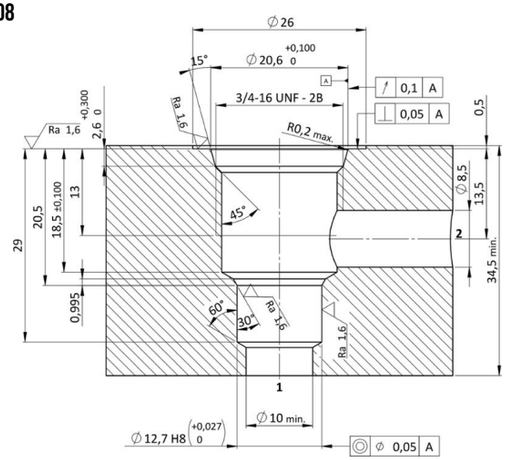
A solenoid valve operated, 2 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVF0.S08 blocks flow bidirectionally. In the energized mode bidirectional flow is allowed between ports 1 and 2. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	18 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,125 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	F	0	·	S	0	8	·	0	*	·	1	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 and 2 both blocked (De-energized)

1 and 2 connected (Energized)

MANUAL OVERRIDE

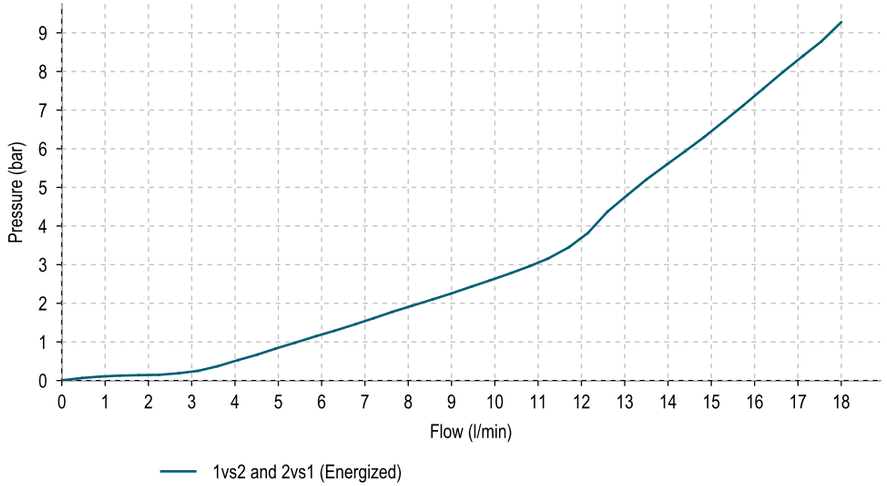
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

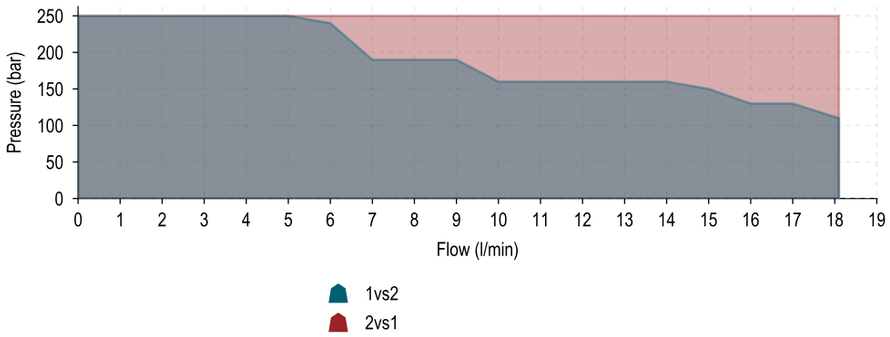
SVFO.SO8 GRAPHS

The performance chart illustrates flow handling capacity 1 to 2 and 2 to 1 (energized).
p/Q curves are recorded at TOil= 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

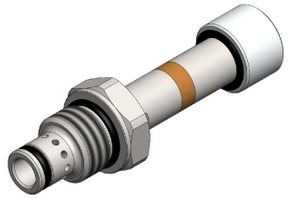


SVF0.S08 VALVE SERIES

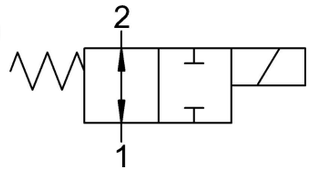
SAE Cartridge - 250 bar

Directional Valve - 2/2 Spool type

Scheme 200



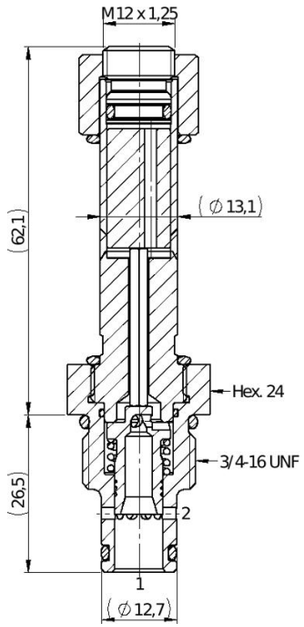
HYDRAULIC SYMBOL



DESCRIPTION

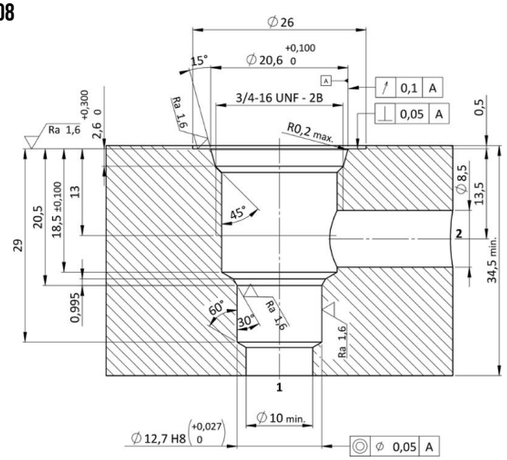
A solenoid valve operated, 2 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode bidirectional flow is allowed between ports 1 and 2. In the energized mode, the SVF0.S08 blocks flow bidirectionally. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	18 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.003 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,125 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	F	0	·	S	0	8	·	0	*	·	2	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø12,7 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 and 2 both blocked (Energized)

1 and 2 connected (De-energized)

MANUAL OVERRIDE

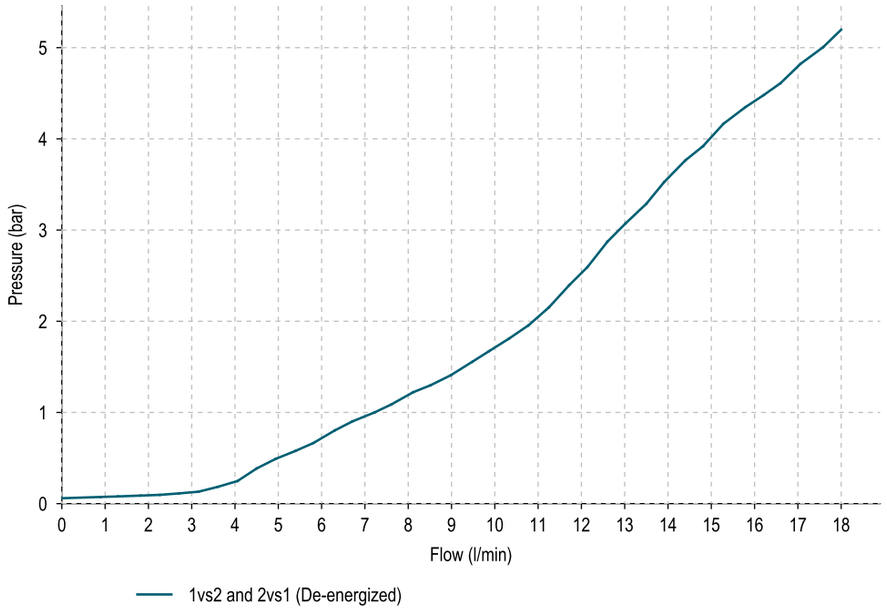
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

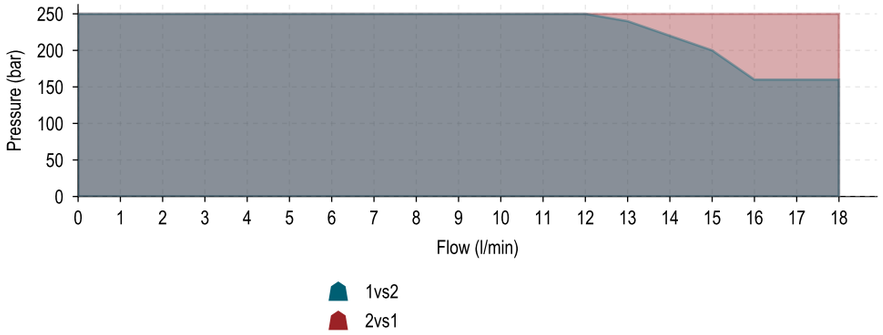
SVFO.SO8 GRAPHS

The performance chart illustrates flow handling capacity 1 to 2 and 2 to 1 (de-energized).
p/Q curves are recorded at TOil= 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

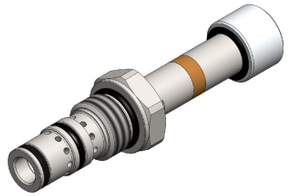


SVP0.S08 VALVE SERIES

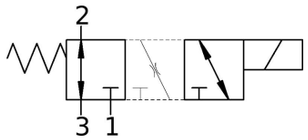
SAE Cartridge - 250 bar

Directional Valve - 3/2 Spool Type

Scheme 100



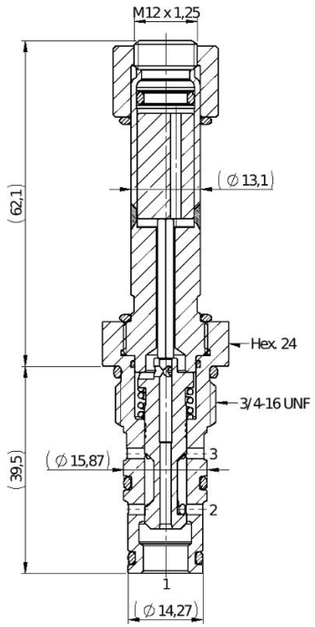
HYDRAULIC SYMBOL



DESCRIPTION

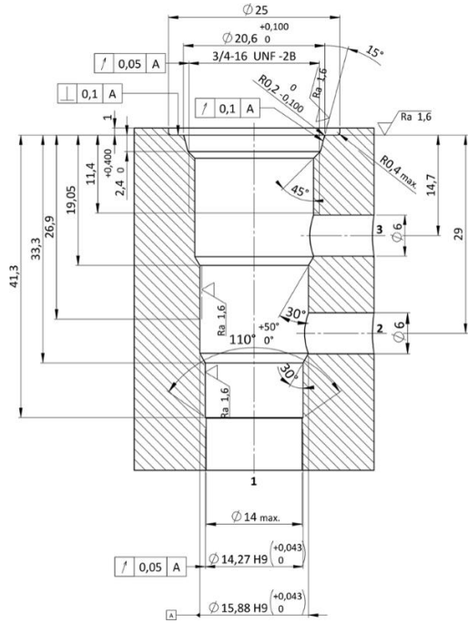
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.S08 allows flow bidirectionally between ports 2 and 3, while blocking flow at 1. In the energized mode, flow is allowed between ports 2 and 1, while flow is blocked at 3. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,140 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	S	0	8	·	0	*	·	1	0	*

VALVE BASIC CODE

S= Inductive position switch upon customer request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

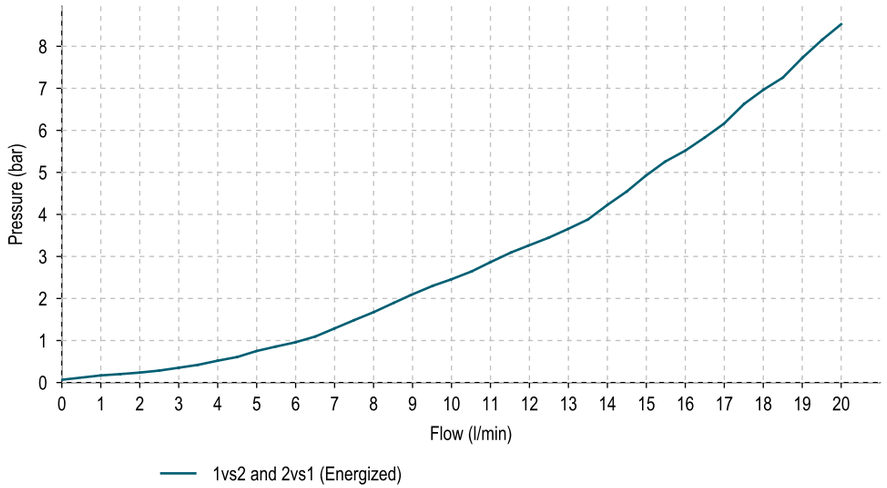
Specifications may change without notice.

Rev. 1

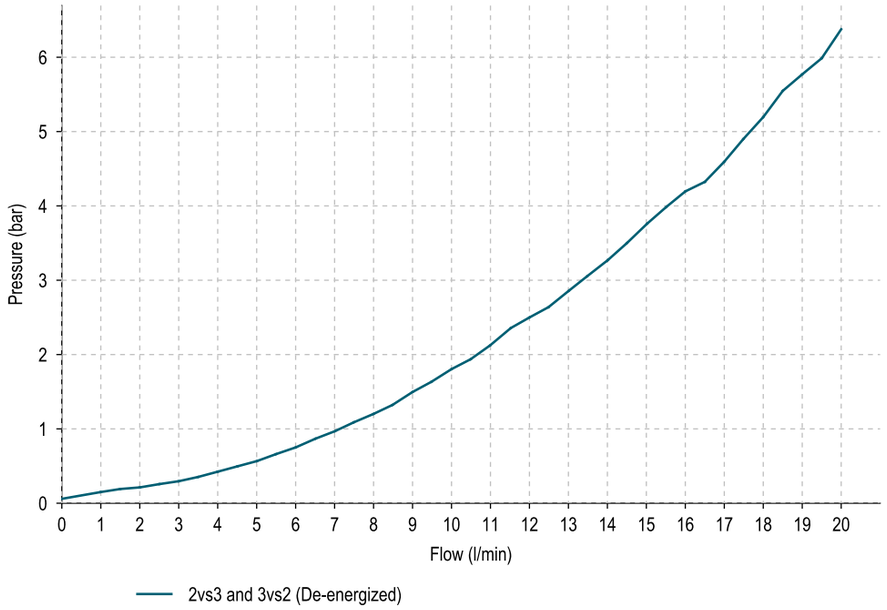
SVPO.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 3 and 3 to 2 (de-energized), 2 to 1 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

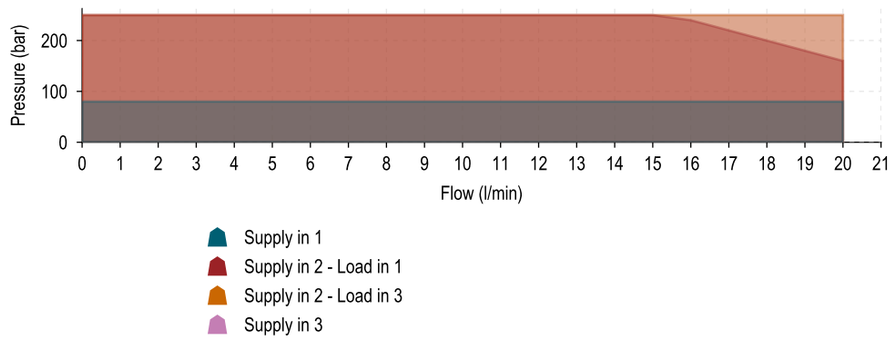
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



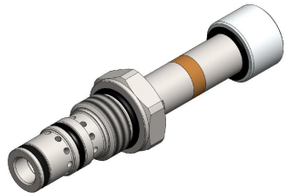
Rev. 1

SVP0.S08 VALVE SERIES

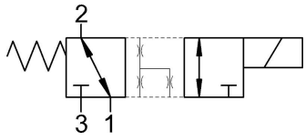
SAE Cartridge - 250 bar

Directional Valve - 3/2 Spool Type

Scheme 200



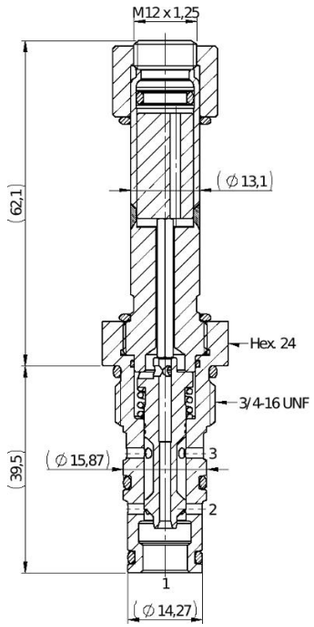
HYDRAULIC SYMBOL



DESCRIPTION

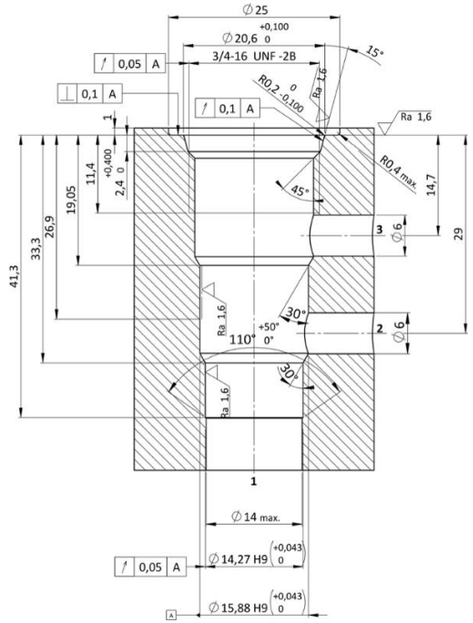
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.S08 allows flow between ports 2 and 1, while blocking flow at 3. In the energized mode, bidirectional flow is allowed between ports 2 and 3, while flow is blocked at 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,140 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	S	0	8	·	0	*	·	2	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

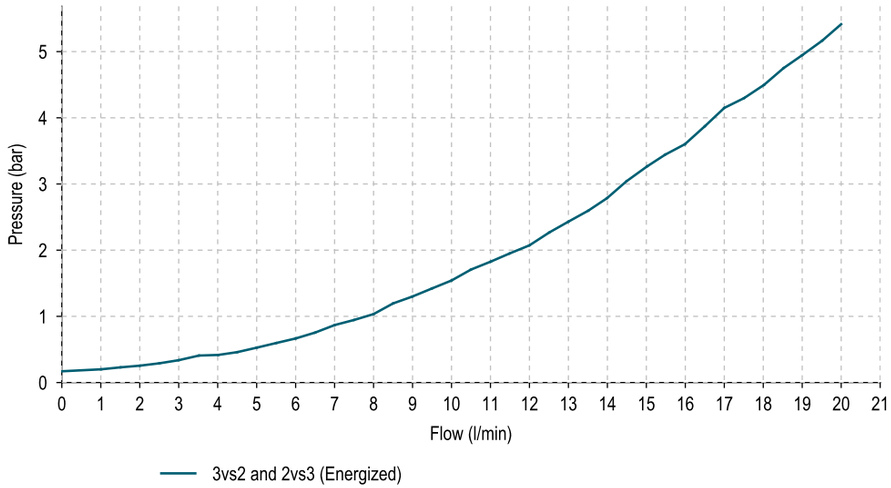
Specifications may change without notice.

Rev. 1

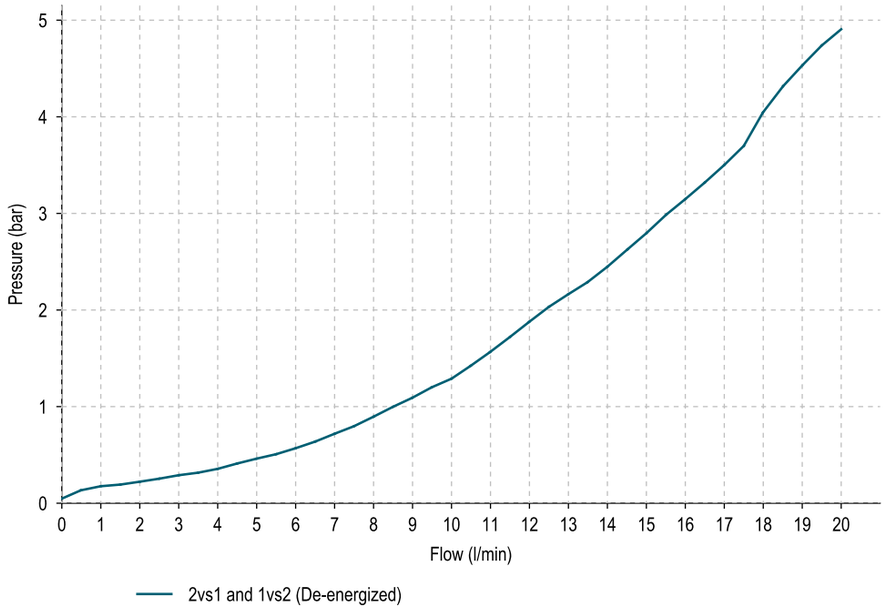
SVPO.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 and 1 to 2 (de-energized), 2 to 3 and 3 to 2 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

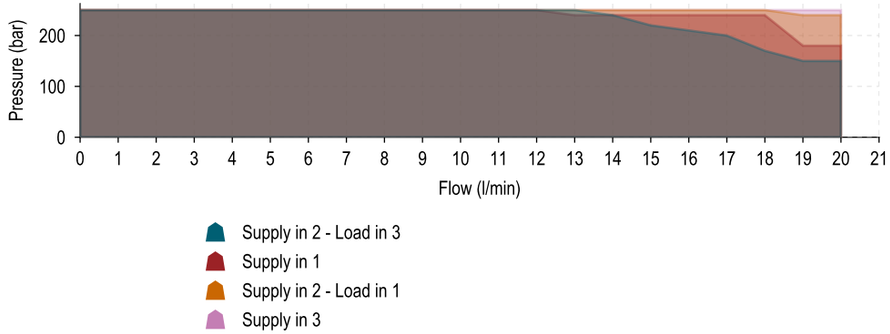
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



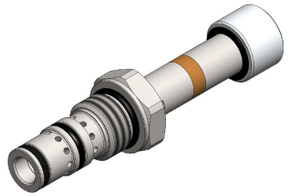
Rev. 1

SVP0.S08 VALVE SERIES

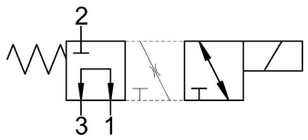
SAE Cartridge - 250 bar

Directional Valve - 3/2 Spool Type

Scheme 300



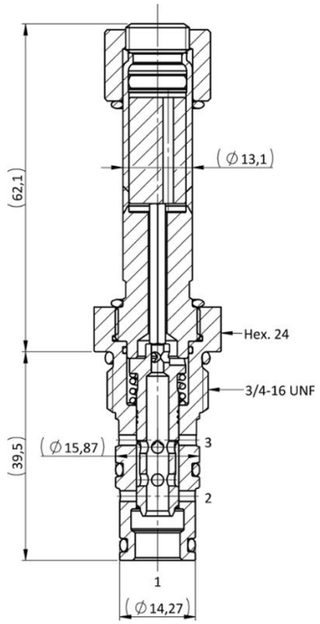
HYDRAULIC SYMBOL



DESCRIPTION

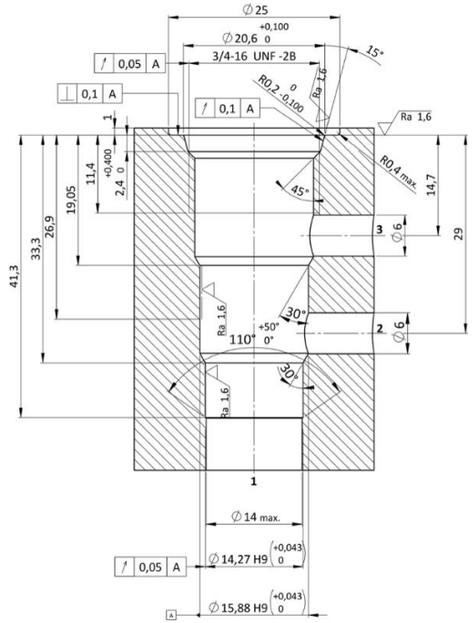
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.S08 allows flow between ports 3 and 1, while blocking flow at 2. In the energized mode, flow is allowed between ports 2 and 1, while flow is blocked at 3. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,140 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	S	0	8	·	0	*	·	3	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

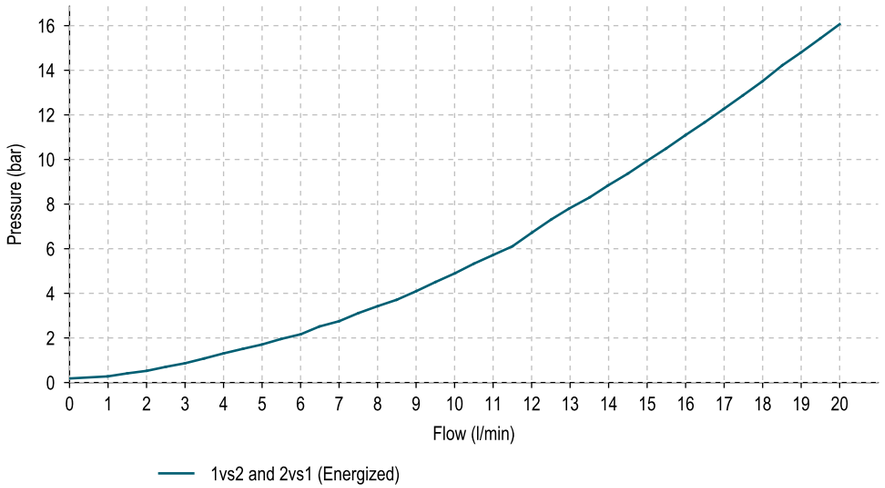
Specifications may change without notice.

Rev. 1

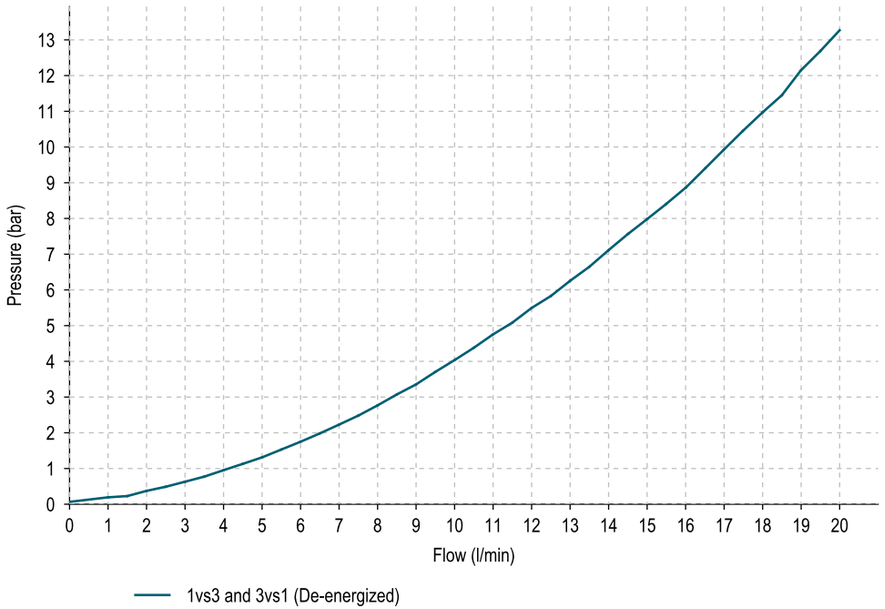
SVPO.SO8 GRAPHS

The performance chart illustrates flow handling capacity 3 to 1 (de-energized),
2 to 1 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

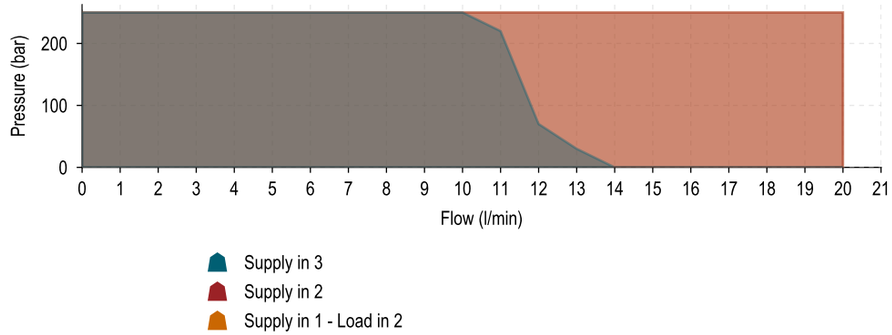
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



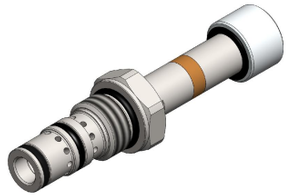
Rev. 1

SVP0.S08 VALVE SERIES

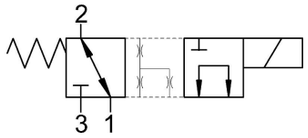
SAE Cartridge - 250 bar

Directional Valve - 3/2 Spool Type

Scheme 400



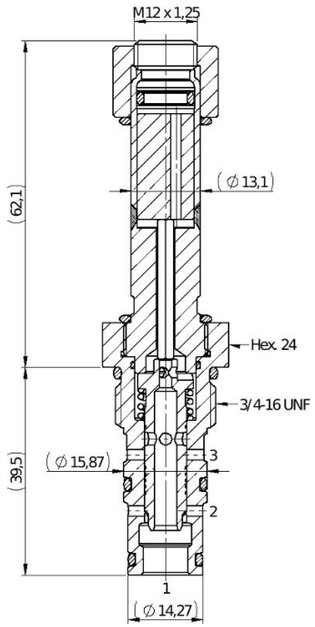
HYDRAULIC SYMBOL



DESCRIPTION

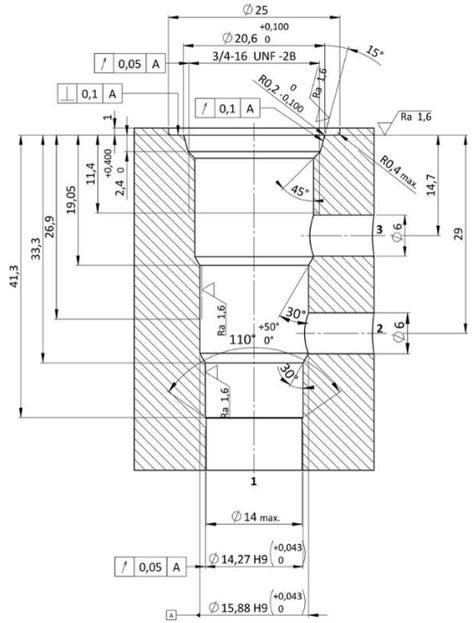
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.S08 allows flow between ports 2 and 1, while blocking flow at 3. In the energized mode, flow is allowed between ports 3 and 1, while flow is blocked at 2. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,140 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	S	0	8	·	0	*	·	4	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

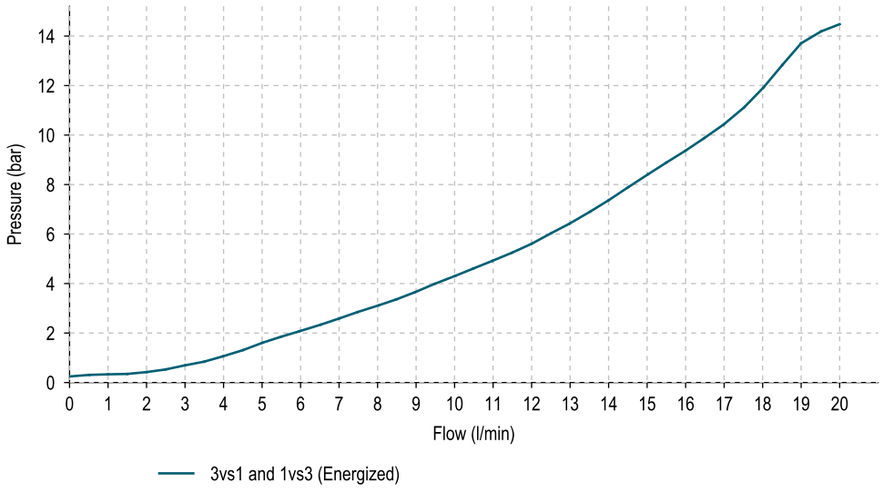
Specifications may change without notice.

Rev. 1

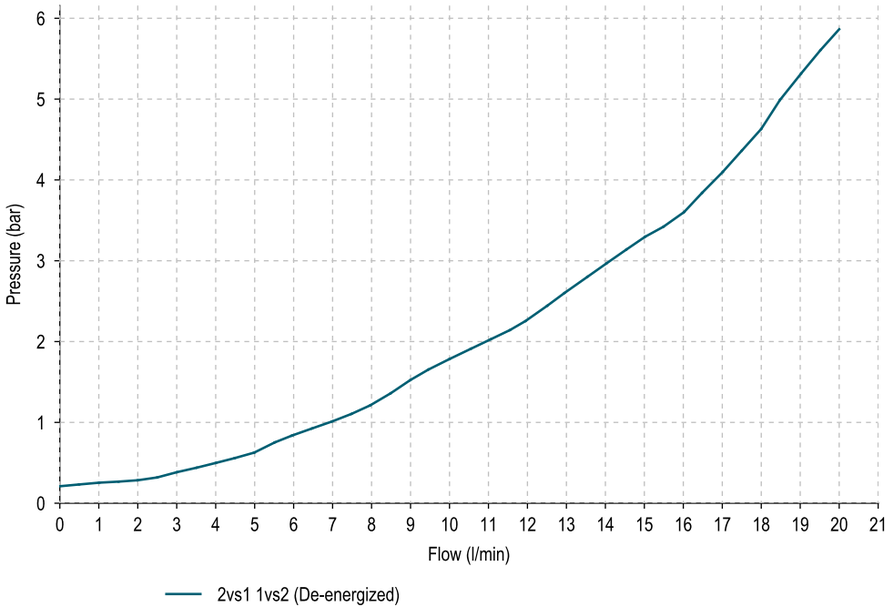
SVPO.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (de-energized), 3 to 1 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

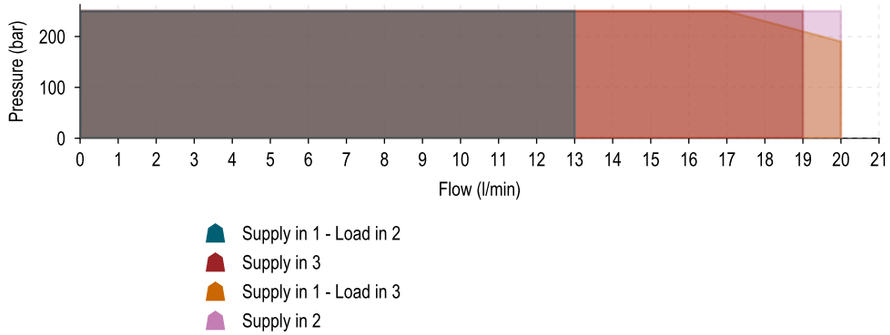
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



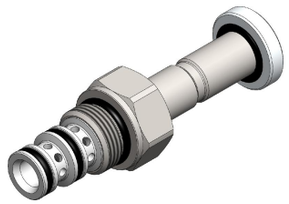
Rev. 1

SVP4.S08 VALVE SERIES

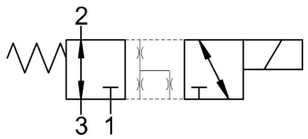
Hybrid SAE Cartridge - 230 bar

Directional Valve - 3/2 Spool Type

Scheme 100



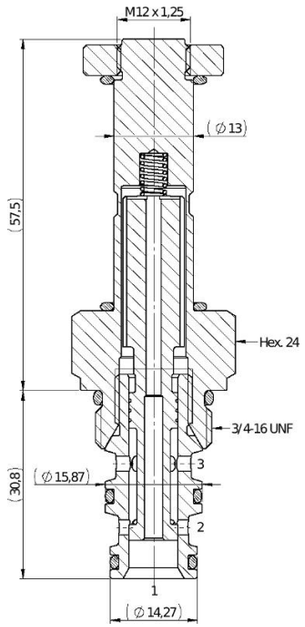
HYDRAULIC SYMBOL



DESCRIPTION

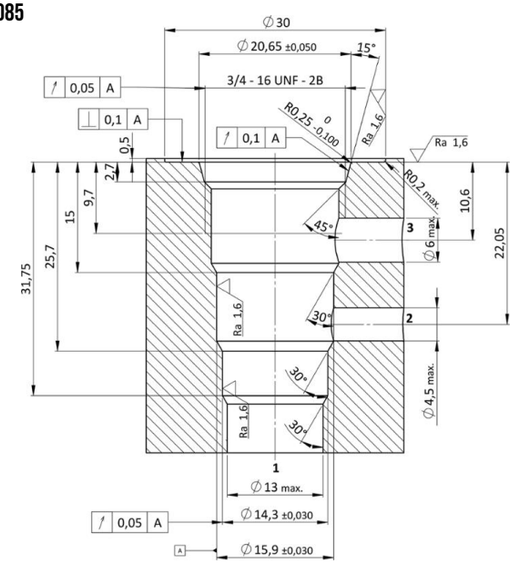
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP4.S08 allows flow bidirectionally between ports 2 and 3, while blocking flow at 1. In the energized mode, bidirectional flow is allowed between ports 1 and 2, while flow is blocked at 3. Even if port 1 may be fully pressurized, it is not intended to be used as the inlet. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH085



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	230 bar
MAXIMUM FLOW	7 l/min
MAXIMUM INTERNAL LEAKAGE	75 cm^3 / min @ 230 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.061 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	27W (for more details see page 769 - 781)
WEIGHT	0,130 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V P 4	·	S 0 8	·	0 0	·	1 0 *
VALVE BASIC CODE		SIZE		MARKING		FLOW PATH

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 and 2 connected, 3 blocked (Energized)

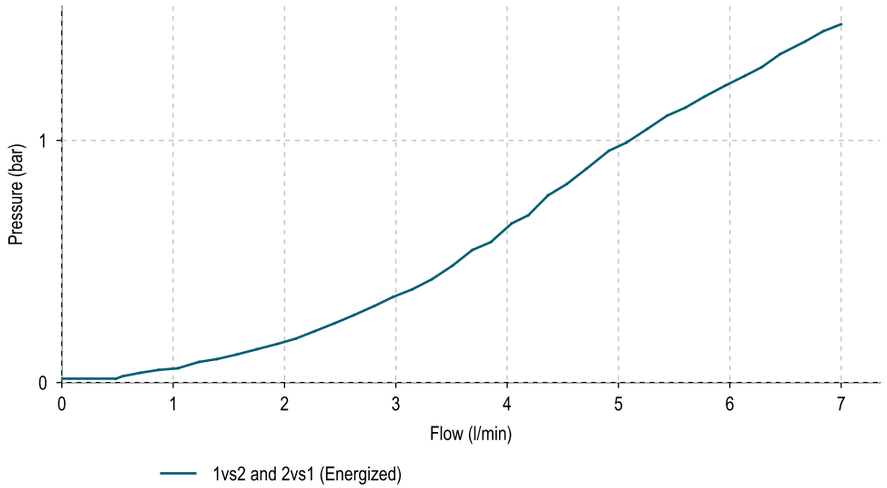
2 and 3 connected, 1 blocked (De-energized)

Specifications may change without notice.

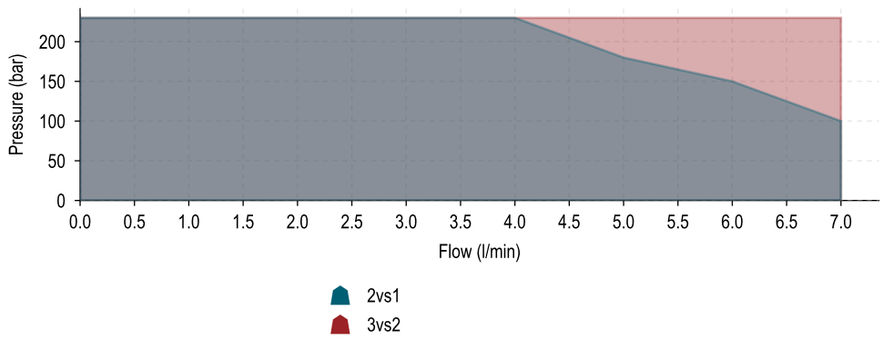
SVP4.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 3 (de-energized) and 1 to 2 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

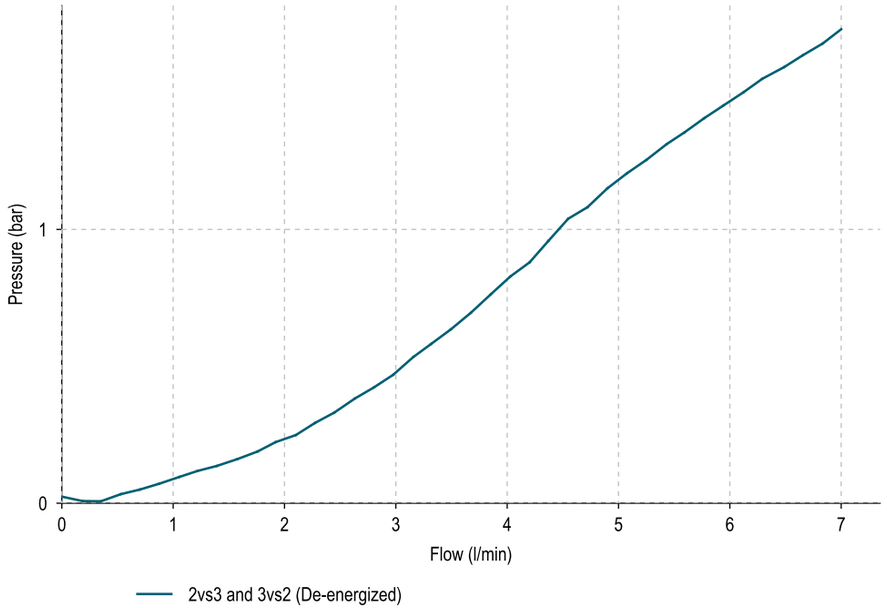
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



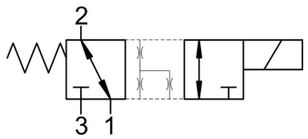
SVP0.S10 VALVE SERIES

SAE Cartridge - 250 bar

Directional valve - 3/2 Spool type

Scheme 200

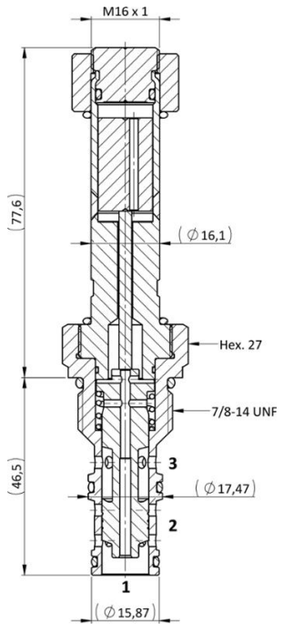
HYDRAULIC SYMBOL



DESCRIPTION

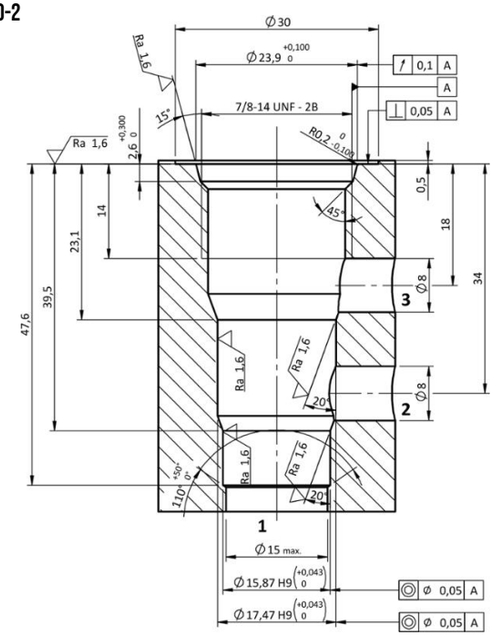
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.S10 allows flow bidirectionally between ports 2 and 3, while blocking flow at 1. In the energized mode, flow is allowed between ports 2 and 1, while flow is blocked at 3. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	115 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.076 and SK.070 (coil) (standard sealing NBR-BUNA-N)
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,230 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	S	1	0	·	0	*	·	2	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with ø17,47 and ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
8	Screw

FLOW PATH

1 and 2 connected, 3 blocked (De-energized)

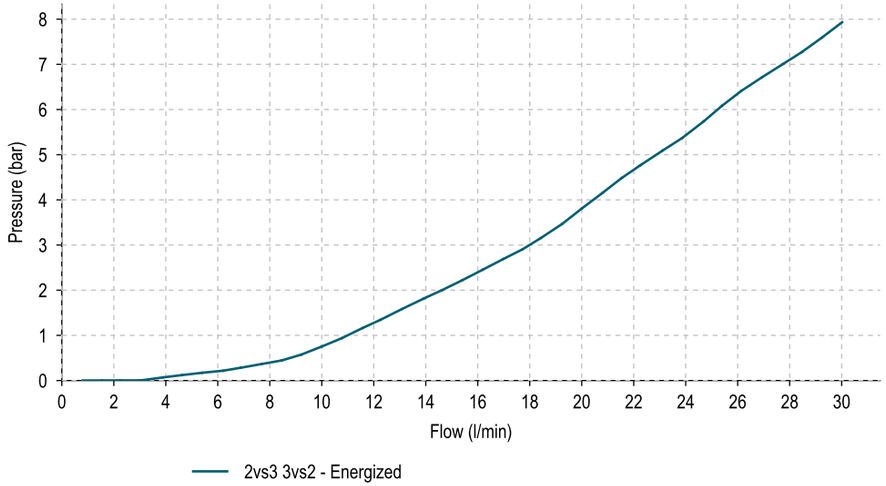
2 and 3 connected, 1 blocked (Energized)

Specifications may change without notice.

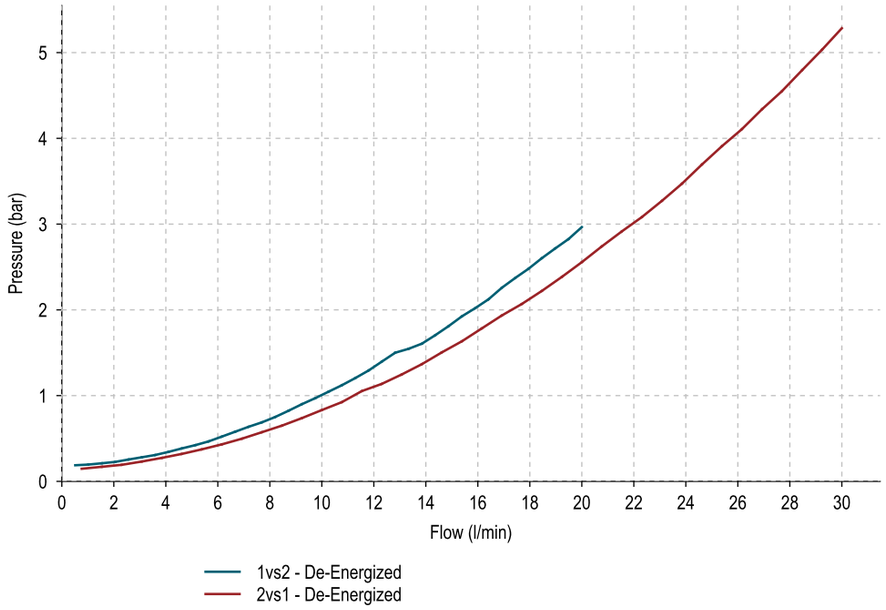
SVPO.S10 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 and 1 to 2 (de-energized), 2 to 3 and 3 to 2 (energized).

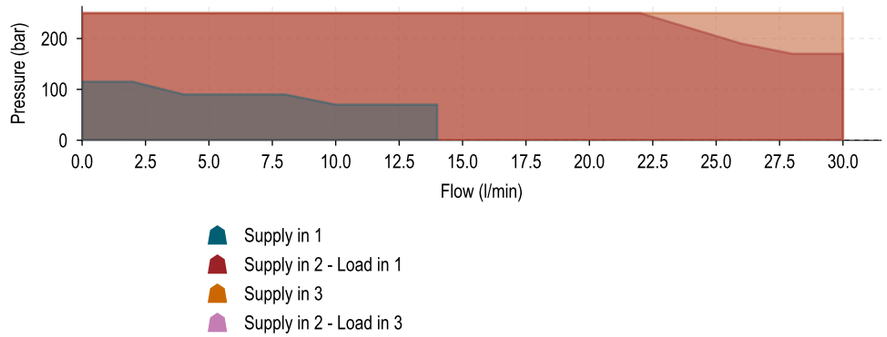
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



NOTE

The performance chart illustrates flow handling capacity 2 to 1 and 1 to 2 (de-energized), 2 to 3 and 3 to 2 (energized).

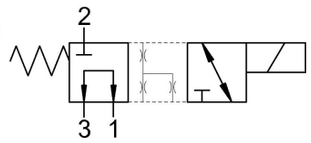
SVP0.M18 VALVE SERIES

METRIC Cartridge - 210 bar

Directional Valve - 3/2 Spool Type

Scheme 100

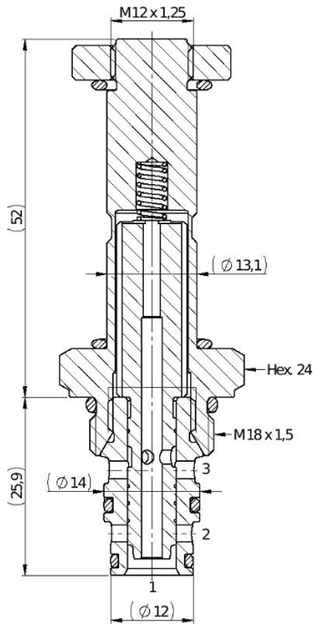
HYDRAULIC SYMBOL



DESCRIPTION

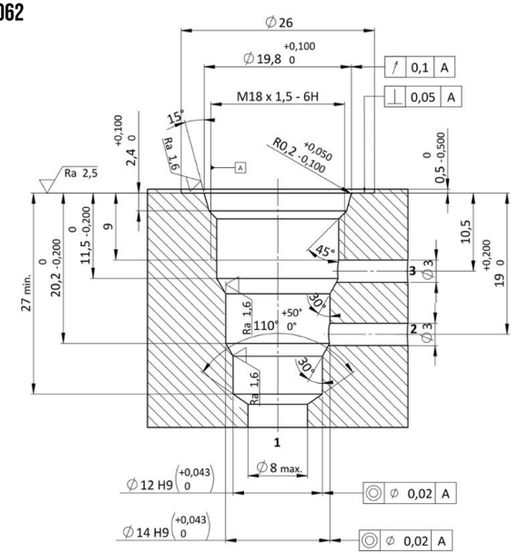
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.M18 allows flow bidirectionally between ports 1 and 3, while blocking flow at 2. In the energized mode, bidirectional flow is allowed between ports 1 and 2, while flow is blocked at 3. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH062



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	210 bar
MAXIMUM FLOW	7 l/min
MAXIMUM INTERNAL LEAKAGE	20 cm^3 / min @ 210 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	10-15 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.231 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. power supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	M	1	8	·	0	0	·	1	0	*

VALVE BASIC CODE

SIZE

METRIC M18x1,5 with Ø14 and Ø12 nose sizes

MARKING

0 = Standard factory marking.
Customized marking can be done upon request.

FLOW PATH

1 and 2 connected, 3 blocked (Energized)

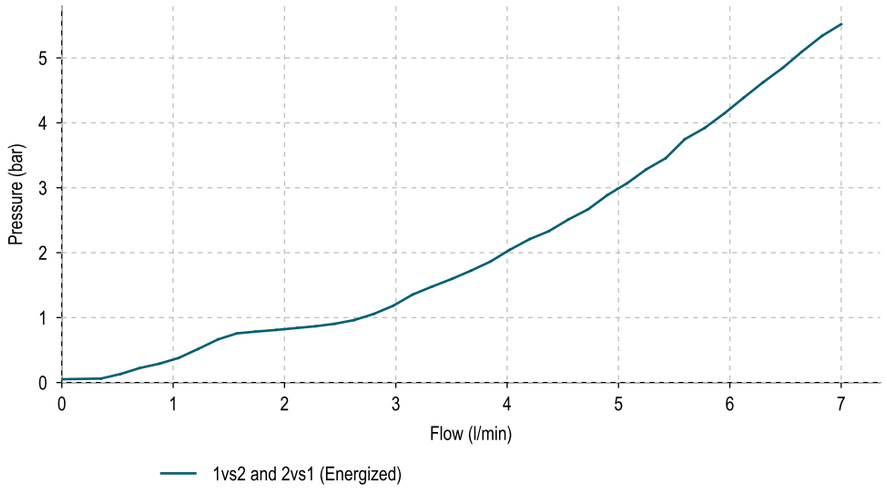
1 and 3 connected, 2 blocked (De-energized)

Specifications may change without notice.

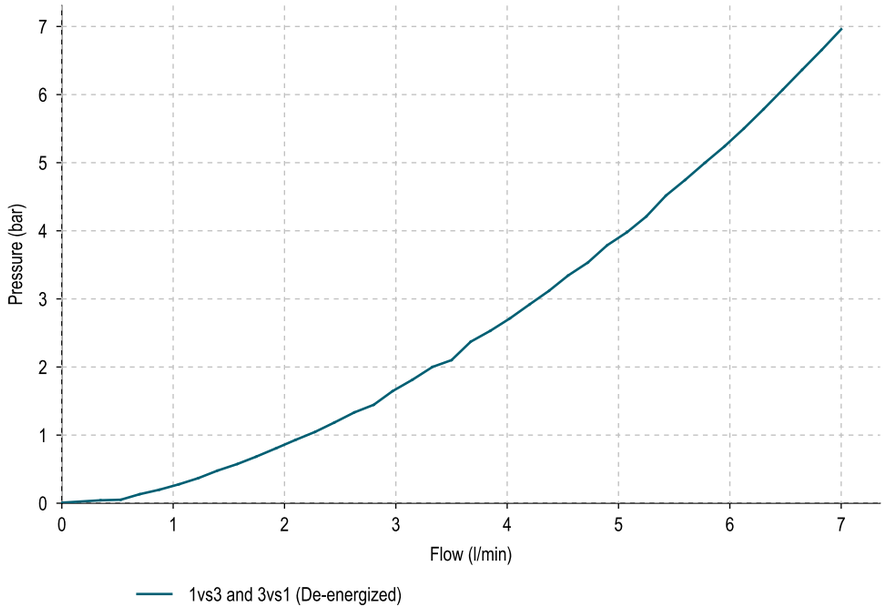
SVPO.M18 GRAPHS

The performance chart illustrates flow handling capacity 1 to 3 (de-energized) and 1 to 2 (energized).
p/Q curves are recorded at TOil =40°C and 46 cSt.

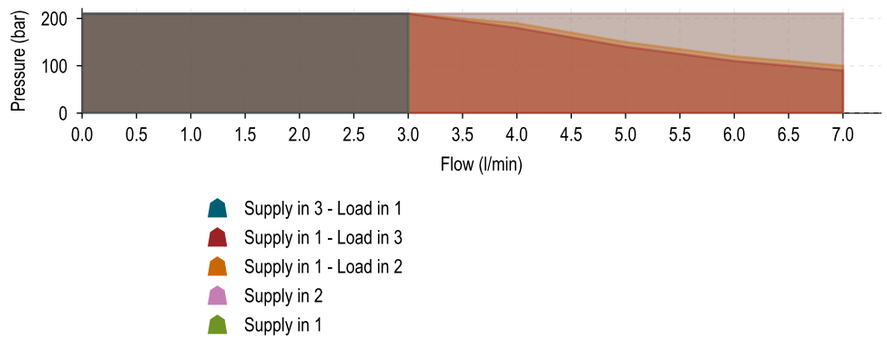
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



- Supply in 3 - Load in 1
- Supply in 1 - Load in 3
- Supply in 1 - Load in 2
- Supply in 2
- Supply in 1

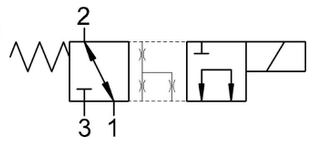
SVP0.M18 VALVE SERIES

METRIC Cartridge - 210 bar

Directional Valve - 3/2 Spool Type

Scheme 400

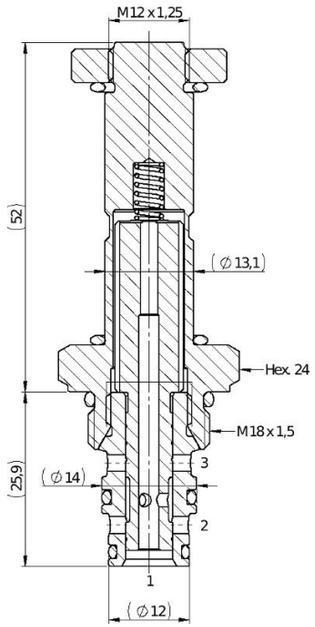
HYDRAULIC SYMBOL



DESCRIPTION

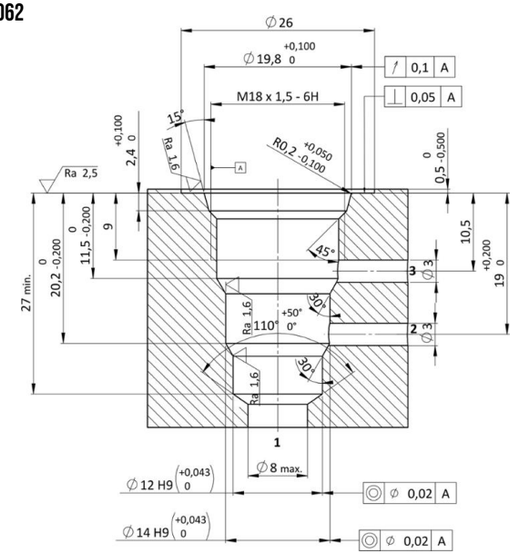
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP0.M18 allows flow bidirectionally between ports 1 and 2, while blocking flow at 3. In the energized mode, bidirectional flow is allowed between ports 1 and 3, while flow is blocked at 2. Even if port 2 may be fully pressurized, it is not intended to be used as the inlet. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH062



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	210 bar
MAXIMUM FLOW	7 l/min
MAXIMUM INTERNAL LEAKAGE	50 cm^3 / min @ 210 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	10-15 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.231 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,110 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	0	·	M	1	8	·	0	0	·	4	0	*

VALVE BASIC CODE

SIZE

METRIC M18x1,5 with Ø14 and Ø12 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 and 2 connected, 3 blocked (De-energized)

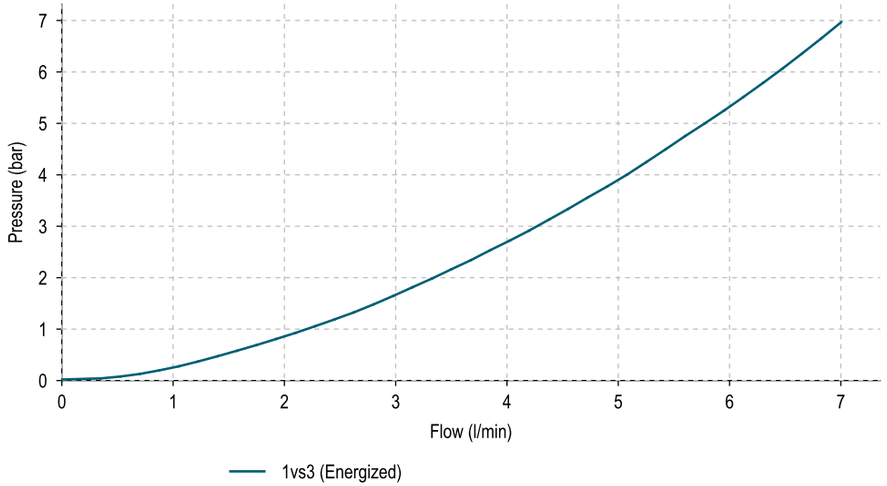
1 and 3 connected, 2 blocked (Energized)

Specifications may change without notice.

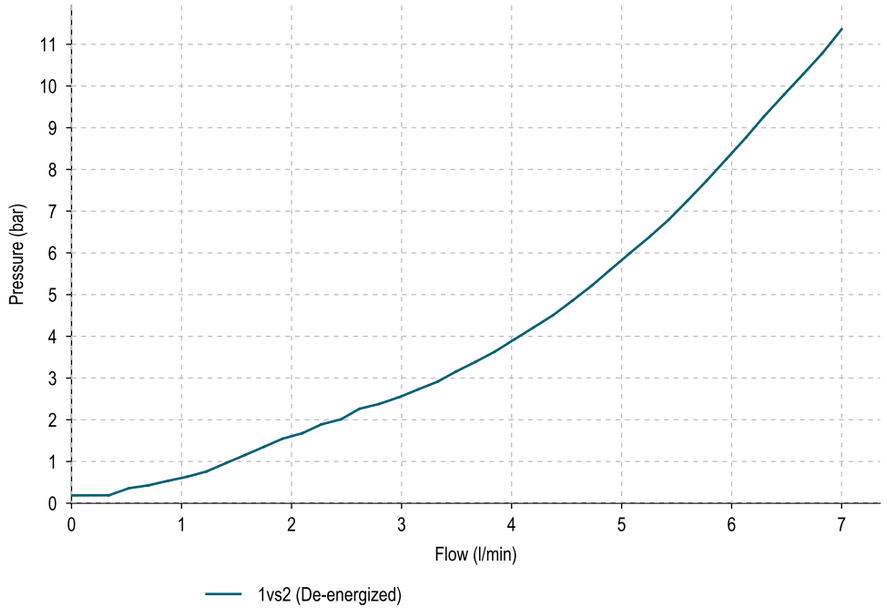
SVPO.M18 GRAPHS

The performance chart illustrates flow handling capacity 1 to 2 (de-energized) and 1 to 3 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

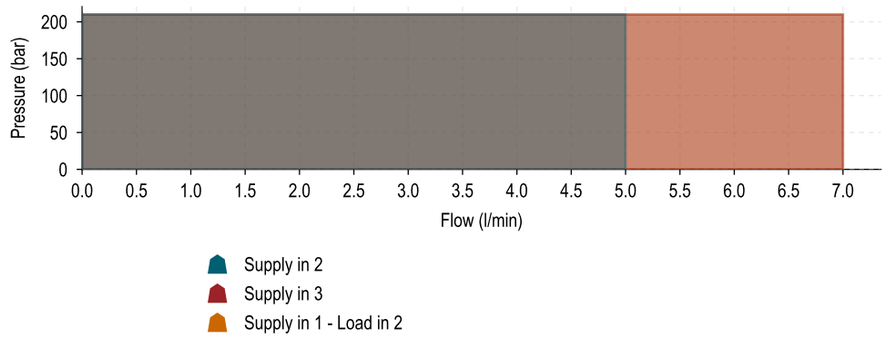
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



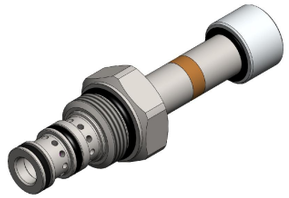
Supply in 2
Supply in 3
Supply in 1 - Load in 2

SVP4.M22 VALVE SERIES

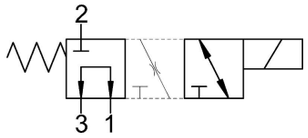
SAE Cartridge - 250 bar

Directional Valve - 3/2 Spool Type

Scheme 300



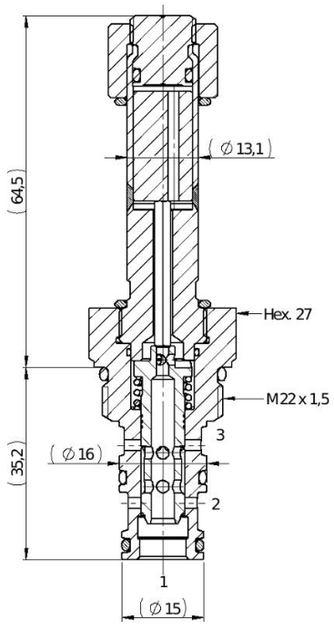
HYDRAULIC SYMBOL



DESCRIPTION

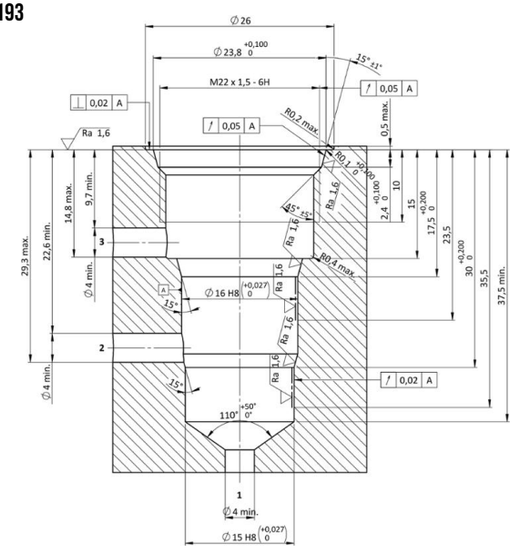
A solenoid valve operated, 3 way 2 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVP4.M22 allows flow between ports 3 and 1, while blocking flow at 2. In the energized mode, flow is allowed between ports 2 and 1, while flow is blocked at 3. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

VH193



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.129 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,158 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	P	4	·	M	2	2	·	0	*	·	3	0	*

VALVE BASIC CODE

SIZE

METRIC M22x1,5 with Ø16 and Ø15 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

FLOW PATH

1 and 2 connected, 3 blocked (Energized)

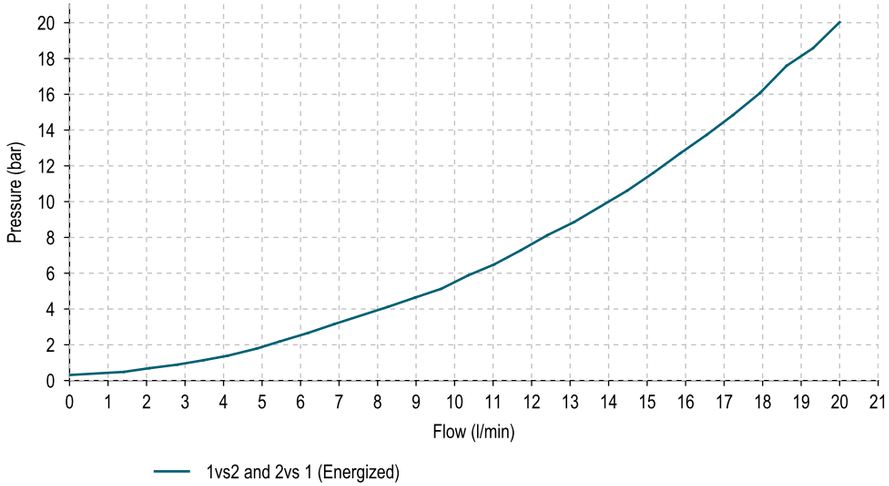
1 and 3 connected, 2 blocked (De-energized)

Specifications may change without notice.

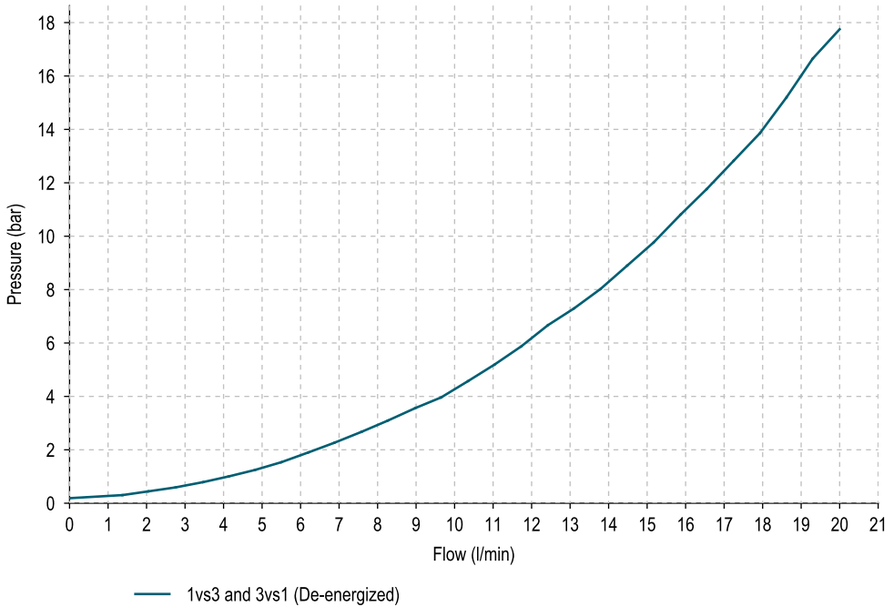
SVP4.M22 GRAPHS

The performance chart illustrates flow handling capacity 1 to 3 and 3 to 1 (de-energized) and 1 to 2 and 2 to 1 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

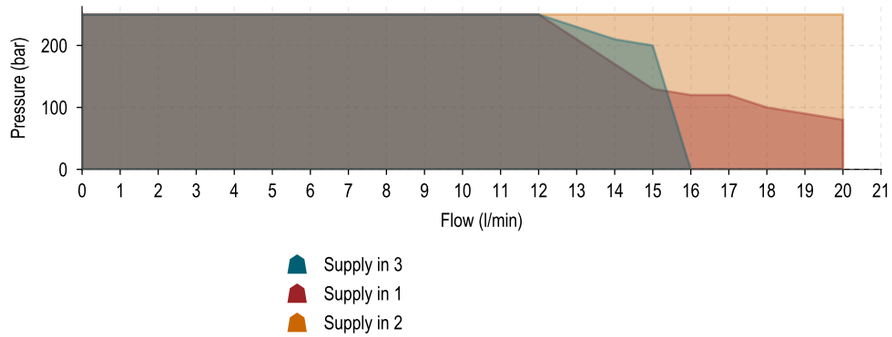
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



NOTE

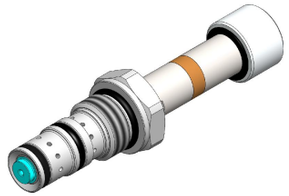
Warning: From 3 to 1 (de-energized) the maximum flow rate in port 3 is 16 l/min.

SVC0.S08 VALVE SERIES

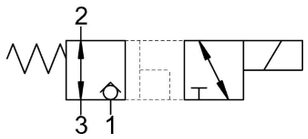
SAE Cartridge - 250 bar

Directional Valve - 3/2 Seated Type

Scheme 100



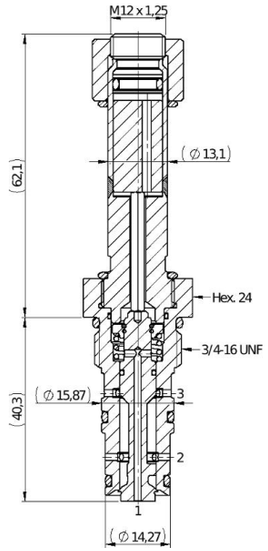
HYDRAULIC SYMBOL



DESCRIPTION

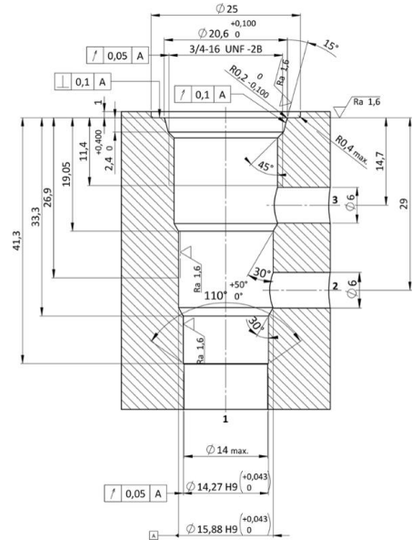
A solenoid valve operated, 3 way 2 positions, seated type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVC0.S08 allows flow bidirectionally between ports 2 and 3, while blocking flow at 1. In this stage the leakage on port 1 is very limited. As soon as the coil is energized there is a transitory phase in which all the ports are connected. In the energized mode, bidirectional flow is allowed between ports 1 and 2, while flow is blocked at 3 with a low leakage. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION

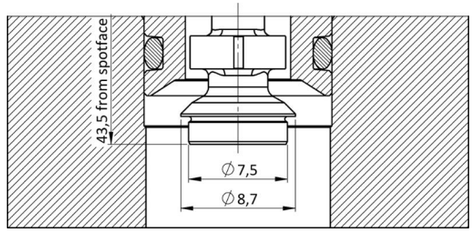


CAVITY

SAE08-2



DESIGN NOTE



The overall dimension in open configuration protrudes into ID Ø14 max of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar 0,25 cm^3 / min @ 250 bar on port 1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,140 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V C 0	·	S 0 8	·	0 *	·	1 0 *
VALVE BASIC CODE		SIZE		MARKING		FLOW PATH

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 and 2 connected, 3 blocked (Energized)

2 and 3 connected, 1 blocked (De-energized)

MANUAL OVERRIDE

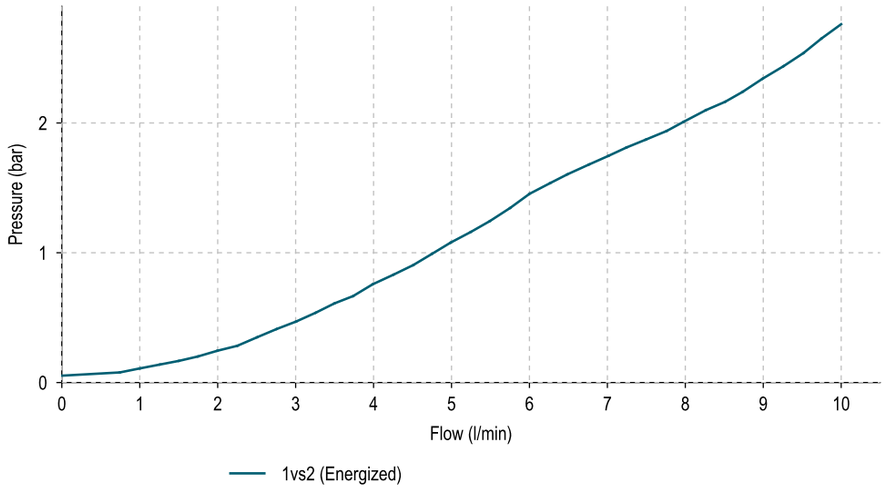
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

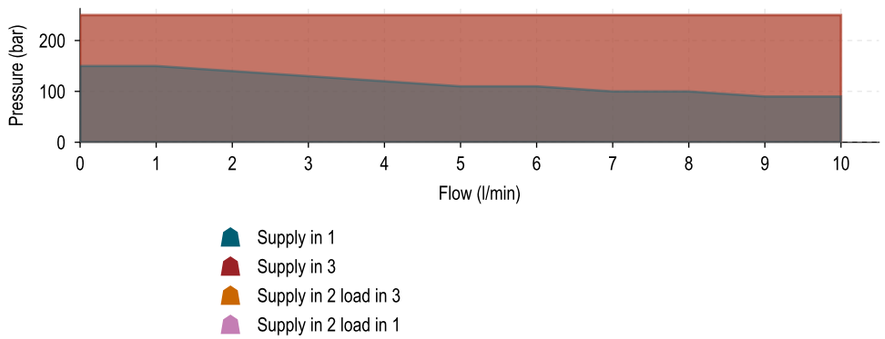
SVCO.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 3 (de-energized) and 1 to 2 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

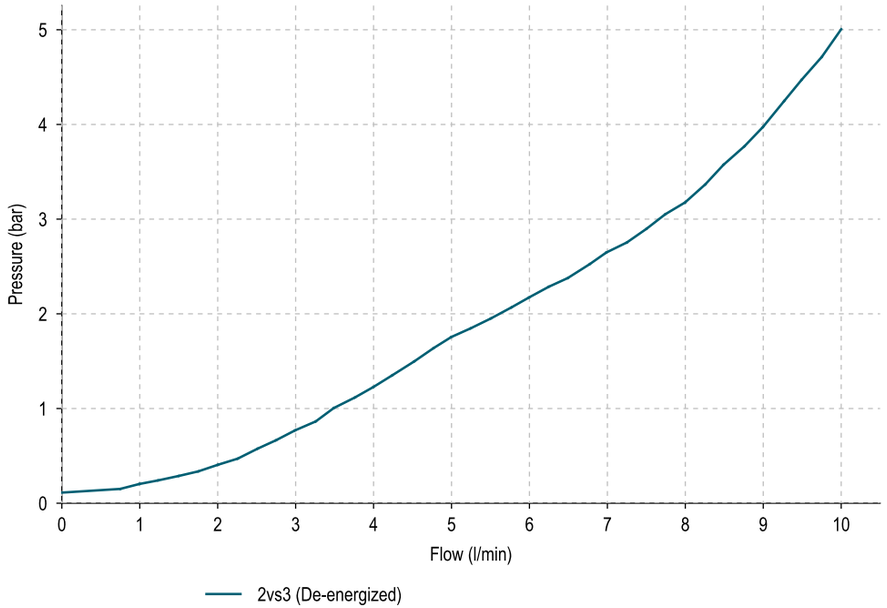
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED

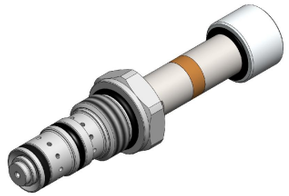


SVC0.S08 VALVE SERIES

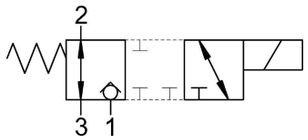
SAE Cartridge - 250 bar

Directional Valve - 3/2 Seated Type

Scheme 200



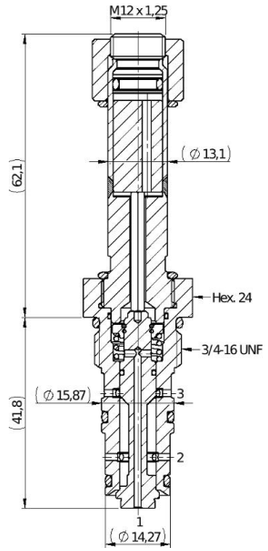
HYDRAULIC SYMBOL



DESCRIPTION

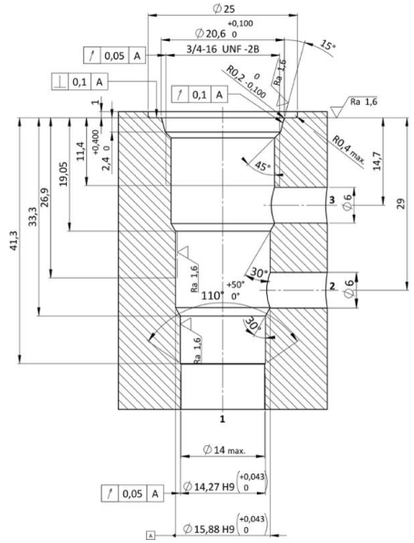
A solenoid valve operated, 3 way 2 positions, seated type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVC0.S08 allows flow bidirectionally between ports 2 and 3, while blocking flow at 1. In this stage the leakage on port 1 is very limited. As soon as the coil is energized there is a transitory phase in which all the ports are blocked. In the energized mode, bidirectional flow is allowed between ports 1 and 2, while flow is blocked at 3 with a low leakage. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION

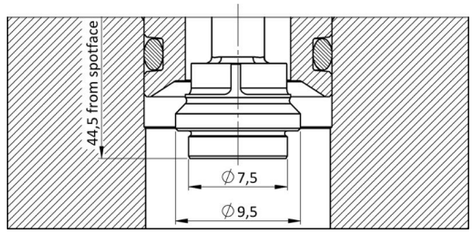


CAVITY

SAE08-2



DESIGN NOTE



The overall dimension in open configuration protrudes into ID Ø14 max of the cavity.

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	85 cm^3 / min @ 250 bar 0,25 cm^3 / min @ 250 bar on port 1
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,140 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V C 0	·	S 0 8	·	0 *	·	2 0 *

VALVE BASIC CODE

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

FLOW PATH

1 and 2 connected, 3 blocked (Energized)

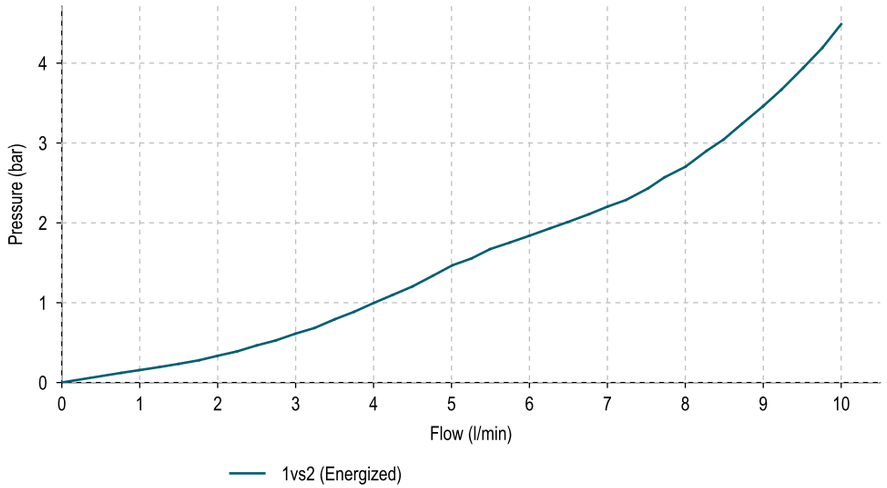
2 and 3 connected, 1 blocked (De-energized)

Specifications may change without notice.

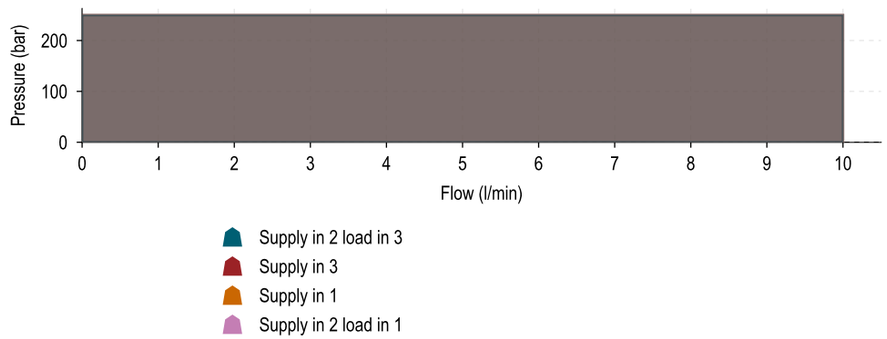
SVCO.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 3 (de-energized) and 1 to 2 (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

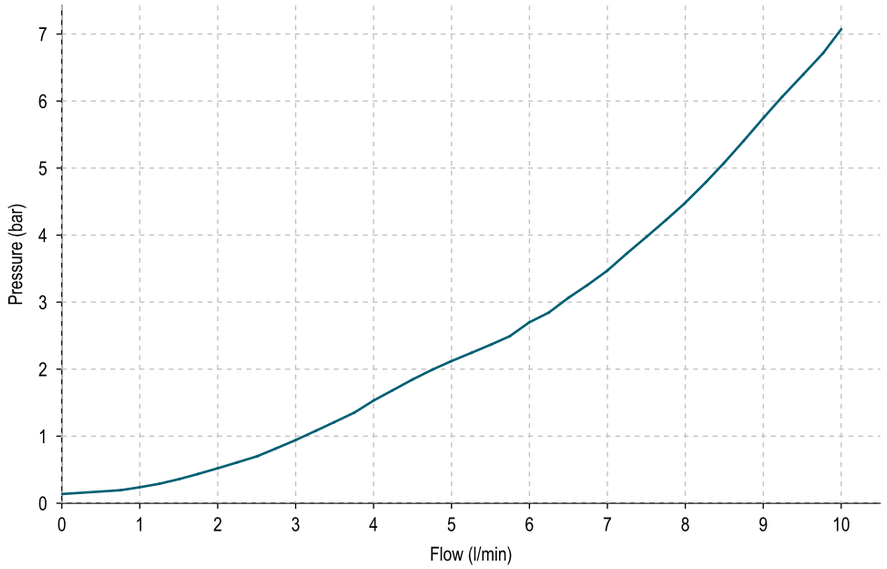
ENERGIZED



PERFORMANCE LIMITS



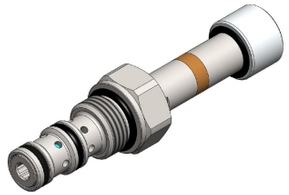
DE-ENERGIZED



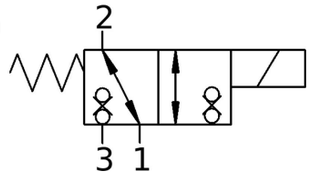
SVI0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 3/2 Seated Type



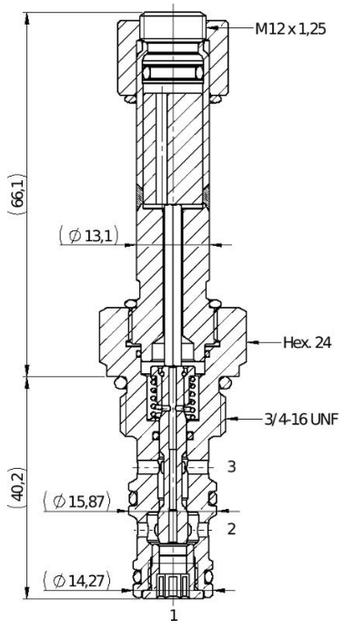
HYDRAULIC SYMBOL



DESCRIPTION

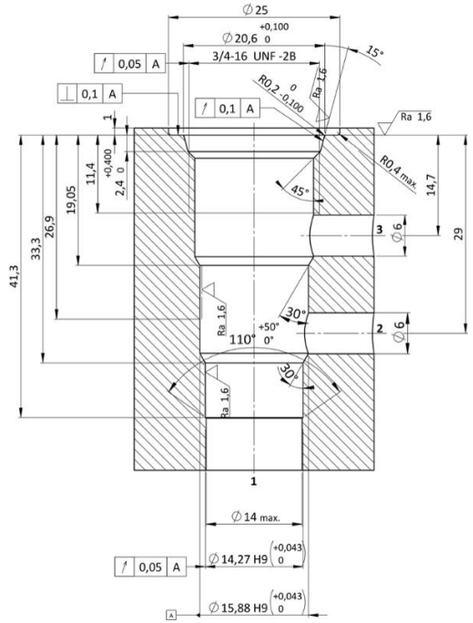
A solenoid valve operated, 3 way 2 positions, seated type, direct acting, bi-directional blocking, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVI0.S08 allows flow bi-directionally between ports 1 and 2, while blocking flow at 3. In the energized mode, bi-directional flow is allowed between ports 3 and 2, while flow is blocked at 1 with extremely low leakage. Even if port 1 and 3 may be fully pressurized they are not intended to be used as the inlet. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE08-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.035 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,231 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	I	0	·	S	0	8	·	0	*	·	0	0	*

VALVE BASIC CODE

0= standard. S= Inductive position switch upon customer request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

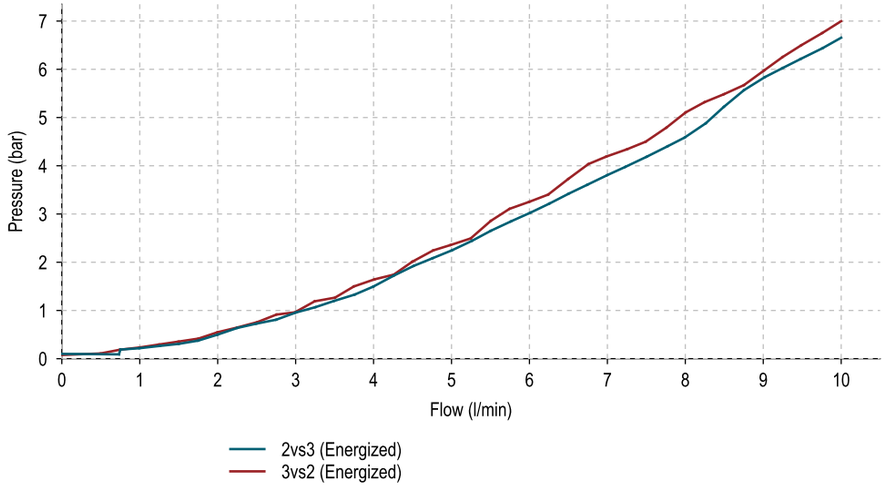
Specifications may change without notice.

Rev. 2

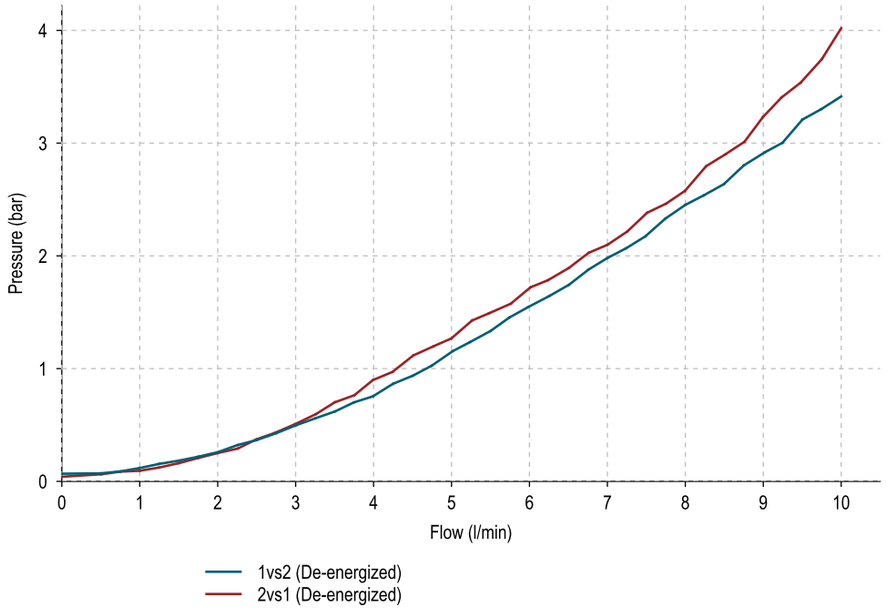
SV10.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 3 and 3 to 2 (energized) 2 to 1 and 1 to 2 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



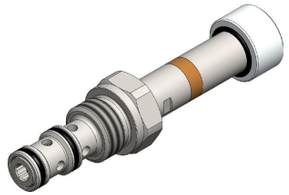
DE-ENERGIZED



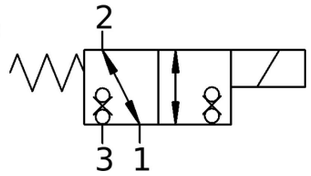
SVI0.S10 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 3/2 Seated Type



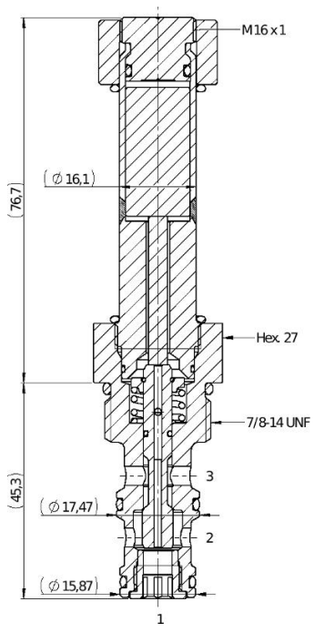
HYDRAULIC SYMBOL



DESCRIPTION

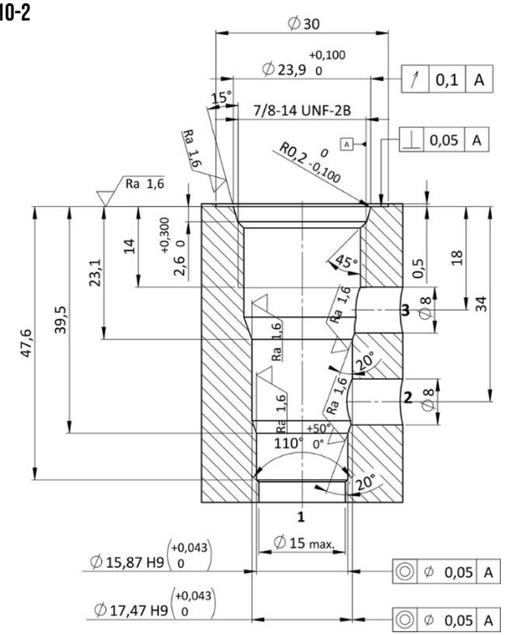
A solenoid valve operated, 3 way 2 positions, seated type, direct acting, bi-directional blocking, screw-in hydraulic directional cartridge valve. In the de-energized mode, the SVI0.S10 allows flow bi-directionally between ports 1 and 2, while blocking flow at 3. In the energized mode, bi-directional flow is allowed between ports 3 and 2, while flow is blocked at 1 with extremely low leakage. Even if port 1 may be fully pressurized it is not intended to be used as the inlet. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow path.

CROSS SECTION



CAVITY

SAE10-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.076 and SK.087(coil) (standard sealing NBR-BUNA-N)
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,231 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	I	0	·	S	1	0	·	0	*	·	0	0	*

VALVE BASIC CODE

0=Standard. S= Inductive position switch upon customer request

SIZE

7/8-14 UNF with Ø17,47 and Ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

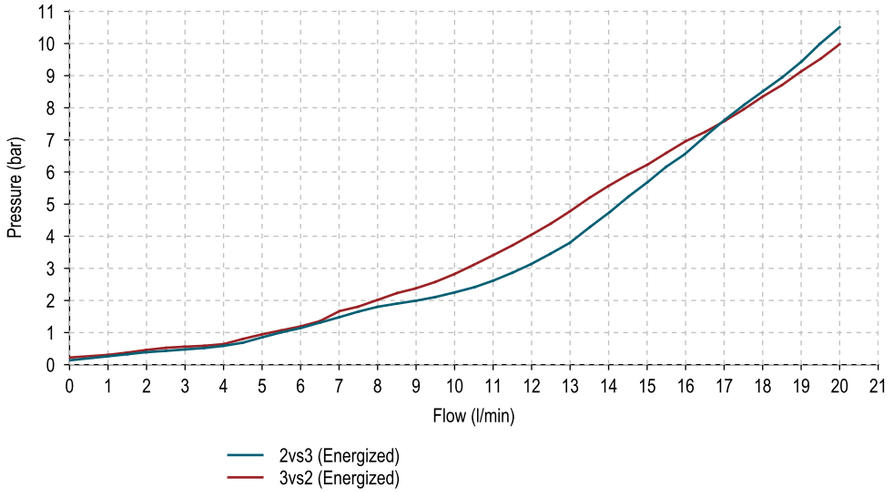
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

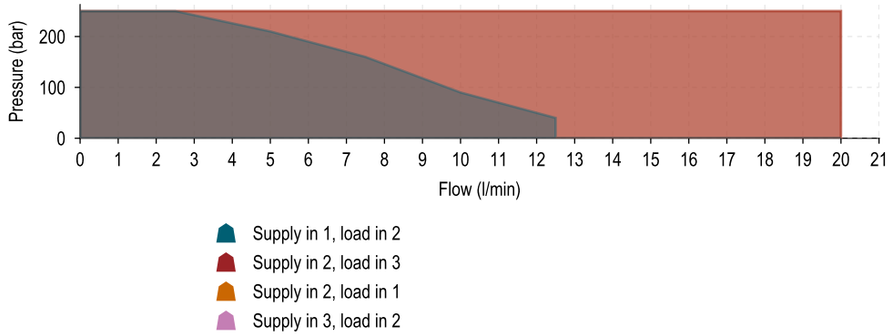
SV10.S10 GRAPHS

The performance chart illustrates flow handling capacity 2 to 3 and 3 to 2 (energized) 2 to 1 and 1 to 2 (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

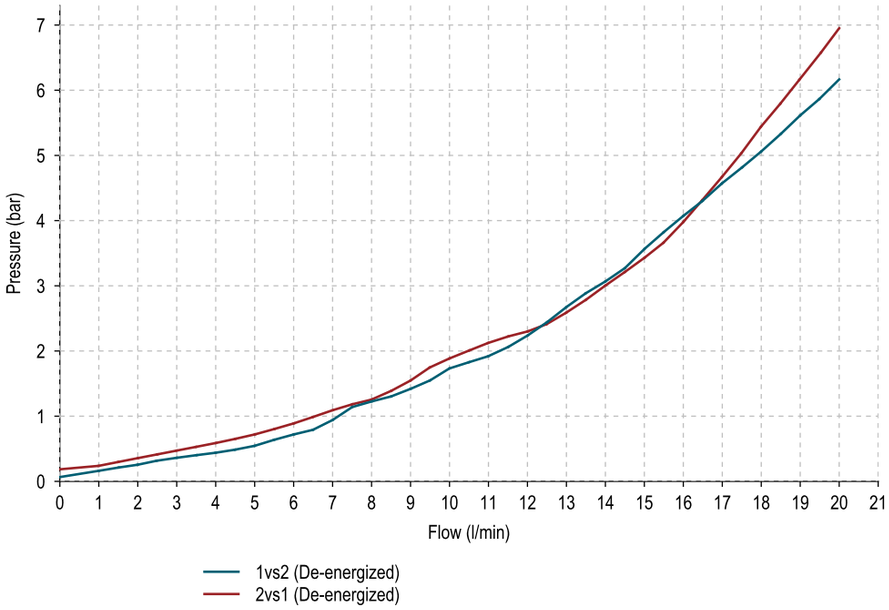
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



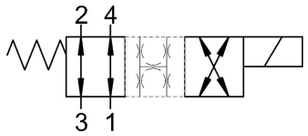
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme A

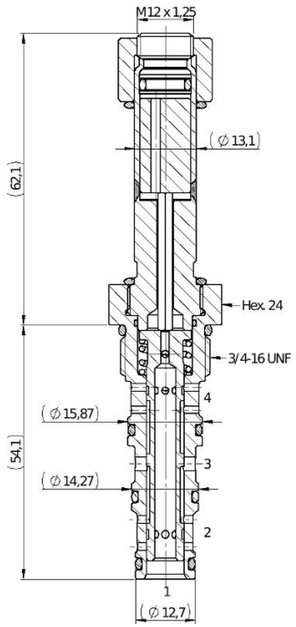
HYDRAULIC SYMBOL



DESCRIPTION

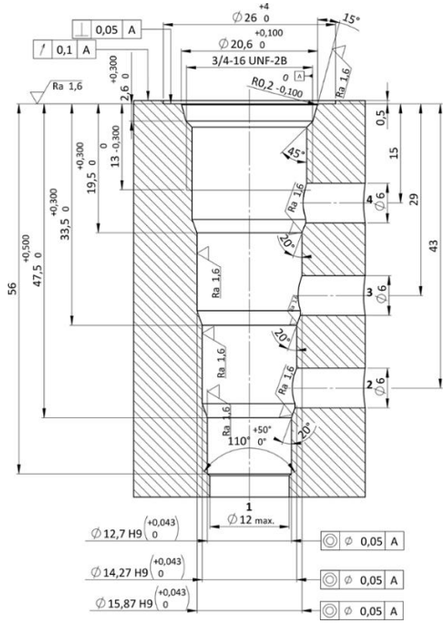
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 flow paths are 1 to 4 and 3 to 2. In the energized mode the valve's spool shifts to open 1 to 2 and 3 to 4. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. All ports are connected at crossover. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	A	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 2 and 1 to 4 (De-energized)

3 to 4 and 1 to 2 (Energized)

MANUAL OVERRIDE

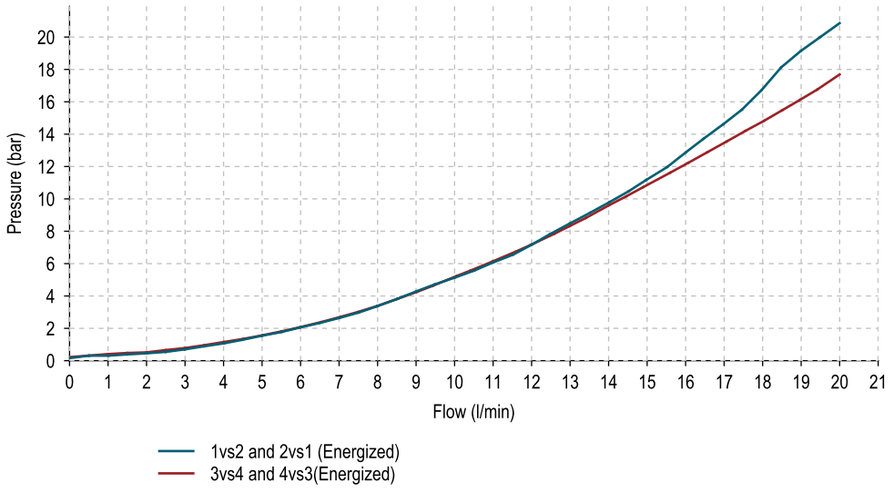
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

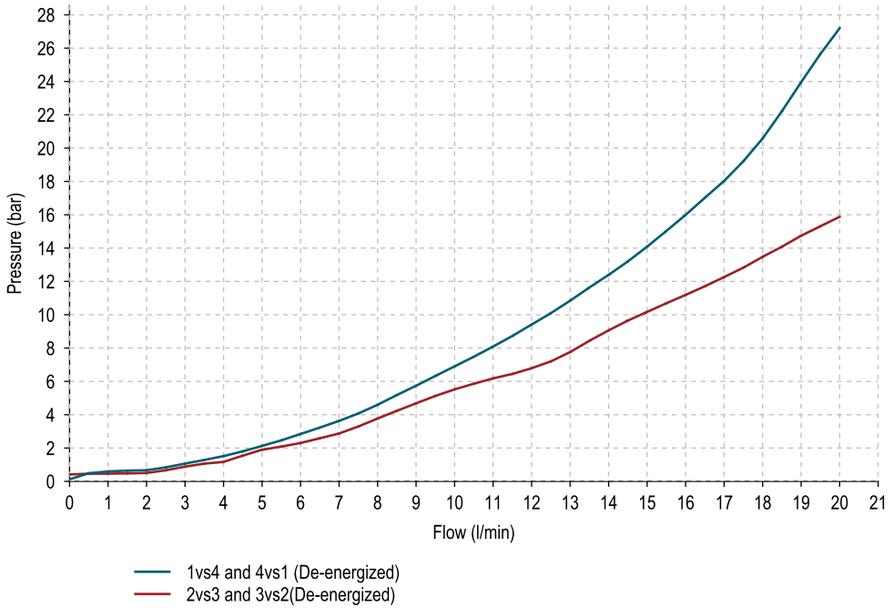
SVA0.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

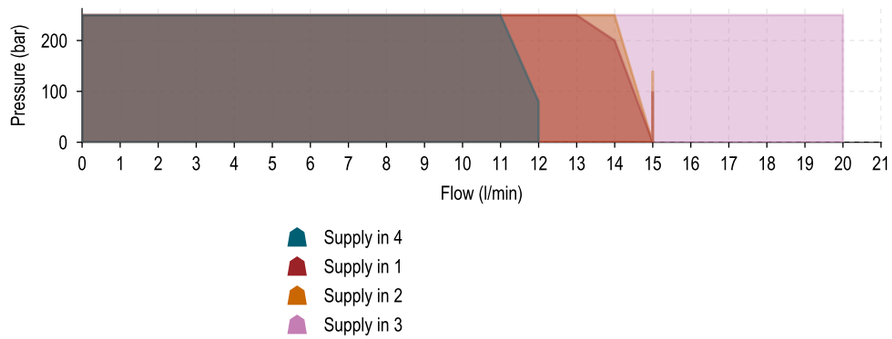
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



WARNING

In (de-)energized configuration, port 4 cannot be used over 12 l/min.

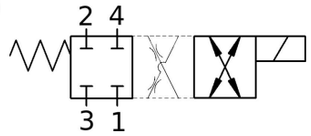
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme B

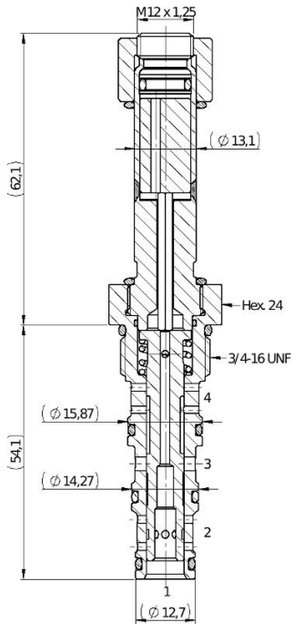
HYDRAULIC SYMBOL



DESCRIPTION

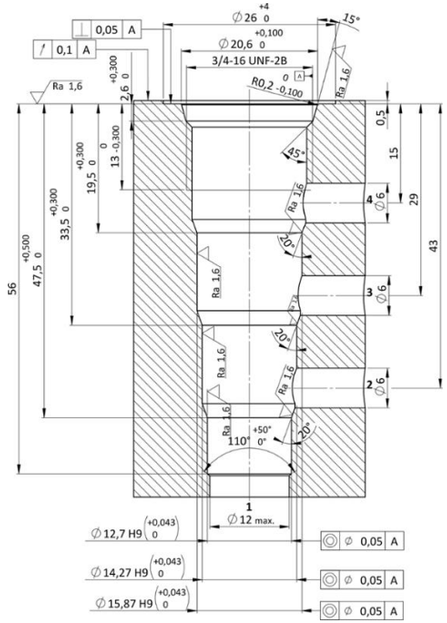
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 blocks flow at all ports. In the energized mode the valve's spool shifts to open 1 to 2 and 3 to 4. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	B	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 4 and 1 to 2 (Energized)

All ports blocked (De-energized)

MANUAL OVERRIDE

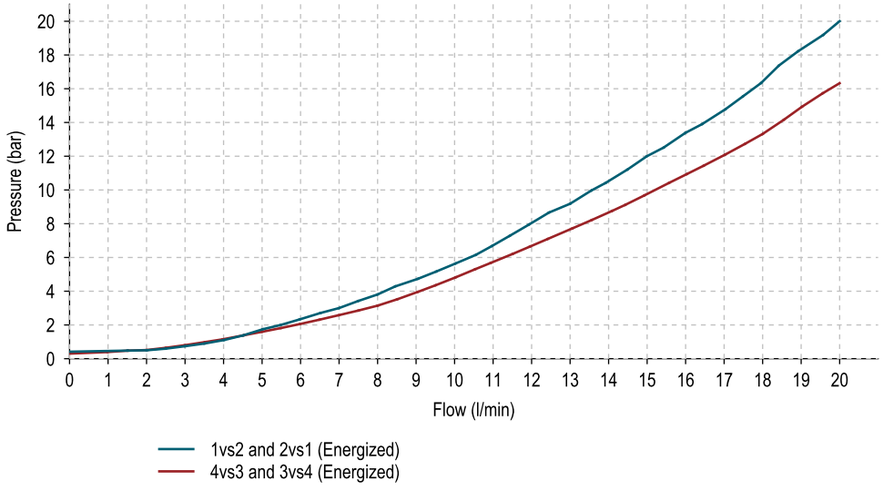
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

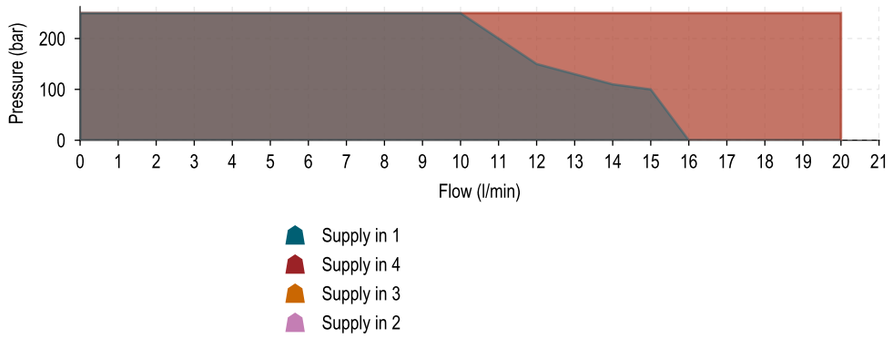
SVAO.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



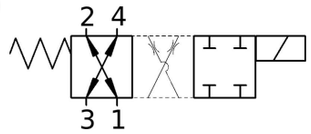
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme C

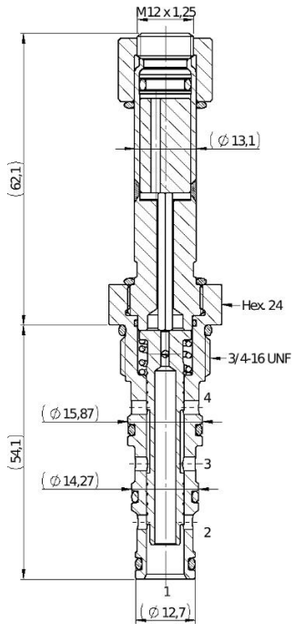
HYDRAULIC SYMBOL



DESCRIPTION

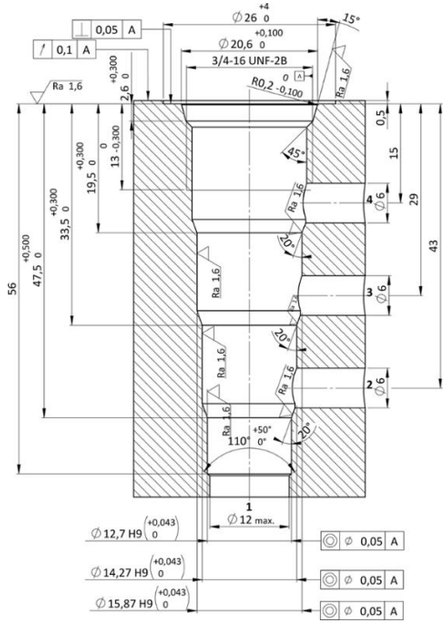
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 flow paths are 1 to 2 and 3 to 4. In the energized mode the SVA0.S08 blocks flow at all ports. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	C	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 4 and 1 to 2 (De-energized)

All ports blocked (Energized)

MANUAL OVERRIDE

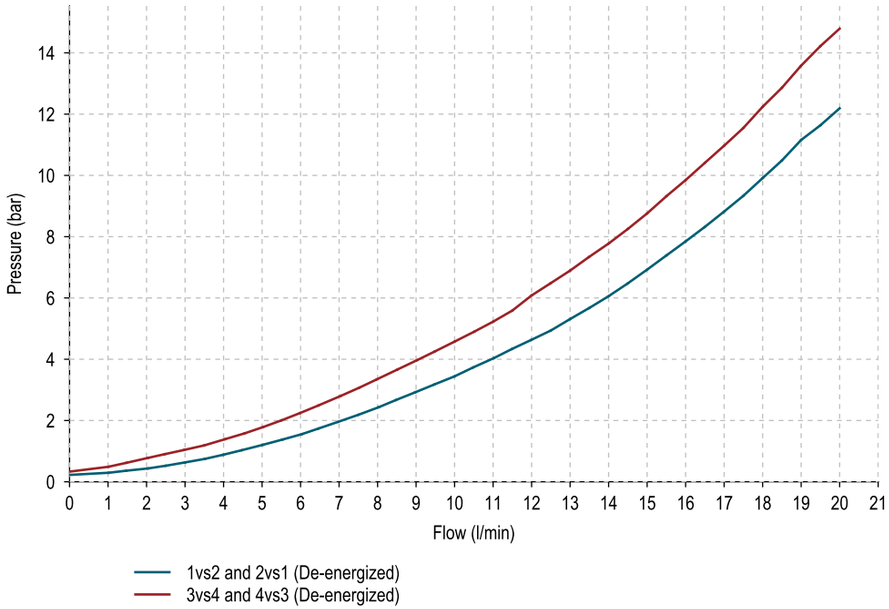
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

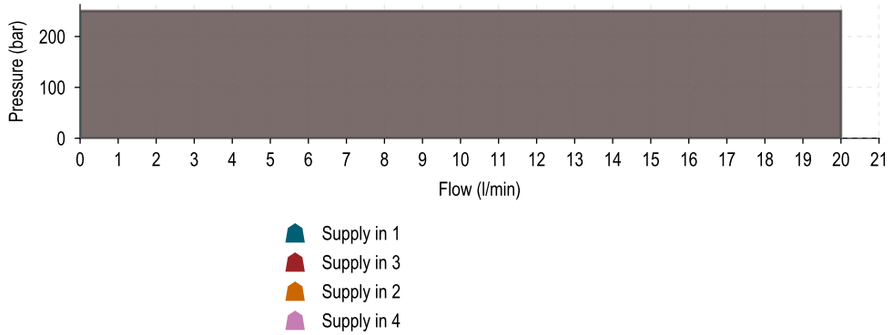
SVA0.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS



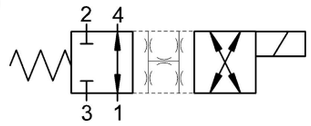
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme D

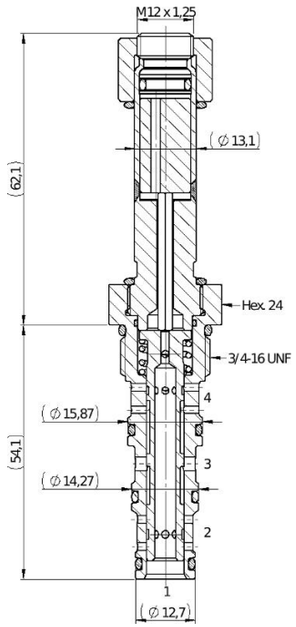
HYDRAULIC SYMBOL



DESCRIPTION

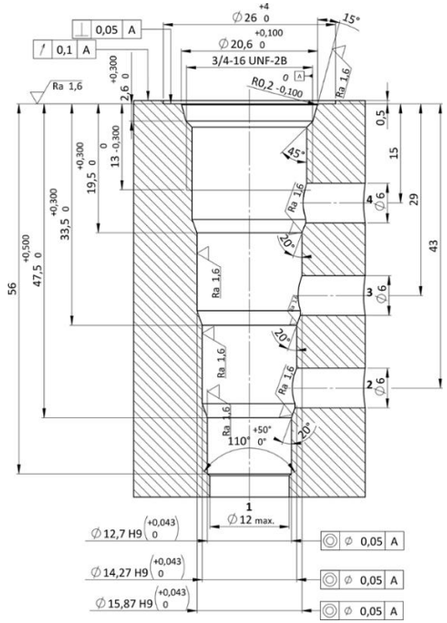
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 allows flow between 4 to 1, while blocking flow between 2 and 3. In the energized mode the valve's spool shifts to open 2 to 1 and 4 to 3. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	D	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

2 to 1 and 3 to 4 (Energized)

4 to 1 (De-energized)

MANUAL OVERRIDE

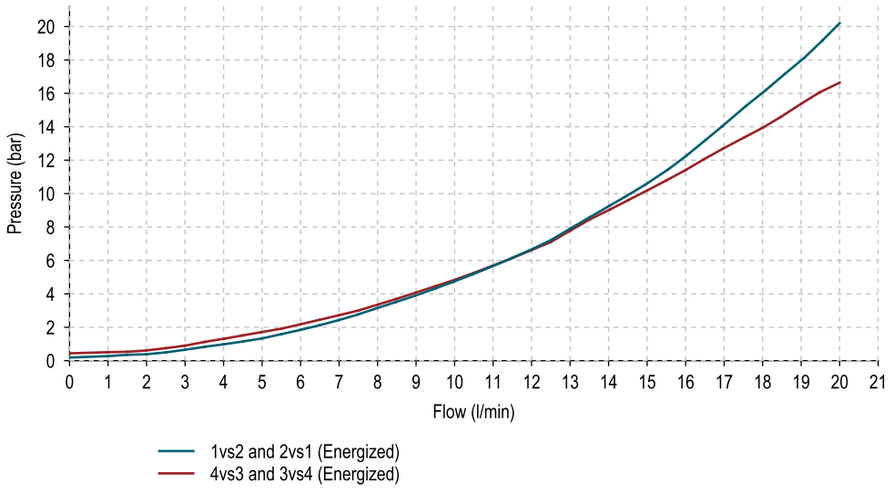
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

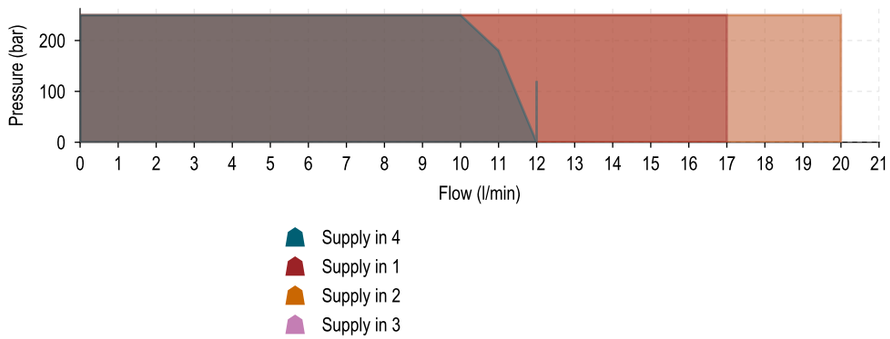
SVA0.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

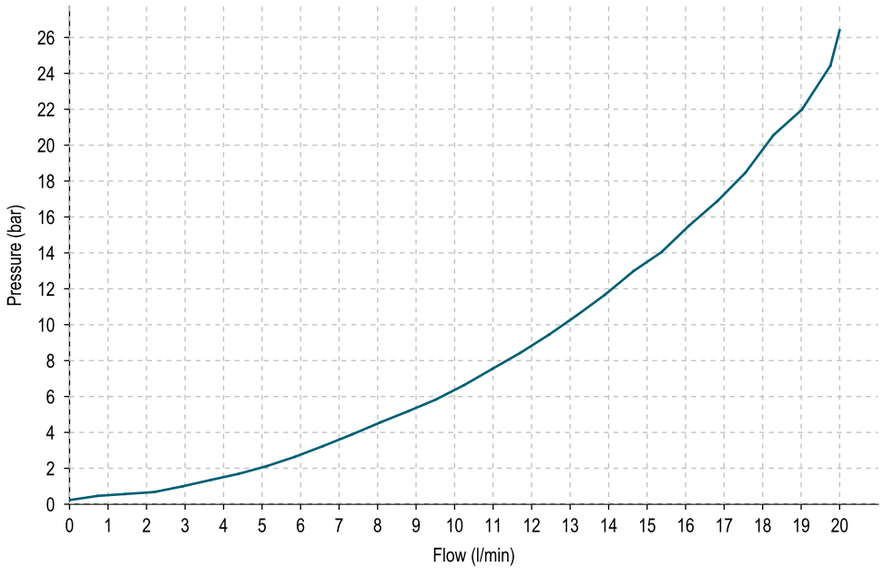
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



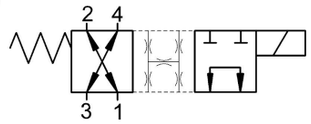
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme E

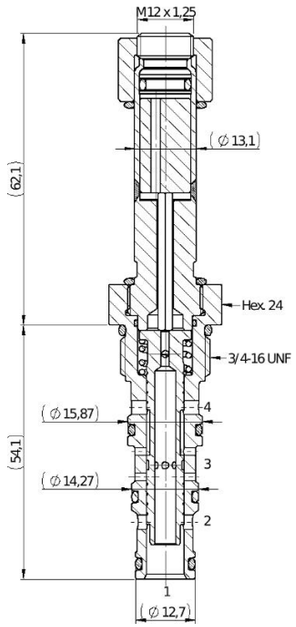
HYDRAULIC SYMBOL



DESCRIPTION

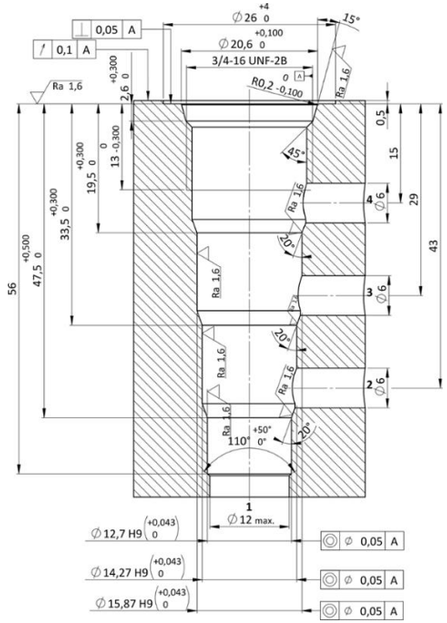
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 flow paths are 2 to 1 and 3 to 4. In the energized mode the SVA0.S08 allows flow between 3 to 1, while blocking flow between 2 and 4. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	E	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 1 (Energized)

3 to 4 and 2 to 1 (De-energized)

MANUAL OVERRIDE

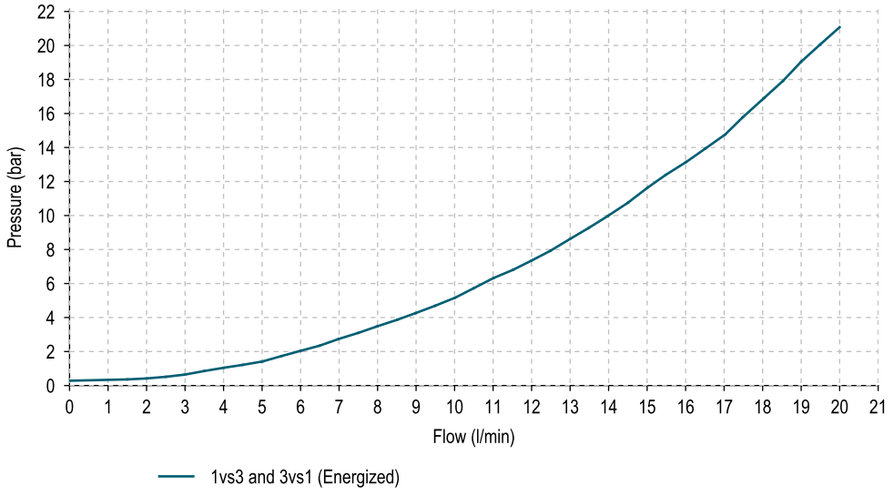
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

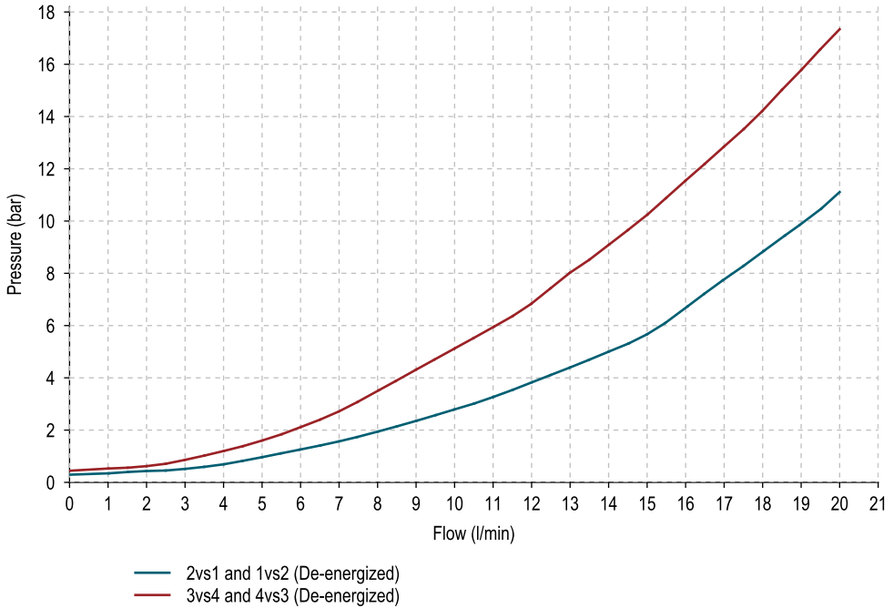
SVA0.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

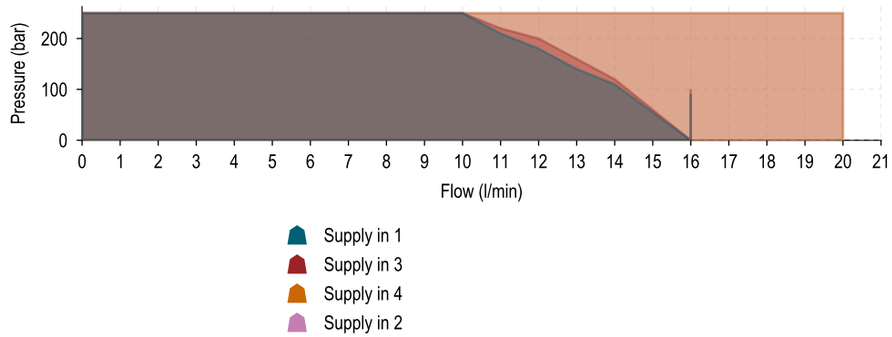
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



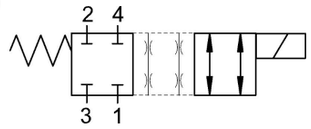
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme F

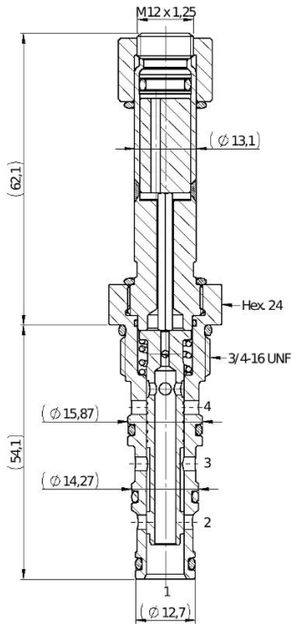
HYDRAULIC SYMBOL



DESCRIPTION

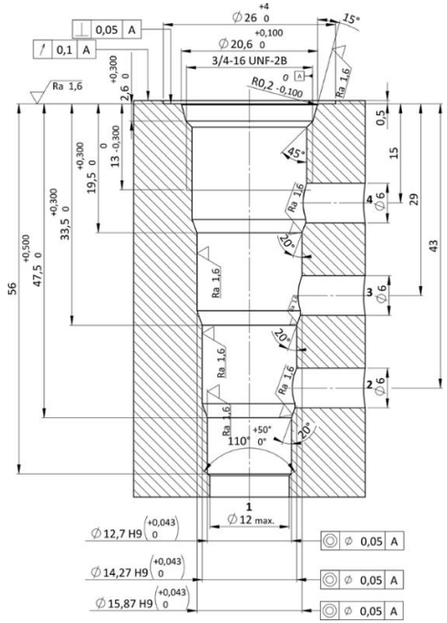
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 blocks flow at all ports. In the energized mode the SVA0.S08 flow paths are 1 to 4 and 3 to 2. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	F	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 2 and 1 to 4 (Energized)

All ports blocked (De-energized)

MANUAL OVERRIDE

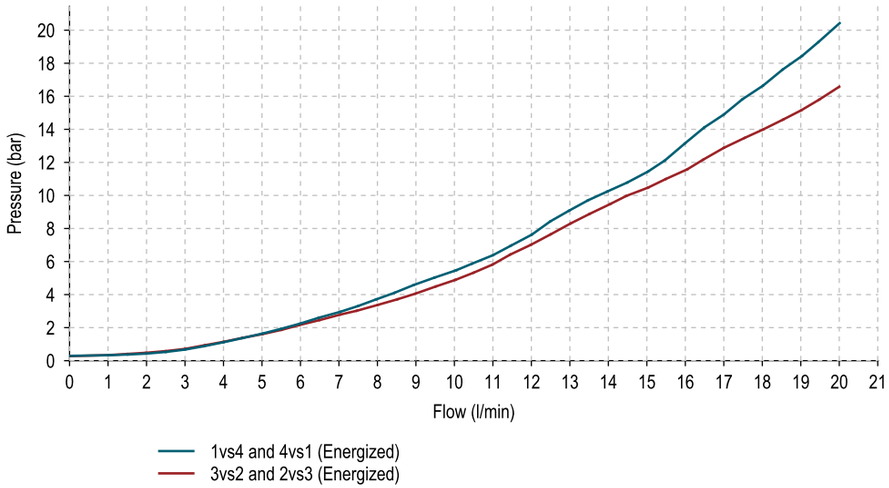
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

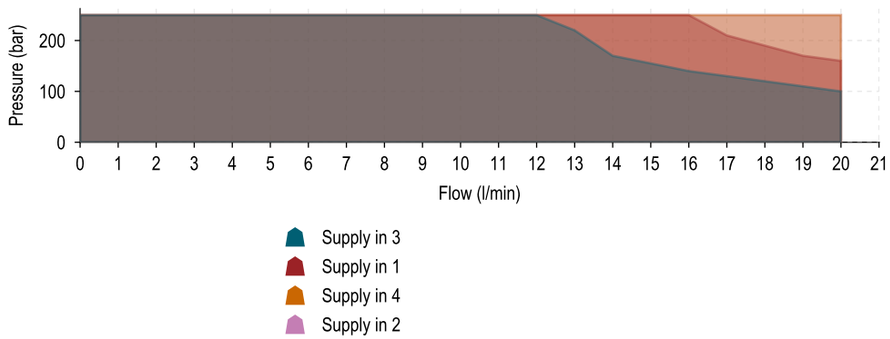
SVAO.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



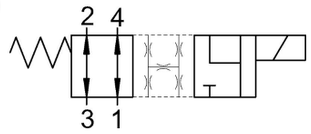
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme G

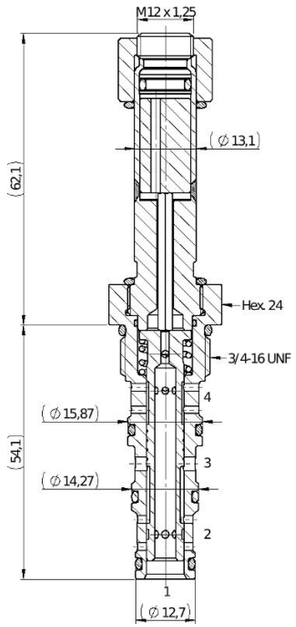
HYDRAULIC SYMBOL



DESCRIPTION

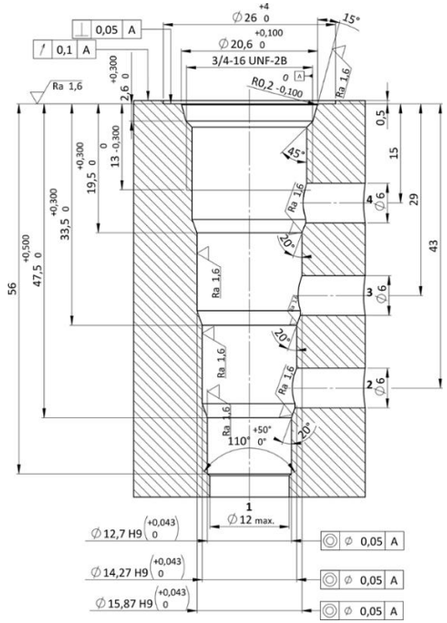
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 flow paths are 1 to 4 and 3 to 2. In the energized mode the SVA0.S08 allows flow between 2, 4 and 1, while blocking flow at 3. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	G	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 to 4 and 2 (Energized)

3 to 2 and 1 to 4 (De-energized)

MANUAL OVERRIDE

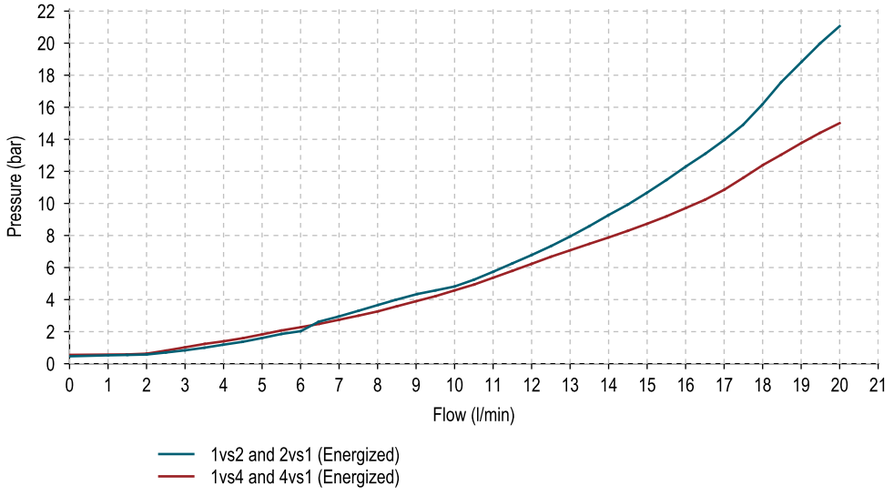
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

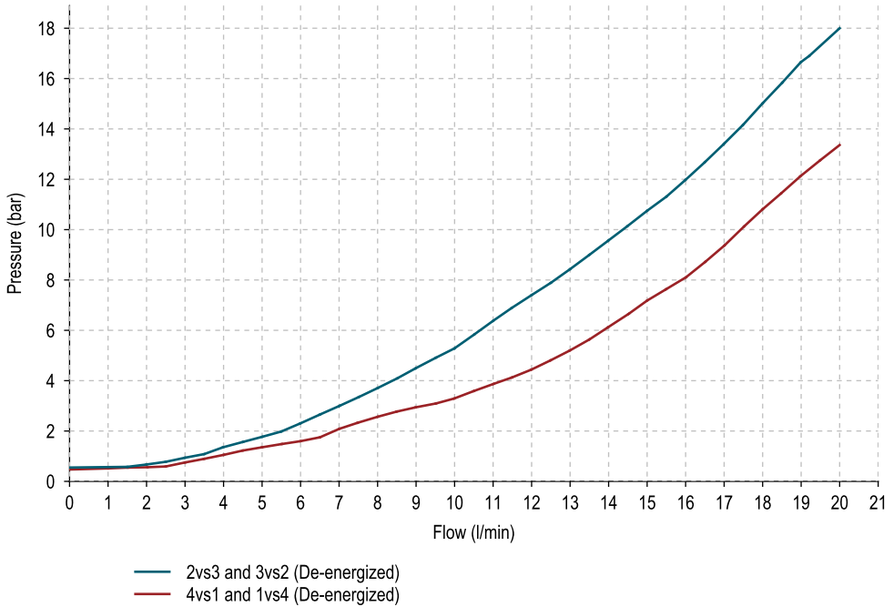
SVAO.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

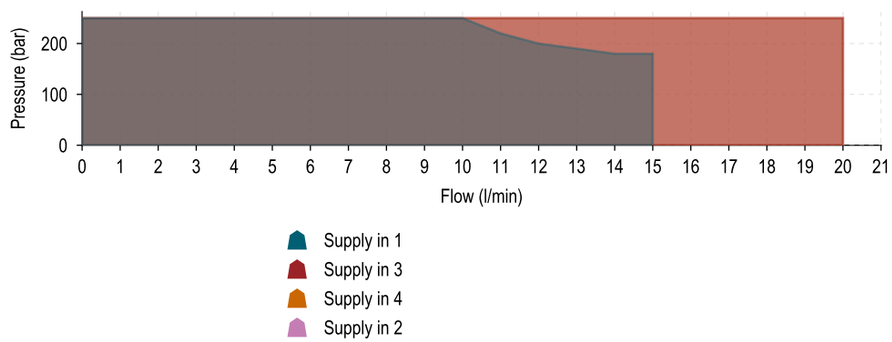
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



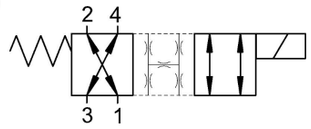
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme H

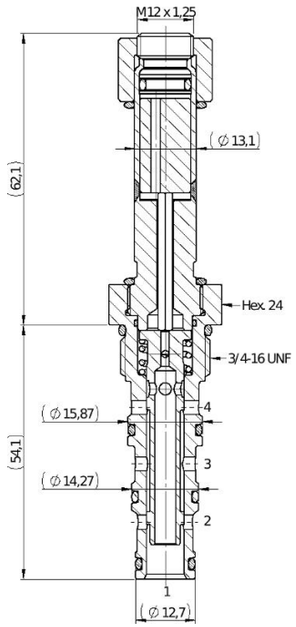
HYDRAULIC SYMBOL



DESCRIPTION

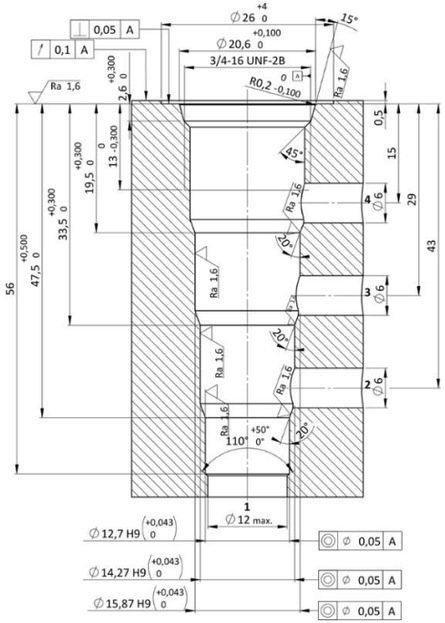
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S08 flow paths are 1 to 2 and 3 to 4. In the energized mode the SVA0.S08 flow paths are 1 to 4 and 3 to 2. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	H	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 2 and 1 to 4 (Energized)

3 to 4 and 1 to 2 (De-energized)

MANUAL OVERRIDE

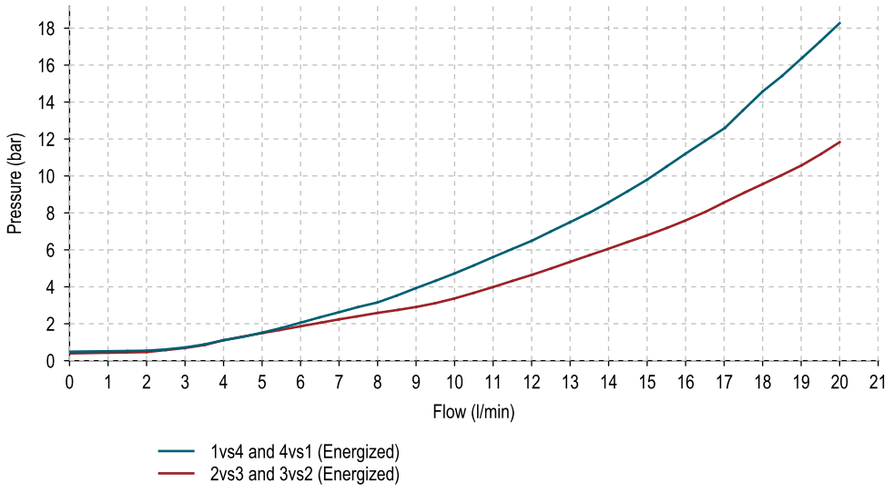
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

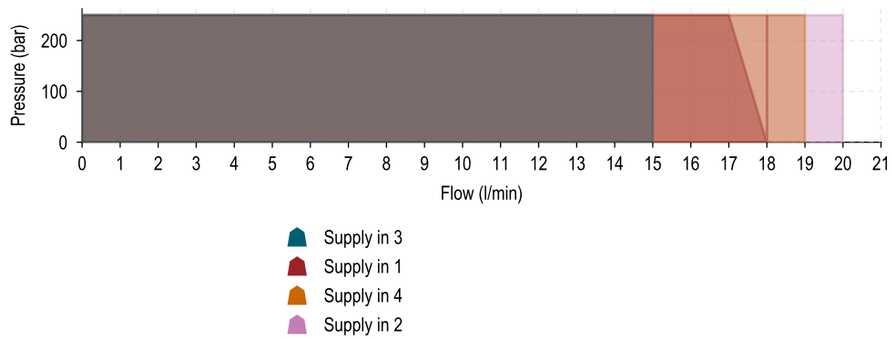
SVA0.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

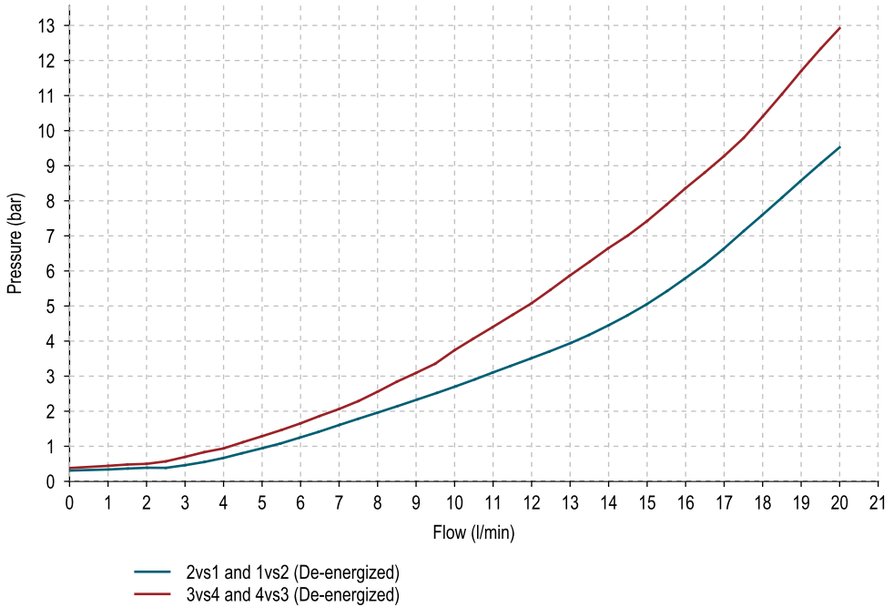
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



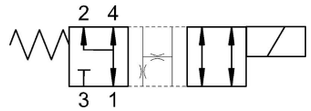
SVA0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme I

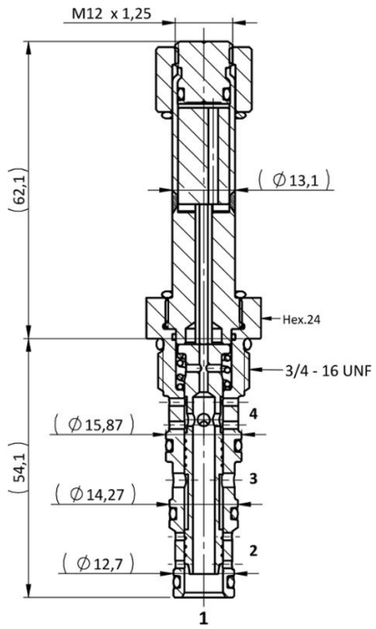
HYDRAULIC SYMBOL



DESCRIPTION

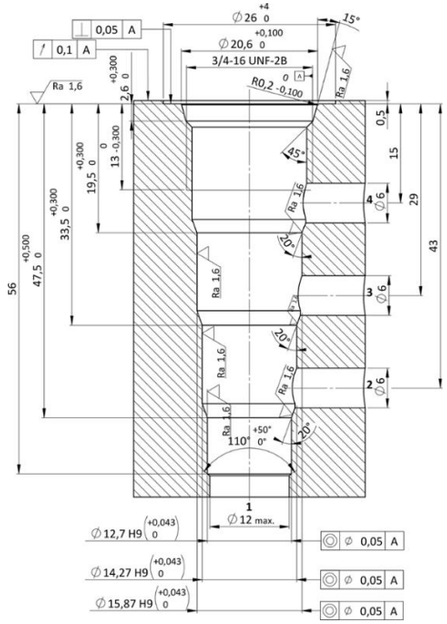
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the energized mode the SVA0.S08 flow paths are 1 to 4 and 3 to 2. In the de-energized mode the SVA0.S08 allows flow between 2, 4 and 1, while blocking flow at 3. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	150 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	25-30 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (coil) (standard sealing NBR-BUNA-N)
COIL	22 W (for more details see page 769 - 781) 20,5 W (Upon customer request - for more details see page 769 - 781)
WEIGHT	0,160 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	A	0	·	S	0	8	·	0	*	·	I	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

1 to 4 and 2 (De-energized)

3 to 2 and 1 to 4 (Energized)

MANUAL OVERRIDE

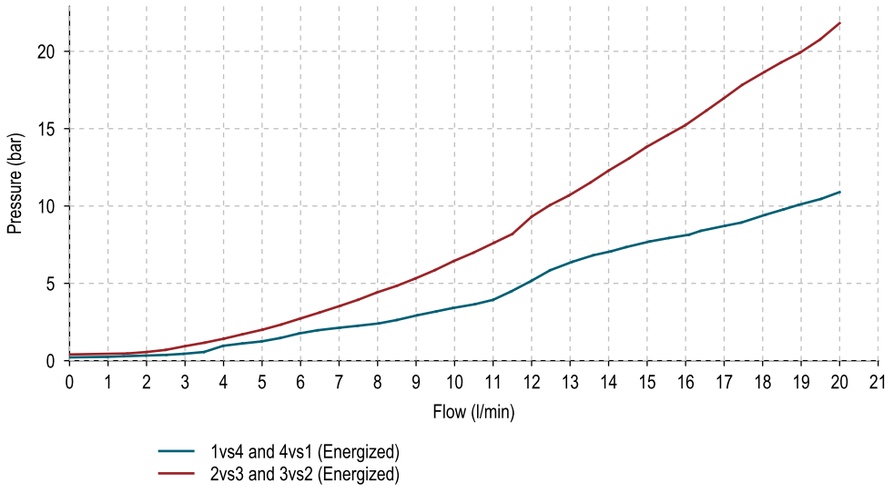
Model code	Type of override
0	No override
3	Push pin
4	Push knob
8	Screw

Specifications may change without notice.

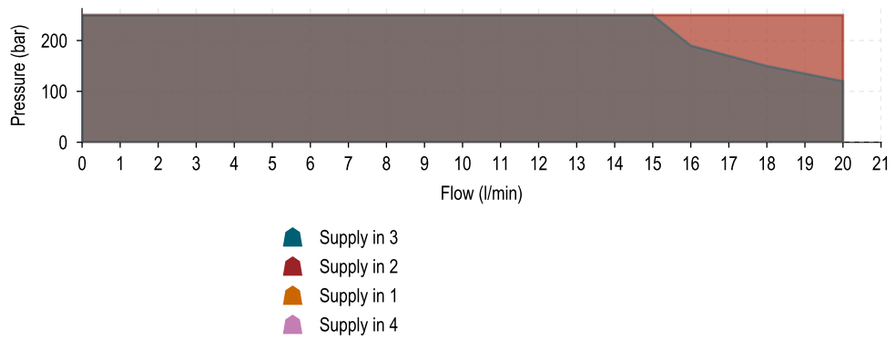
SVAO.S08 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

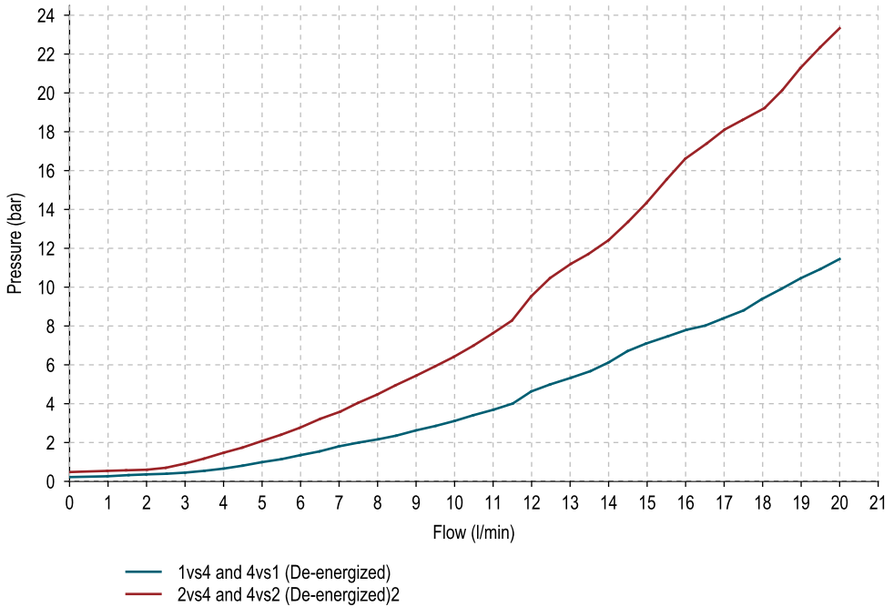
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED

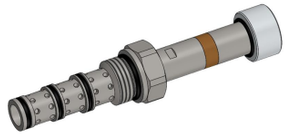


SVA0.S10 VALVE SERIES

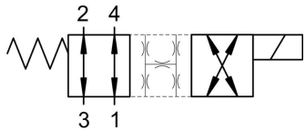
SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme A



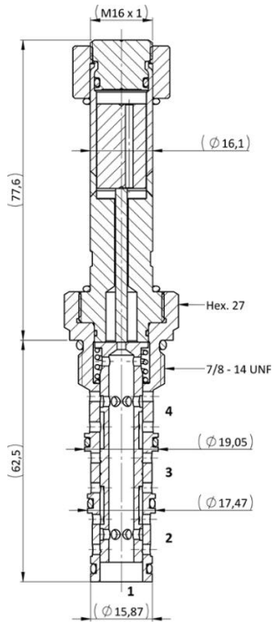
HYDRAULIC SYMBOL



DESCRIPTION

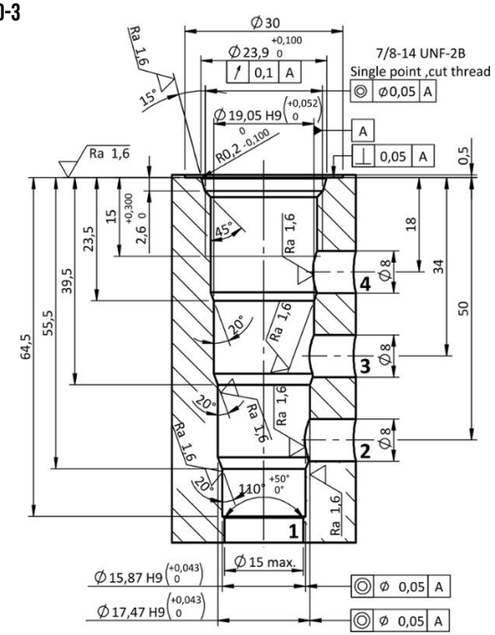
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S10 flow paths are 1 to 4 and 3 to 2. In the energized mode the valve's spool shifts to open 1 to 2 and 3 to 4. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. All ports are connected at crossover. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	100 cm^3 / min @ 250 bar 314 cm^3 / min @ 250 bar Direction 2vs3 with Energized Coil
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,242 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected

S V A 0	·	S 1 0	·	0 0	·	A 0 *

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 2 and 4 to 1 (De-energized)

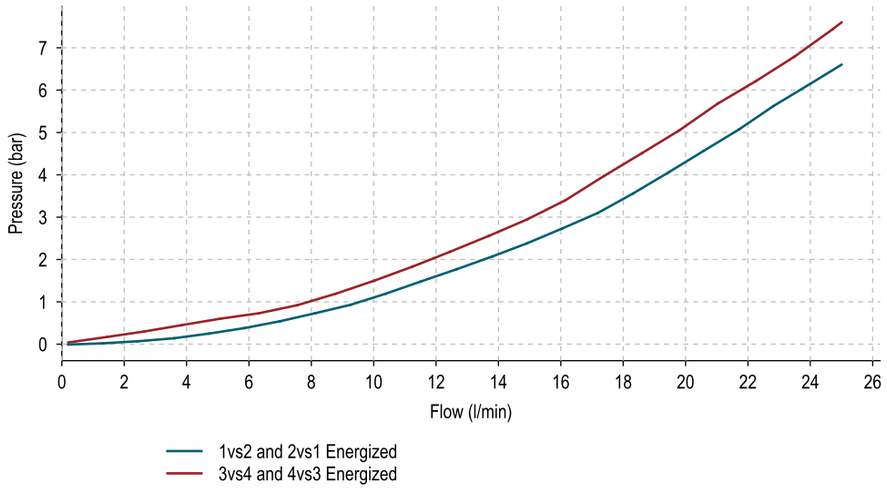
3 to 4 and 2 to 1 (Energized)

Specifications may change without notice.

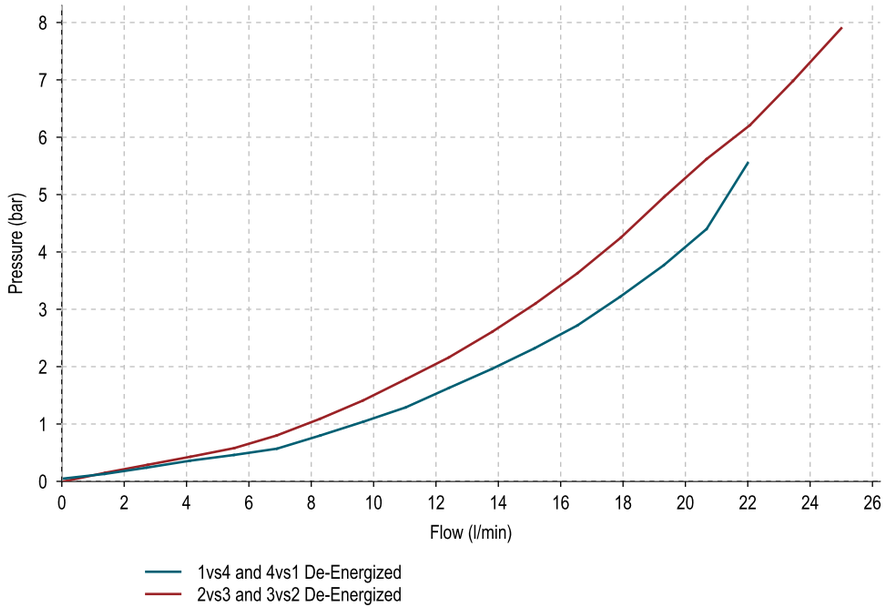
SVA0.S10 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

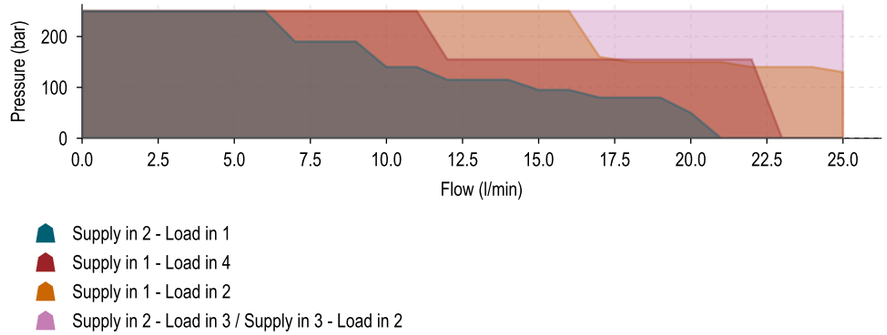
ENERGIZED



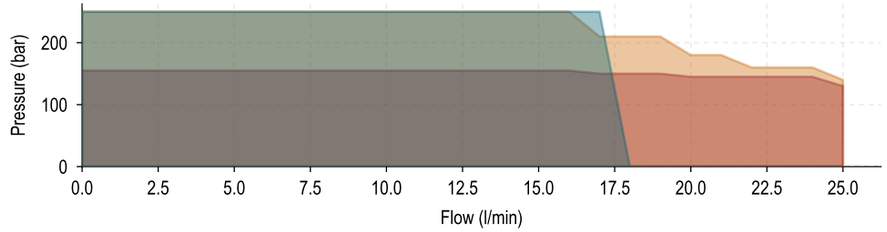
DE-ENERGIZED



PERFORMANCE LIMITS



PERFORMANCE LIMITS



WARNING

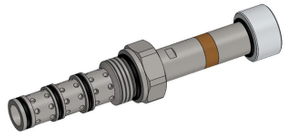
In (de-)energized configuration, port 4 cannot be used over 22 l/min.

SVA0.S10 VALVE SERIES

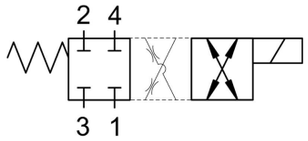
SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme B



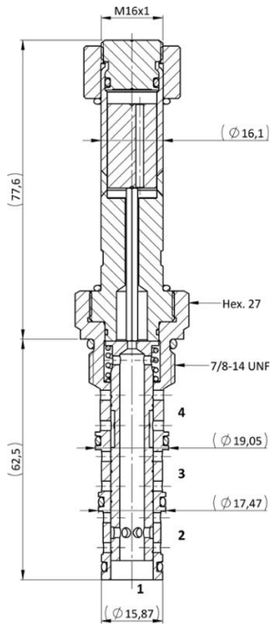
HYDRAULIC SYMBOL



DESCRIPTION

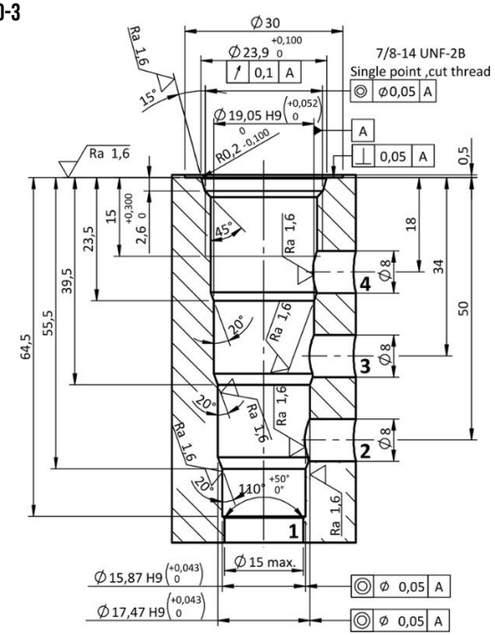
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S10 blocks flow at all ports. In the energized mode the valve's spool shifts to open 1 to 2 and 3 to 4. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with libricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,245 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected

S	V	A	0	·	S	1	0	·	0	0	·	B	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 4 and 1 to 2 (Energized)

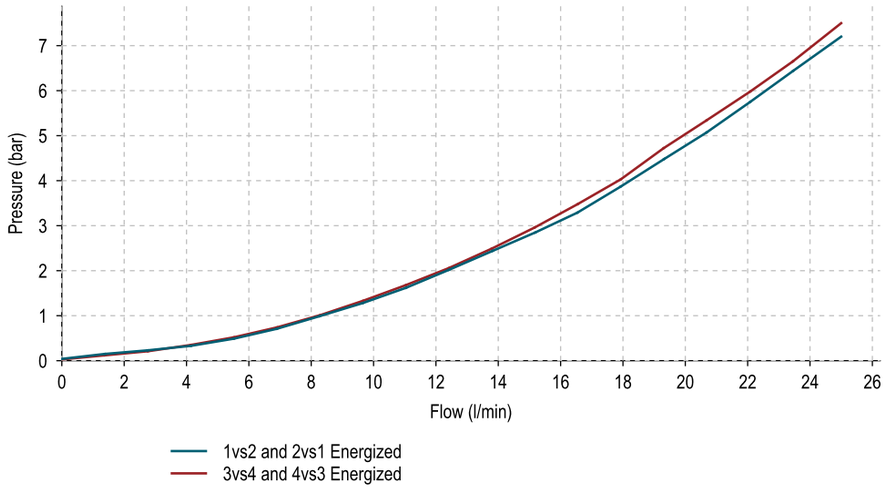
All ports blocked (De-Energized)

Specifications may change without notice.

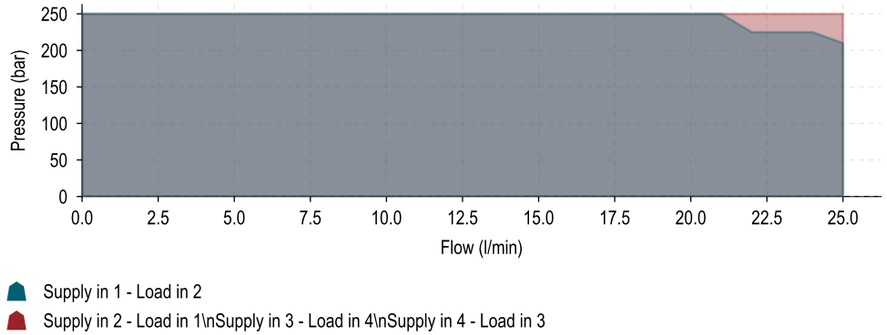
SVAO.S10 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (Energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



NOTE

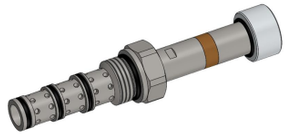
The performance chart illustrates flow handling capacity in all possible directions (Energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

SVA0.S10 VALVE SERIES

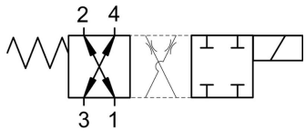
SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme C



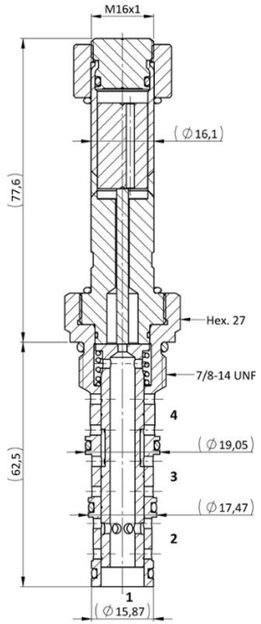
HYDRAULIC SYMBOL



DESCRIPTION

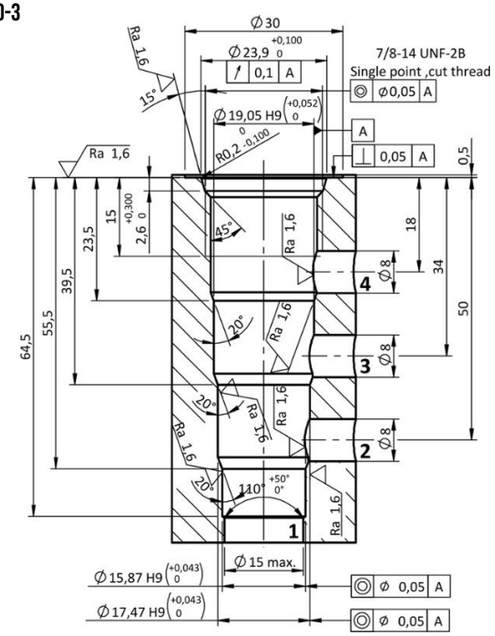
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S10 flow paths are 1 to 2 and 3 to 4. In the energized mode the SVA0.S10 blocks flow at all ports. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VS 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,245 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected.

S V A 0	·	S 1 0	·	0 0	·	C 0 *

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 4 and 2 to 1 (De-Energized)

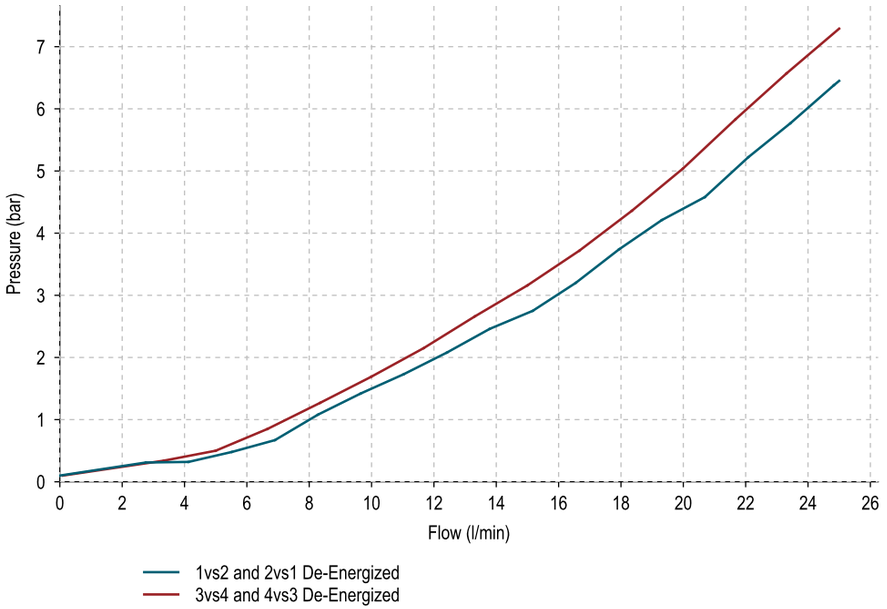
All ports blocked (Energized)

Specifications may change without notice.

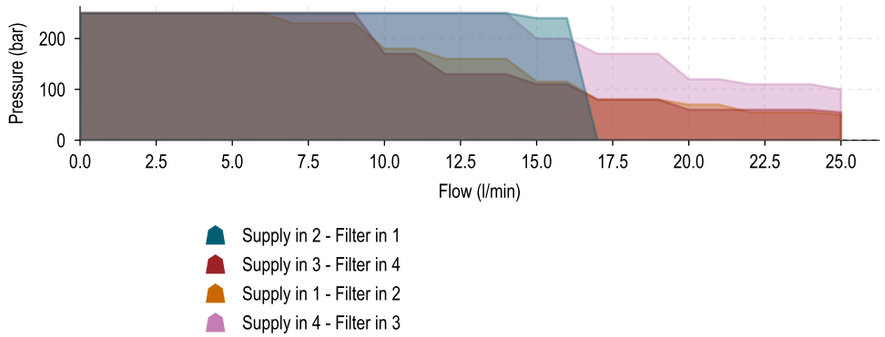
SVA0.S10 GRAPHS

The performance chart illustrates flow handling capacity in all possible directions (De-energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

DE-ENERGIZED



PERFORMANCE LIMITS

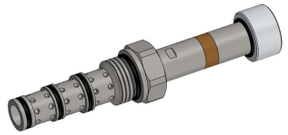


SVA0.S10 VALVE SERIES

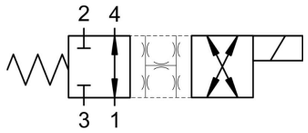
SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme D



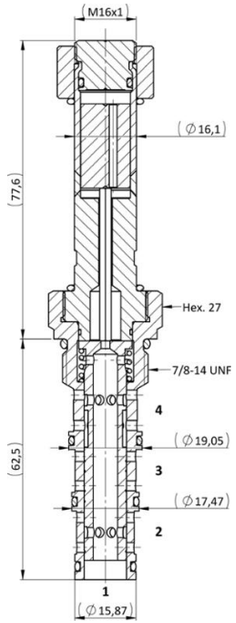
HYDRAULIC SYMBOL



DESCRIPTION

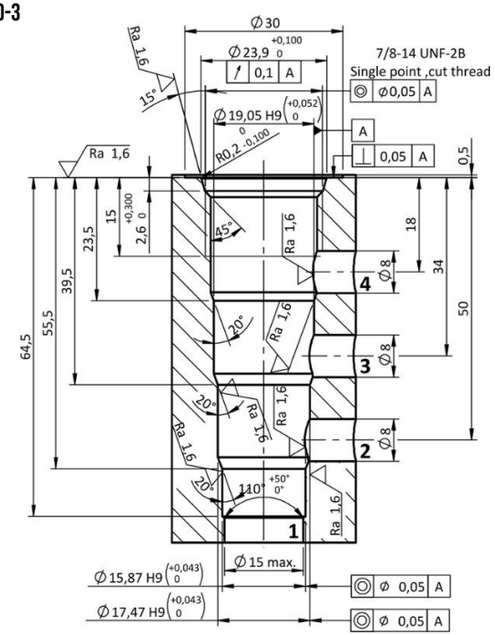
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S10 allows flow between 4 to 1, while blocking flow between 2 and 3. In the energized mode the valve's spool shifts to open 2 to 1 and 4 to 3. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,244 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected

S	V	A	0	·	S	1	0	·	0	0	·	D	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 noses sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

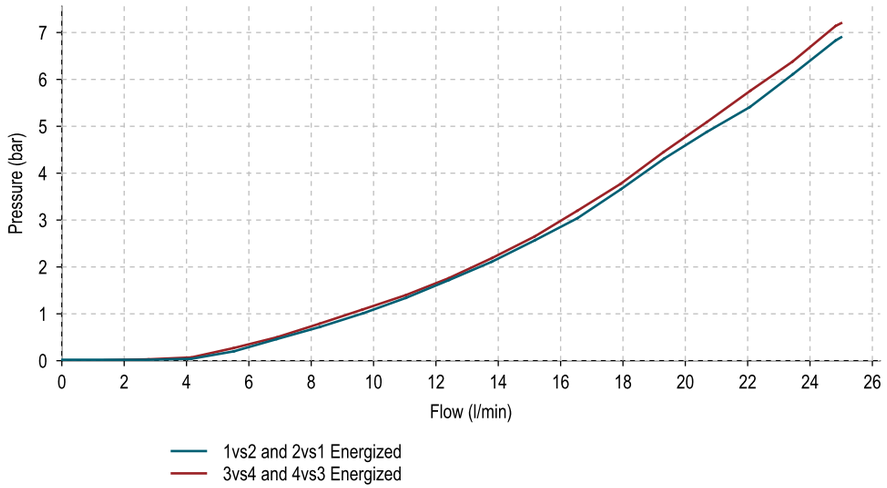
2 to 1 and 3 to 4 (Energized)

4 to 1 (De-Energized)

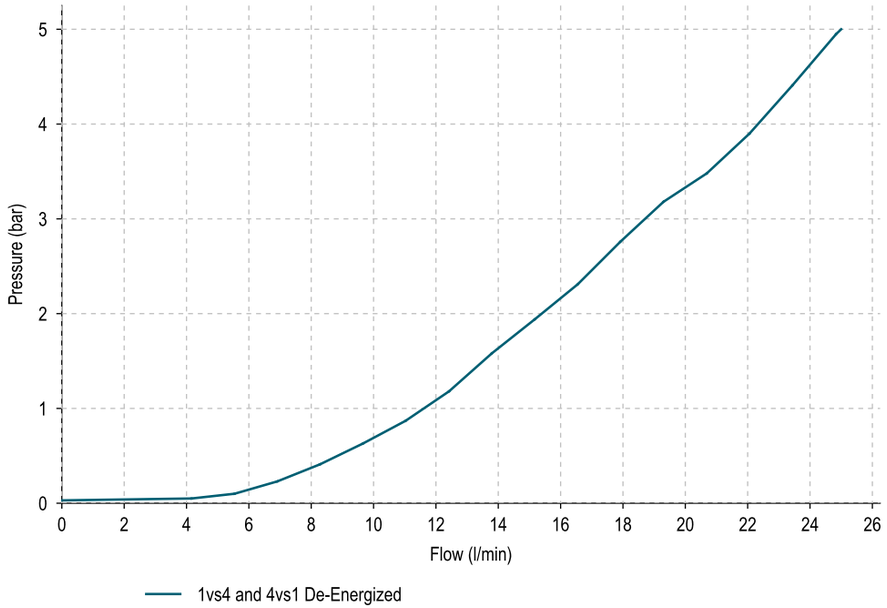
Specifications may change without notice.

SVAO.S10 GRAPHS

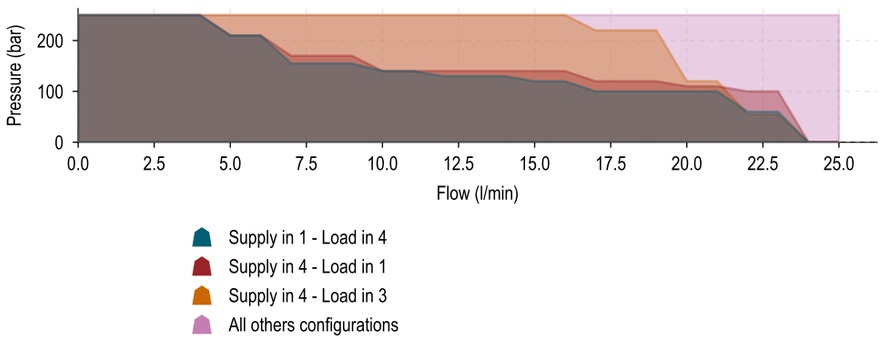
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



NOTE

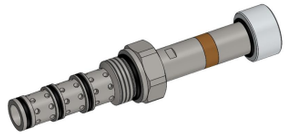
The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

SVA0.S10 VALVE SERIES

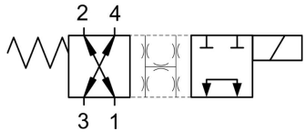
SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme E



HYDRAULIC SYMBOL



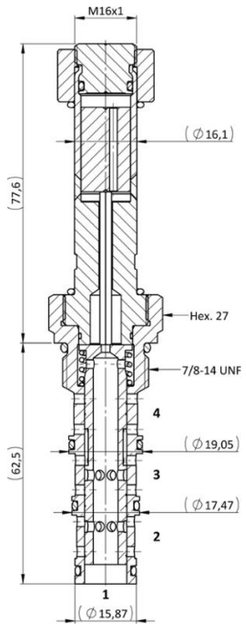
DESCRIPTION

A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S10 flow paths are 2 to 1 and 3 to 4. In the energized mode the SVA0.S10 allows flow between 3 to 1, while blocking flow between 2 and 4. All ports are connected at crossover. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

TECHNICAL DATA

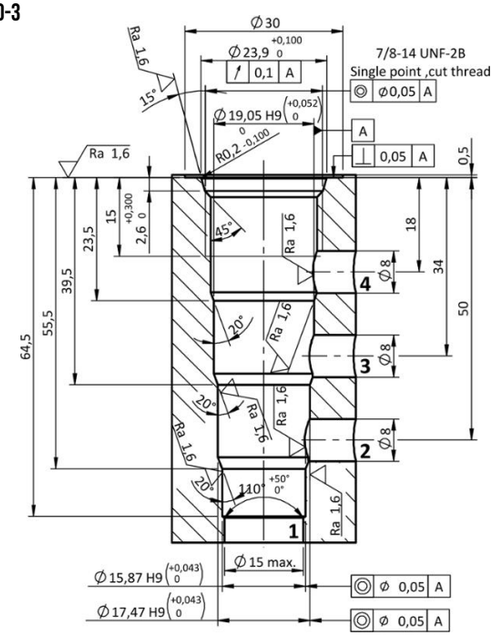
MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,244 kg

CROSS SECTION



CAVITY

SAE10-3



ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected.

S	V	A	0	·	S	1	0	·	0	0	·	E	0	*

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 noses sizes.

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

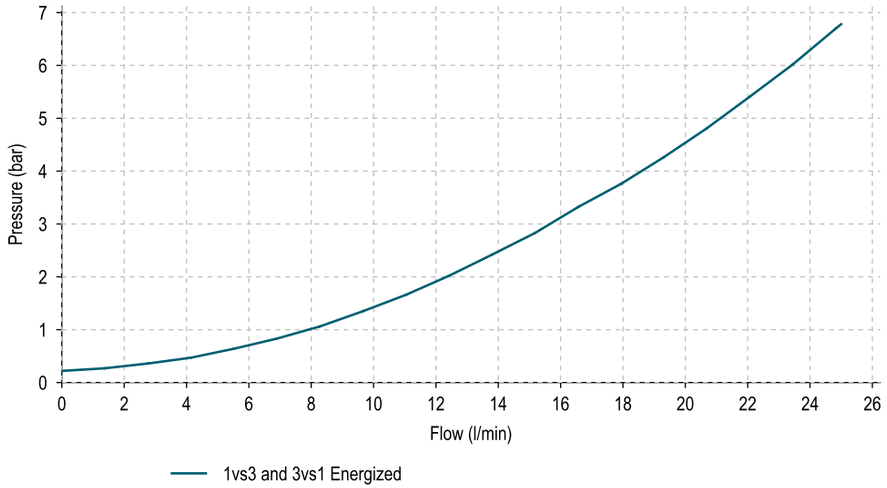
3 to 1 (Energized)

3 to 4 and 2 to 1 (De-Energized)

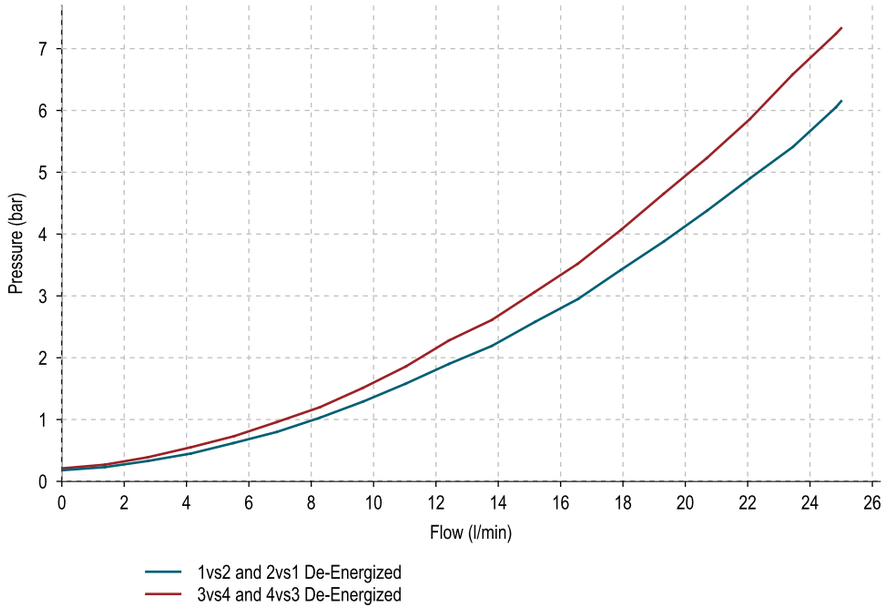
Specifications may change without notice.

SVAO.S10 GRAPHS

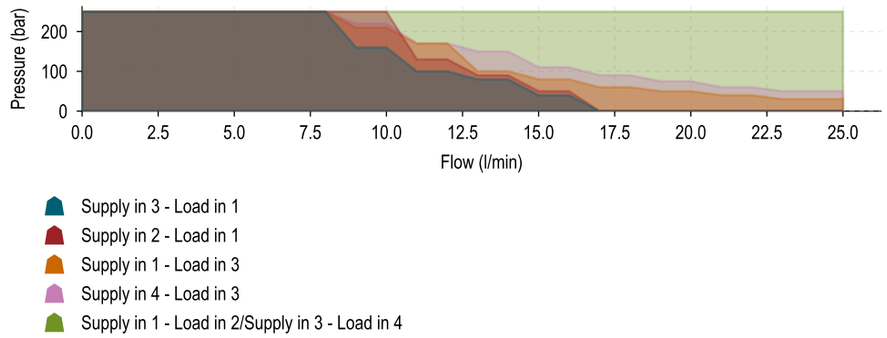
ENERGIZED



DE-ENERGIZED



PERFORMANCE LIMITS



NOTE

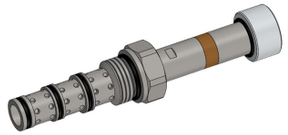
The performance chart illustrates flow handling capacity in all possible directions (de-energized/energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

SVA0.S10 VALVE SERIES

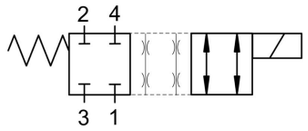
SAE Cartridge - 250 bar

Directional Valve - 4/2 Spool Type

Scheme F



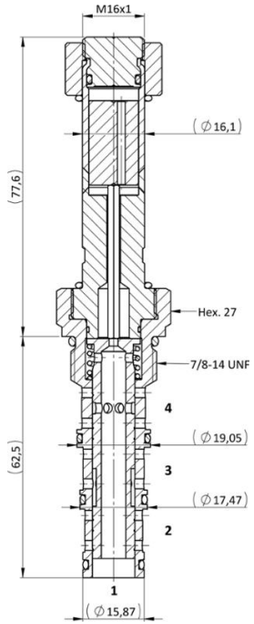
HYDRAULIC SYMBOL



DESCRIPTION

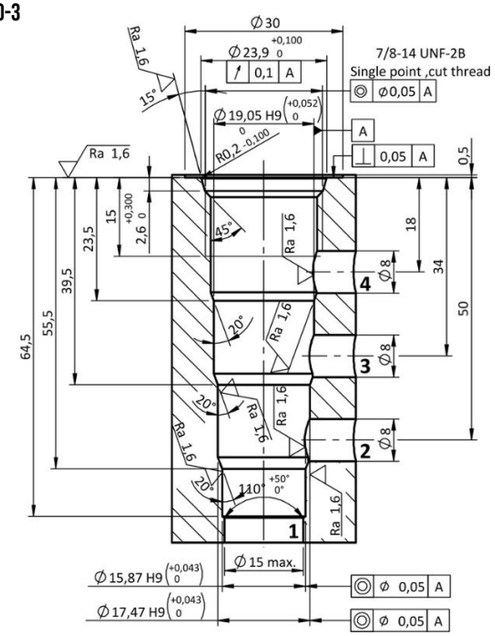
A solenoid valve operated, 4-way, 2-position, spool-type, direct-acting, screw-in hydraulic cartridge valve. In the de-energized mode the SVA0.S10 blocks flow at all ports. In the energized mode the SVA0.S10 flow paths are 1 to 4 and 3 to 2. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	80 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,425 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected

S V A 0	·	S 1 0	·	0 0	·	F 0 *

VALVE BASIC CODE

0= Standard. S= Inductive position switch upon request

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 noses sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

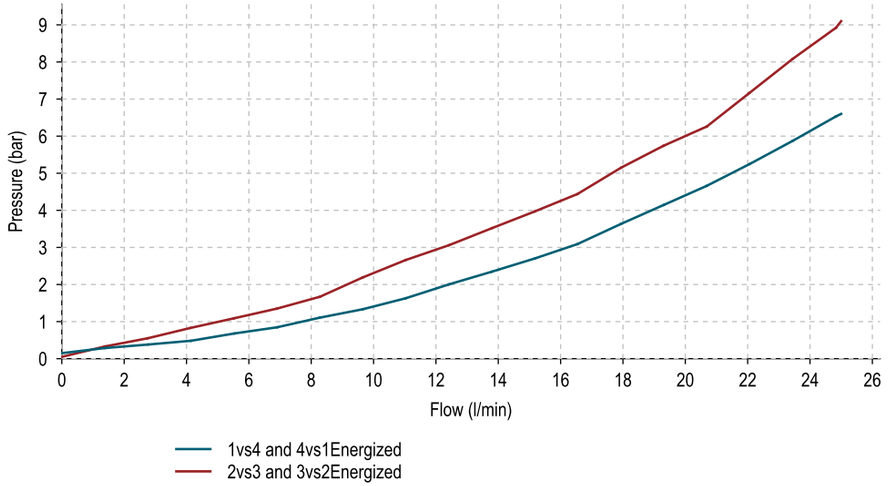
3 to 2 and 1 to 4 (Energized)

All ports blocked (De-Energized)

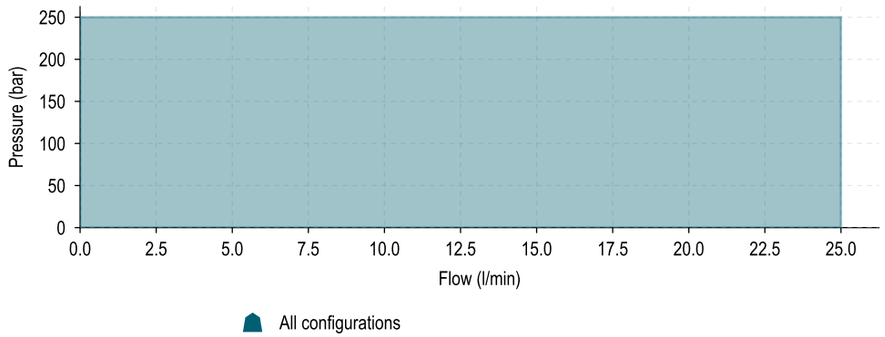
Specifications may change without notice.

SVAO.S10 GRAPHS

ENERGIZED



PERFORMANCE LIMITS



NOTE

The performance chart illustrates flow handling capacity in all possible directions (energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

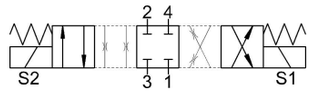
SVB0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/3 Spool Type

Scheme A

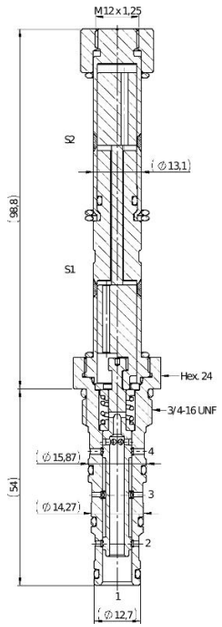
HYDRAULIC SYMBOL



DESCRIPTION

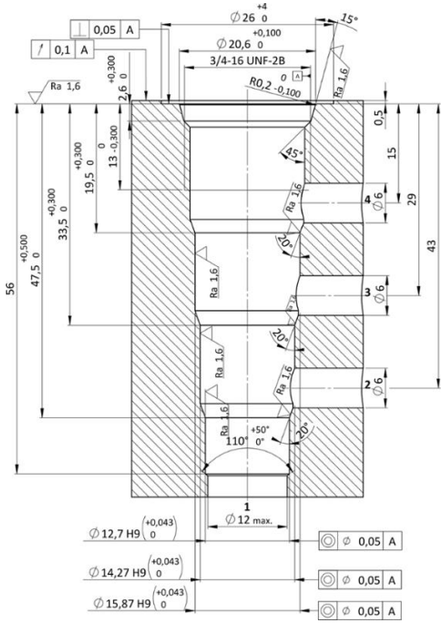
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode the SVB0.S08 blocks flow to all ports. When coil S1 (lower coil) is energized flow is allowed from 3 to 4 and from 2 to 1. When coil S2 (upper coil) is energized flow is allowed from 3 to 2 and from 4 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	120 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% of nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (one for each coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,183 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	B	0	·	S	0	8	·	0	*	·	A	0	*

VALVE BASIC CODE

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 2 and 4 to 1 (Energized) S2

3 to 4 and 2 to 1 (Energized) S1

All ports blocked (De-energized)

MANUAL OVERRIDE

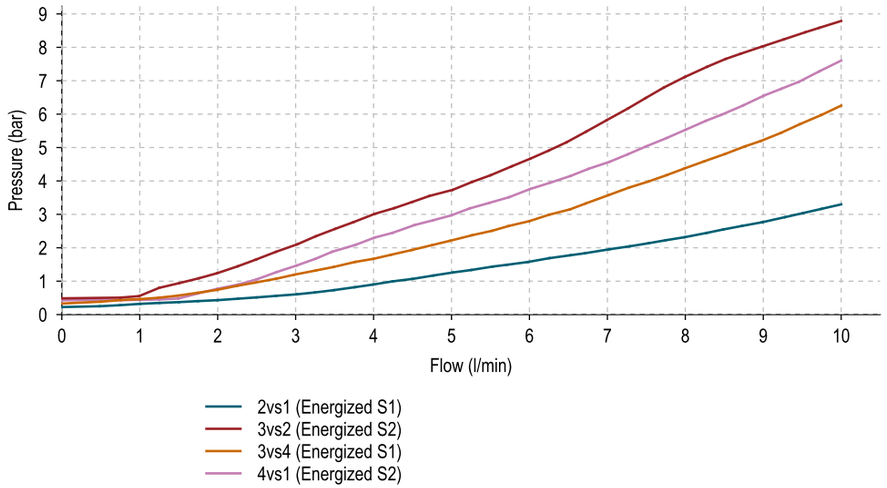
Model code	Type of override
0	No override

Specifications may change without notice.

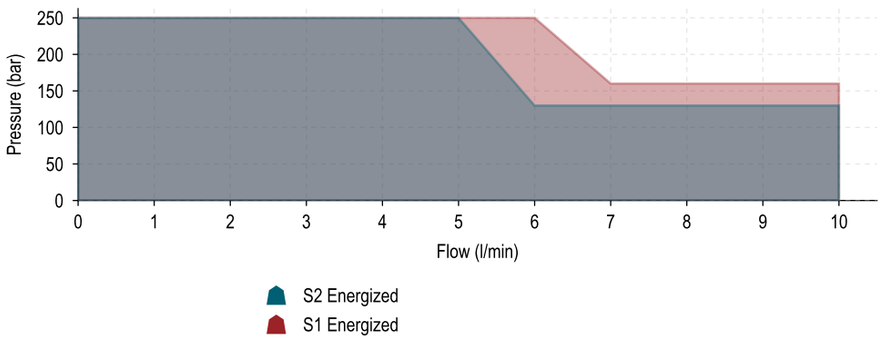
SVBO.S08 GRAPHS

The performance chart illustrates flow handling capacity 3 to 4 and 2 to 1 (energized S1) and 3 to 2 and 4 to 1 (energized S2).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS

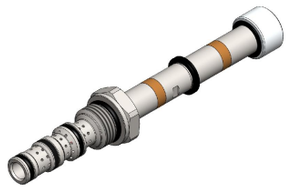


SVB0.S08 VALVE SERIES

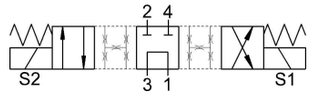
SAE Cartridge - 250 bar

Directional Valve - 4/3 Spool Type

Scheme B



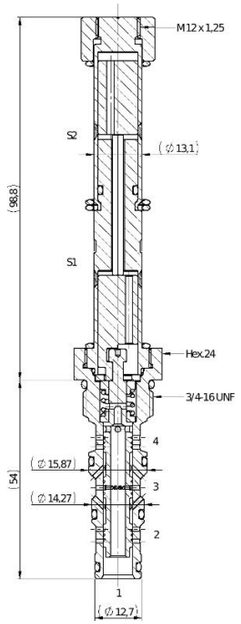
HYDRAULIC SYMBOL



DESCRIPTION

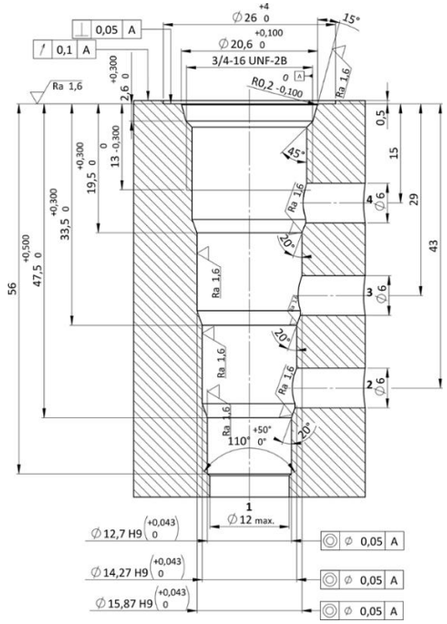
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode the SVB0.S08 blocks flow 2 and 4 while flow is allowed from 3 to 1 ports. When coil S1 (lower coil) is energized flow is allowed from 3 to 4 and from 2 to 1. When coil S2 (upper coil) is energized flow is allowed from 3 to 2 and from 4 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	120 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (one for each coil) (standard sealing NBR-BUNA-N)
COIL	22W (for more details see page 769 - 781)
WEIGHT	0,183 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V B 0	·	S 0 8	·	0 *	·	B 0 *

VALVE BASIC CODE

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override

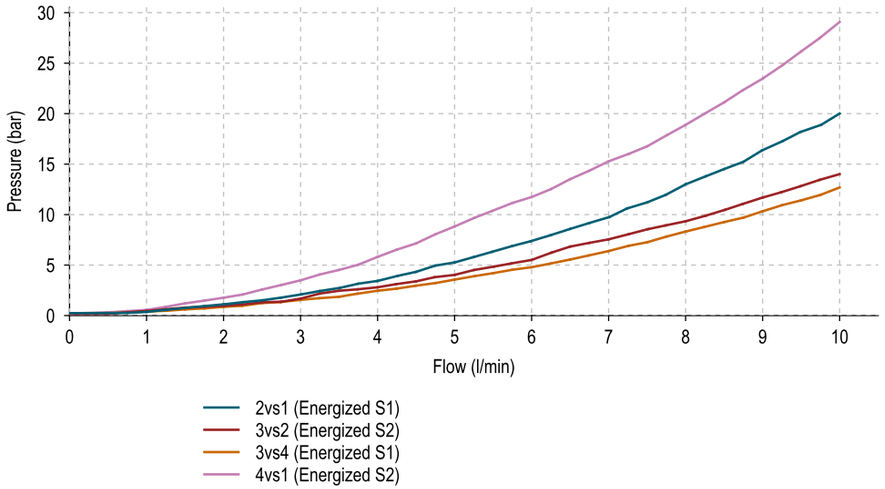
Specifications may change without notice.

Rev. 1

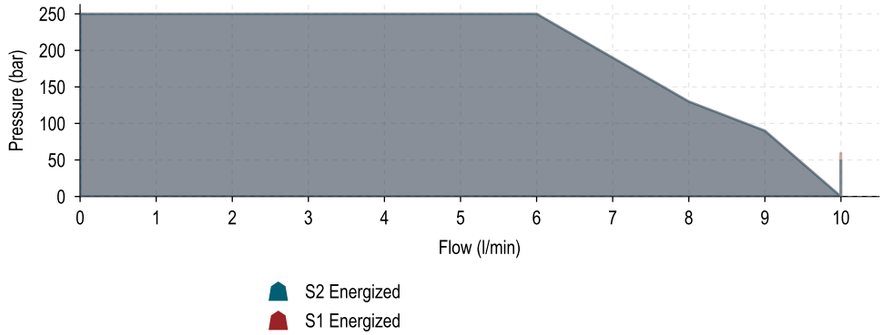
SVBO.S08 GRAPHS

The performance chart illustrates flow handling capacity 3 to 2 and 4 to 1 (energized S1), 3 to 4 and 2 to 1 (energized S1).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

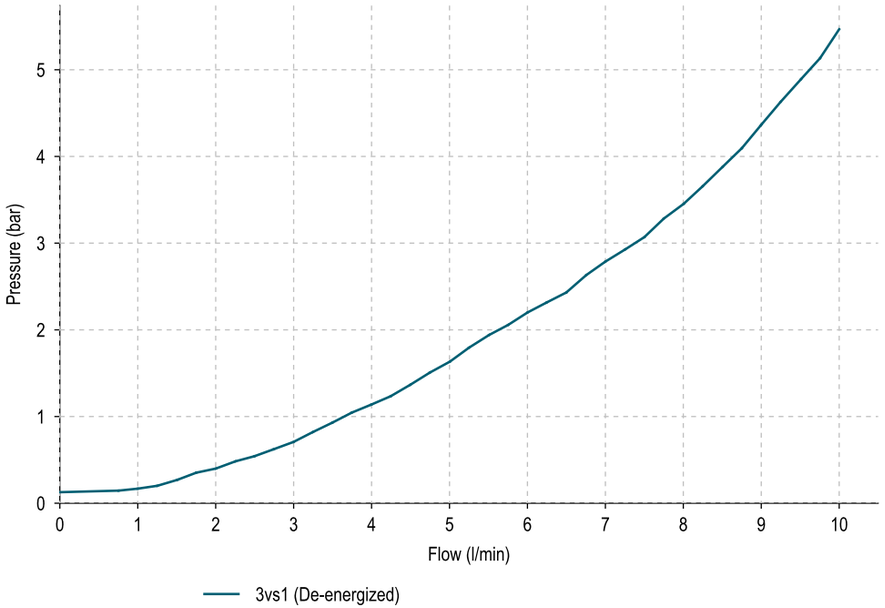
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



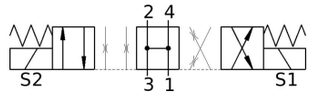
SVBO.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/3 Spool Type

Scheme C

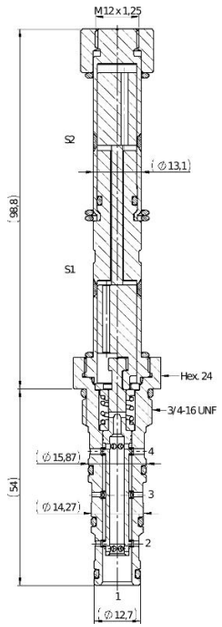
HYDRAULIC SYMBOL



DESCRIPTION

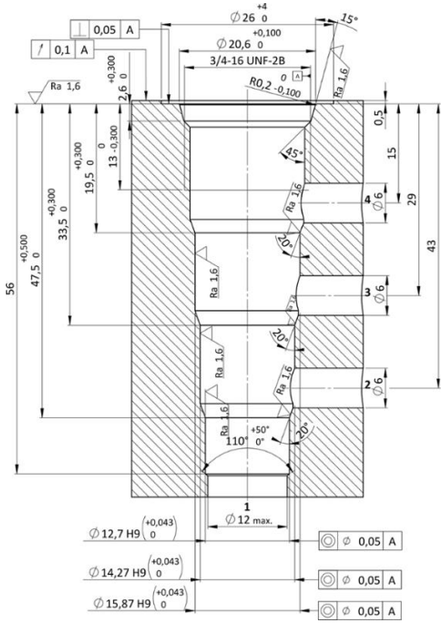
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode all ports are connected. When coil S1 (lower coil) is energized flow is allowed from 3 to 4 and from 2 to 1. When coil S2 (upper coil) is energized flow is allowed from 3 to 2 and from 4 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	120 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (one for each coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,183 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V B 0	·	S 0 8	·	0 *	·	C 0 *
VALVE BASIC CODE		SIZE		MARKING		FLOW PATH

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 to 2 and 4 to 1 (Energized) S2

3 to 4 and 2 to 1 (Energized) S1

All ports connected (De-energized)

MANUAL OVERRIDE

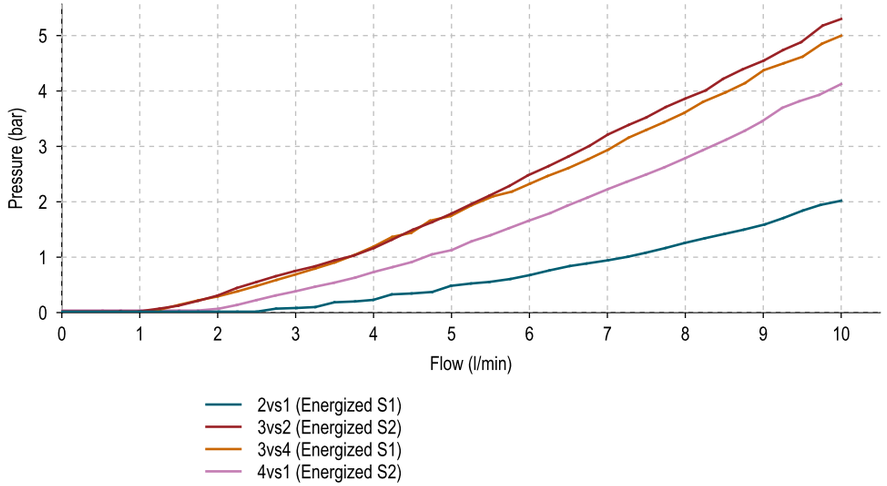
Model code	Type of override
0	No override

Specifications may change without notice.

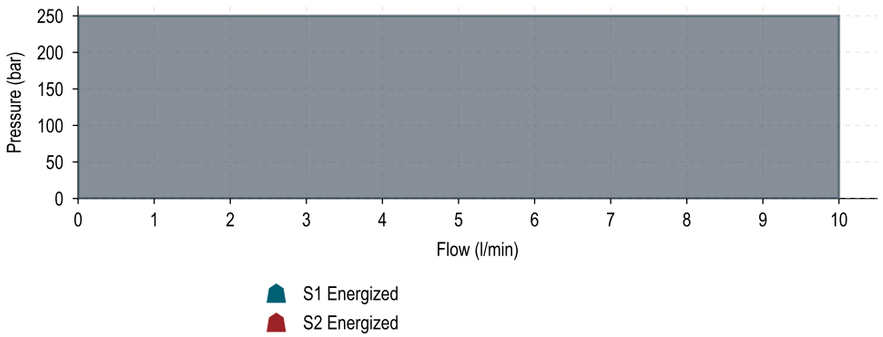
SVBO.S08 GRAPHS

The performance chart illustrates flow handling capacity 3 to 4 and 2 to 1 (energized S1) and 3 to 2 and 4 to 1 (energized S2).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

ENERGIZED



PERFORMANCE LIMITS



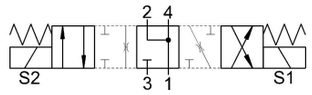
SVBO.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/3 Spool Type

Scheme D

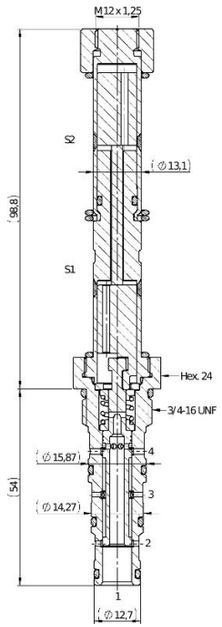
HYDRAULIC SYMBOL



DESCRIPTION

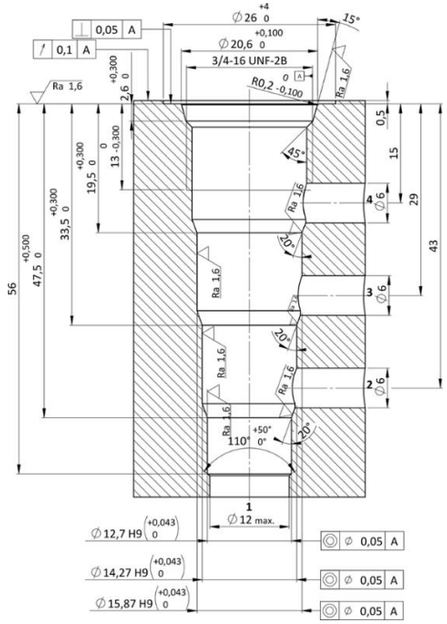
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode ports 2,4 and 1 are connected while port 3 is blocked. When coil S1 (lower coil) is energized flow is allowed from 3 to 4 and from 2 to 1. When coil S2 (upper coil) is energized flow is allowed from 3 to 2 and from 4 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	120 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (one for each coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,183 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S V B 0	·	S 0 8	·	0 *	·	D 0 *
VALVE BASIC CODE		SIZE		MARKING		FLOW PATH

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

2, 4 and 1 connected, 3 blocked (De-energized)

3 to 2 and 4 to 1 (Energized) S2

3 to 4 and 2 to 1 (Energized) S1

MANUAL OVERRIDE

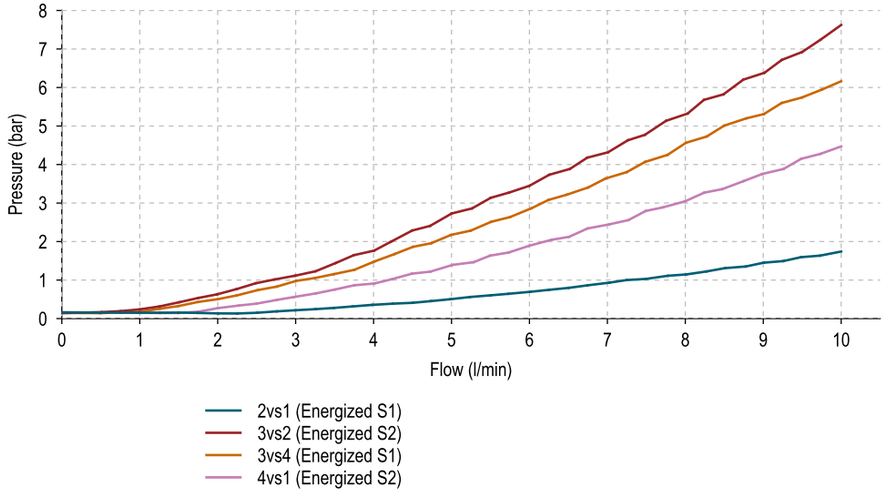
Model code	Type of override
0	No override

Specifications may change without notice.

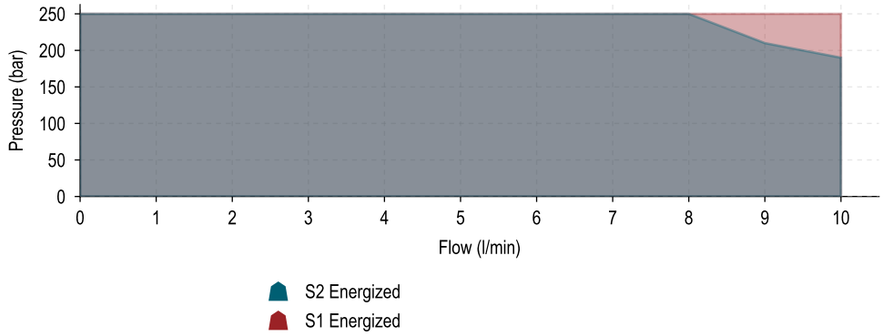
SVBO.S08 GRAPHS

The performance chart illustrates flow handling capacity 3 to 4 and 2 to 1 (energized S1) and 3 to 2 and 4 to 1 (energized S2).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

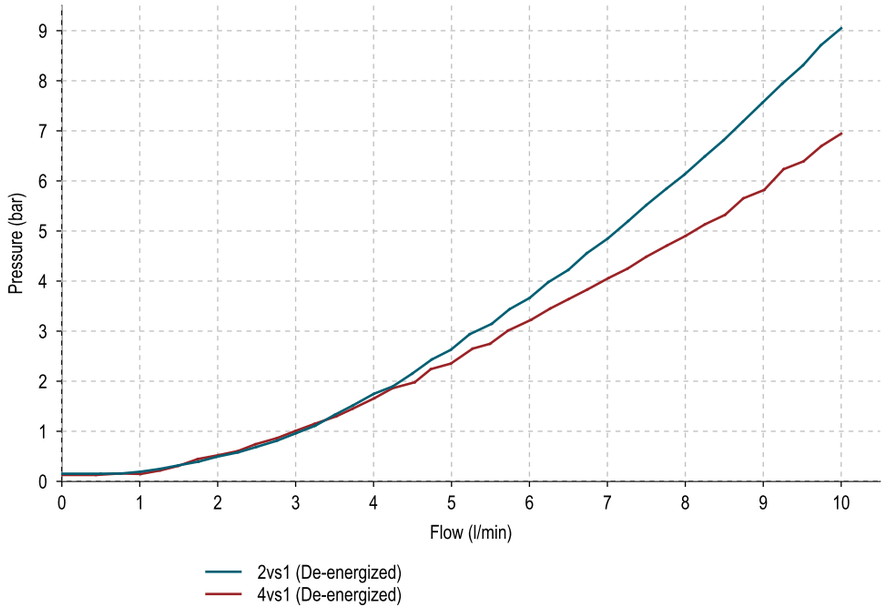
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



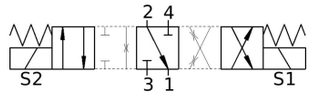
SVBO.S08 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - 4/3 Spool Type

Scheme E

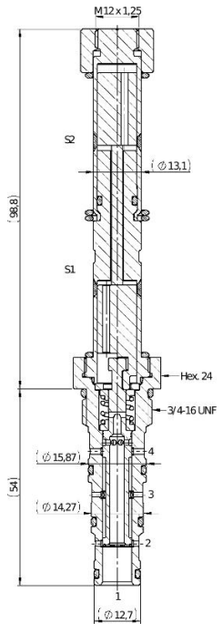
HYDRAULIC SYMBOL



DESCRIPTION

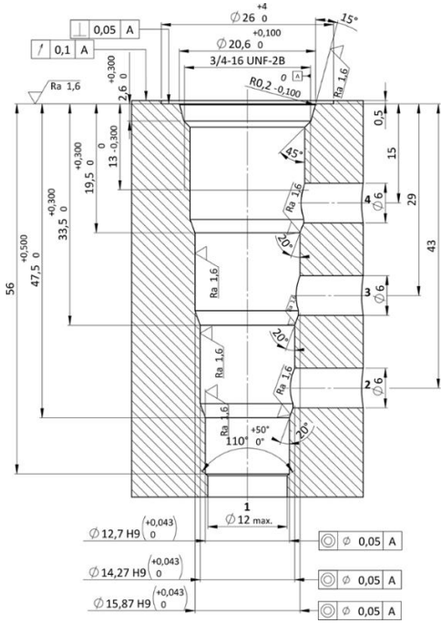
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode ports 2 and 1 are connected while ports 3 and 4 are blocked. When coil S1 (lower coil) is energized flow is allowed from 3 to 4 and from 2 to 1. When coil S2 (upper coil) is energized flow is allowed from 3 to 2 and from 4 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE08-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	10 l/min
MAXIMUM INTERNAL LEAKAGE	120 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.065 and SK.027 (one for each coil) (standard sealing NBR-BUNA-N)
COIL	18W (for more details see page 769 - 781)
WEIGHT	0,183 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Costumized nut can be selected

S	V	B	0	·	S	0	8	·	0	*	·	E	0	*

VALVE BASIC CODE

SIZE

3/4-16 UNF with Ø15,87 and Ø14,27 and Ø12,7 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

FLOW PATH

3 and 4 blocked, flow allowed from 2 to1 (De-energized)

3 to 2 and 4 to 1 (Energized) S2

3 to 4 and 2 to 1 (Energized) S1

MANUAL OVERRIDE

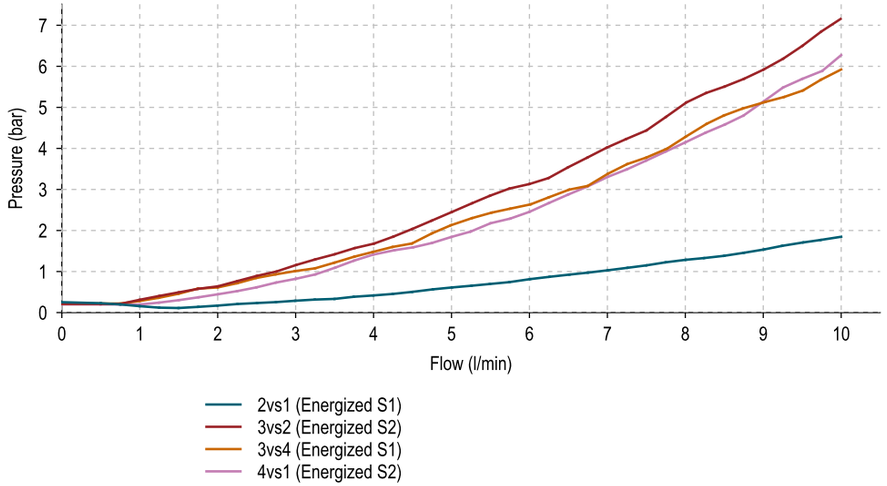
Model code	Type of override
0	No override

Specifications may change without notice.

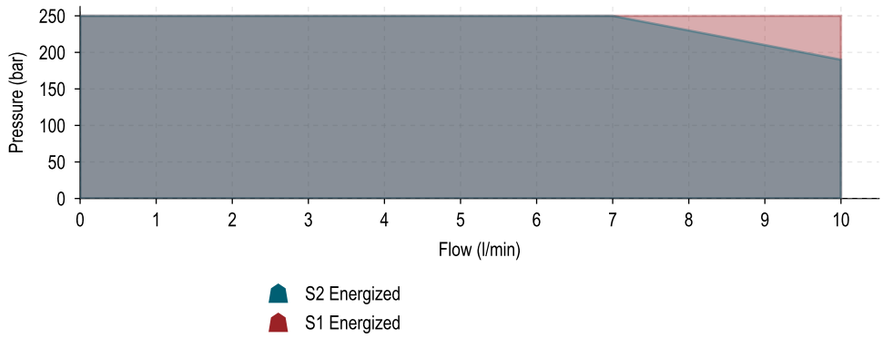
SVBO.S08 GRAPHS

The performance chart illustrates flow handling capacity 3 to 4 and 2 to 1 (energized S1) and 3 to 2 and 4 to 1 (energized S2).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

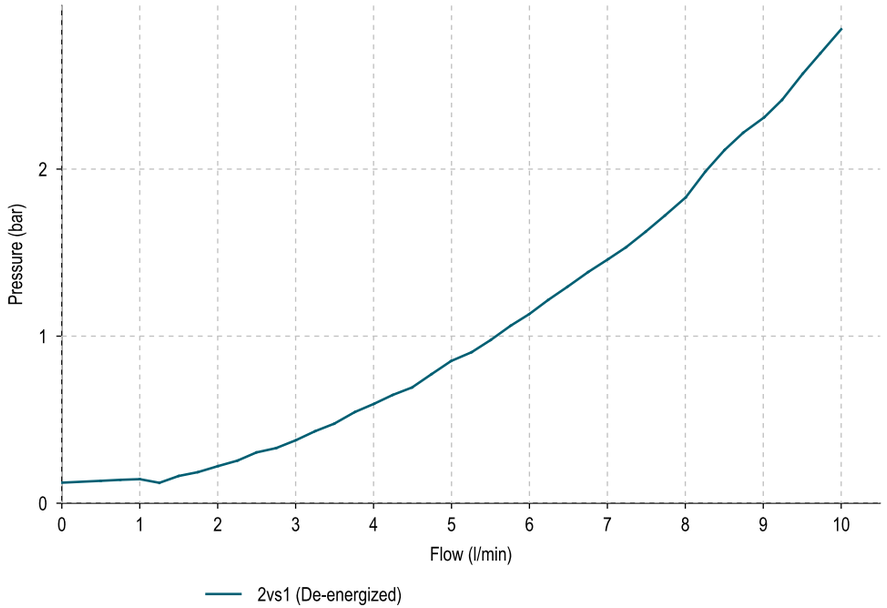
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



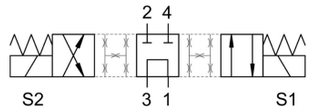
SVB0.S10 VALVE SERIES

SAE Cartridge

Directional Valve - 4/3 Spool Type

Scheme B

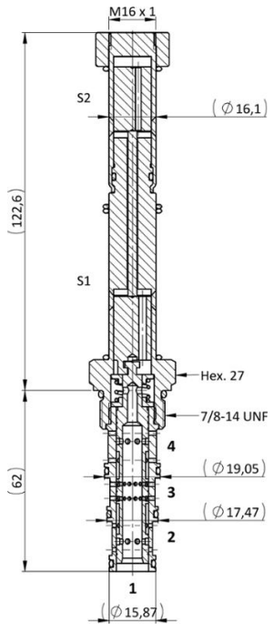
HYDRAULIC SYMBOL



DESCRIPTION

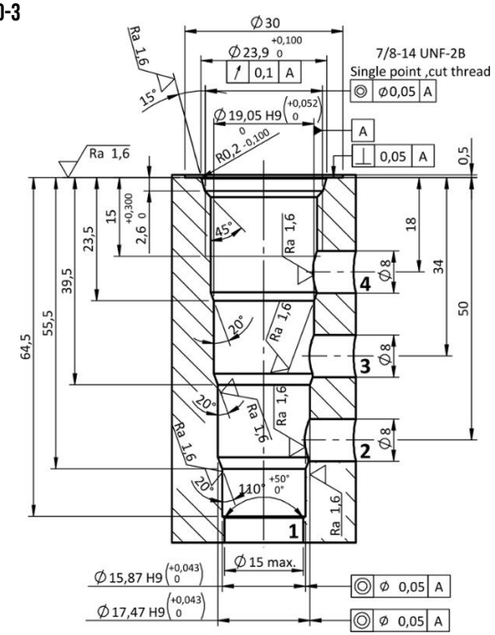
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode the SVB0.S10 blocks flow 2 and 4 while flow is allowed from 3 to 1 ports. When coil S1 (lower coil) is energized flow is allowed from 4 to 1 and from 3 to 2. When coil S2 (upper coil) is energized flow is allowed from 3 to 4 and from 2 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	25 l/min
MAXIMUM INTERNAL LEAKAGE	160 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,301 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected.

S	V	B	0	·	S	1	0	·	0	*	·	B	0	*

VALVE BASIC CODE

SVB0.S10.00.BR0 with restricted passage from ports 2 and 4 to ports 3 and 1.

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request

FLOW PATH

2 and 4 blocked, flow allowed from 3 to 1 (De-Energized)

3 to 2 and 4 to 1 (Energized) S1

3 to 4 and 2 to 1 (Energized) S2

MANUAL OVERRIDE

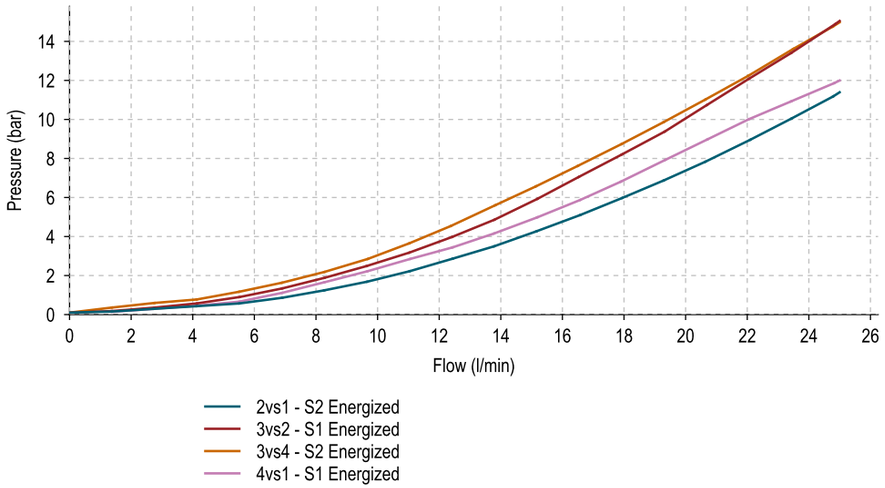
Model code	Type of override
0	No override

Specifications may change without notice.

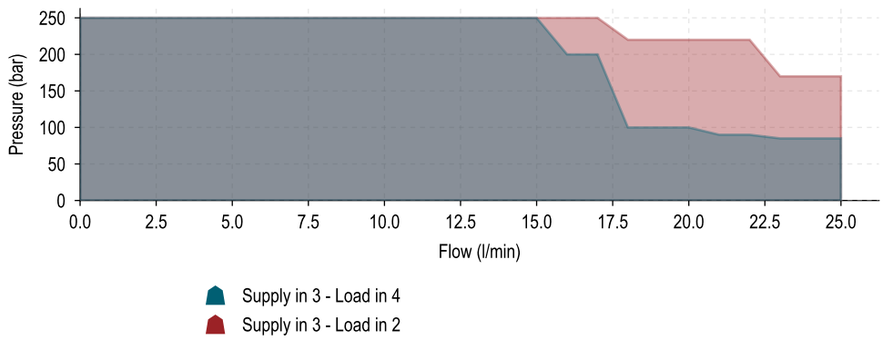
SVBO.S10 GRAPHS

The performance chart illustrates flow handling capacity 3 to 2 and 4 to 1 (energized S1), 3 to 4 and 2 to 1 (energized S2) and 3 to 1 (de-energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

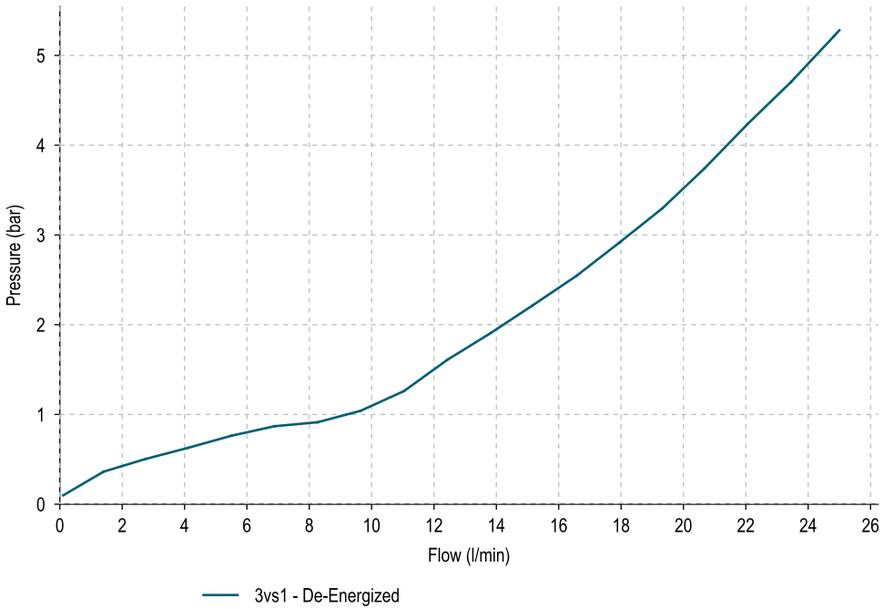
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



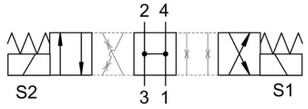
SVBO.S10 VALVE SERIES

SAE Cartridge - 250 bar

Directional Valve - Spool Type

Scheme C

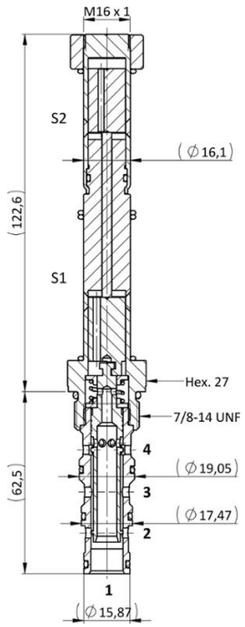
HYDRAULIC SYMBOL



DESCRIPTION

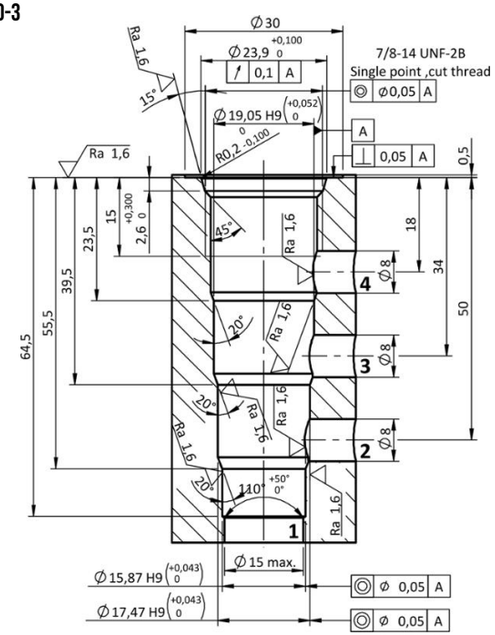
A solenoid valve operated, 4 way 3 positions, spool type, direct acting, screw-in hydraulic directional cartridge valve. In the de-energized mode all ports are connected. When coil S1 (lower coil) is energized flow is allowed from 3 to 4 and from 2 to 1. When coil S2 (upper coil) is energized flow is allowed from 3 to 2 and from 4 to 1. The rigid design using a 1-piece body contributes to minimize the effect of eccentricities in cavity and provides great reliability. Low pressure drop thanks to optimized flow paths.

CROSS SECTION



CAVITY

SAE10-3



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	200 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
COIL	26W (for more details see page 769 - 781)
WEIGHT	0,301 kg

ORDERING CODE

NOTE

Solenoid valves are designed to work with D.C. current supply, for A.C. a RAC coil and connector with rectifier must be used.

NOTE

Customized nut can be selected.

S	V	B	0	·	S	1	0	·	0	*	·	C	0	*

VALVE BASIC CODE

SIZE

7/8-14 UNF with Ø19,05, Ø17,47 and Ø15,87 nose sizes

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override

FLOW PATH

3 to 2 and 4 to 1 (Energized) S2

3 to 4 and 2 to 1 (Energized) S1

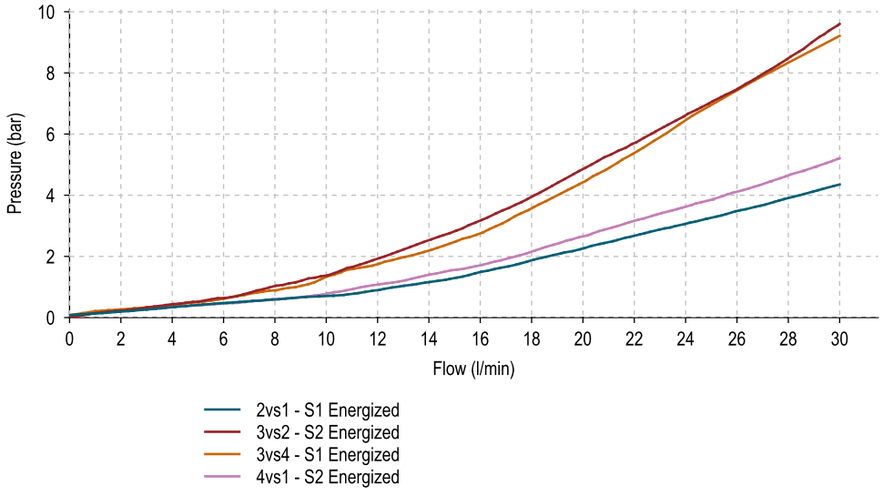
All ports connected (De-energized)

Specifications may change without notice.

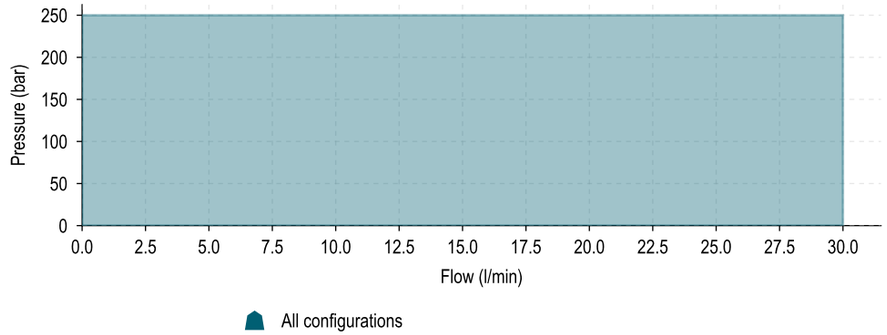
SVBO.S10 GRAPHS

The performance chart illustrates flow handling capacity 3 to 4 and 2 to 1 (energized S1), 3 to 2 and 4 to 1 (energized S2), and 2 to 1, 3 to 1, 3 to 2, 3 to 4 and 4 to 1 (De-energized).

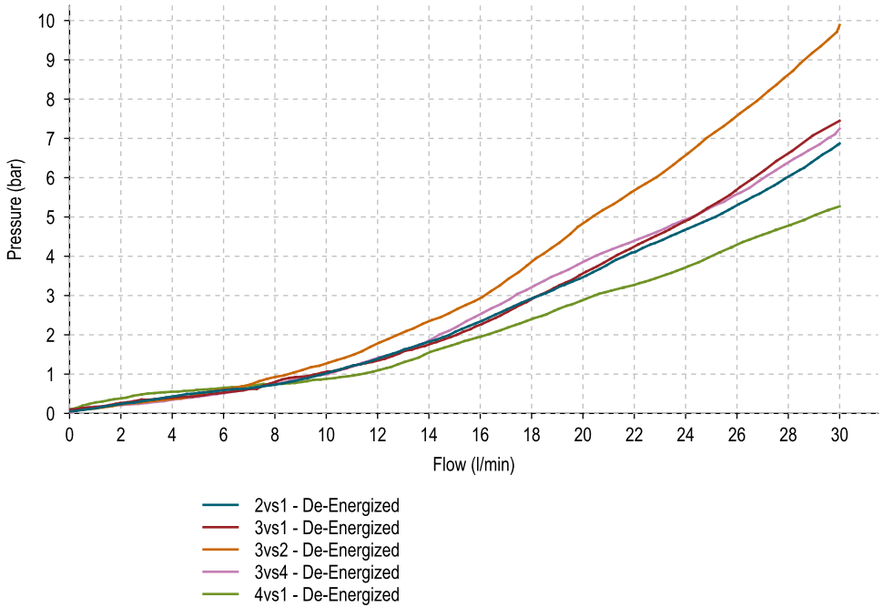
ENERGIZED



PERFORMANCE LIMITS



DE-ENERGIZED



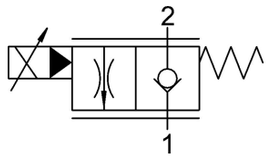
PFR0.S08 VALVE SERIES

SAE Cartridge - 250 bar

Proportional Solenoid Valve

2 way proportional flow control

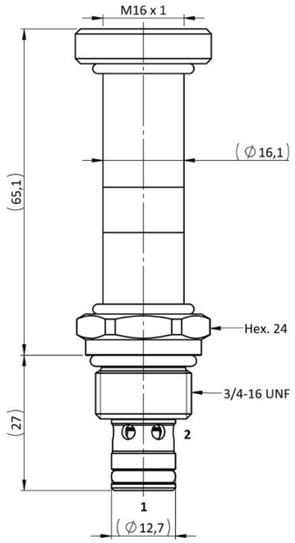
HYDRAULIC SYMBOL



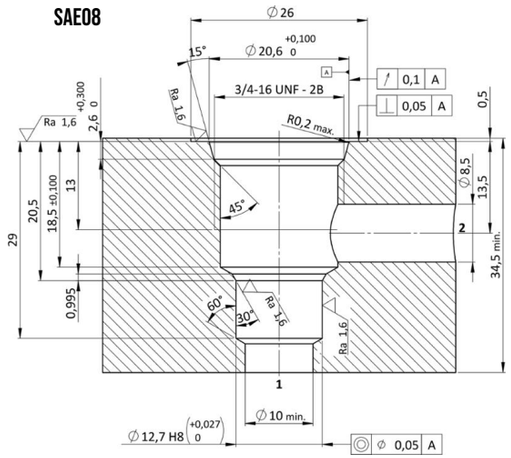
DESCRIPTION

The PFR0 is a proportional solenoid operated, two way, poppet type, normally closed, screw-in hydraulic cartridge valve for low leakage blocking and load-holding applications. When de-energized, the valve operates as a check valve and allows flow from 1 to 2, while blocking flow from 2 to 1. When energized, the valve opens 2 to 1 flow path: flow is proportional to the current applied to the coil.

CROSS SECTION



CAVITY SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 10 bar 0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D. C24.L0 (24Vdc-26W)
WEIGHT	0,150 kg

ORDERING CODE

P	F	R	0	·	S	0	8	·	0	*	·	*	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw
6	Pull and Hold
9	Pull and Hold with Threaded Nut (10-32 UNF)
A	Pull and Hold with Threaded Nut (M8)

FILTRATION

Model code	Type of filter
F	With filter (mesh size 280 µm)
N	No filter

NOTE

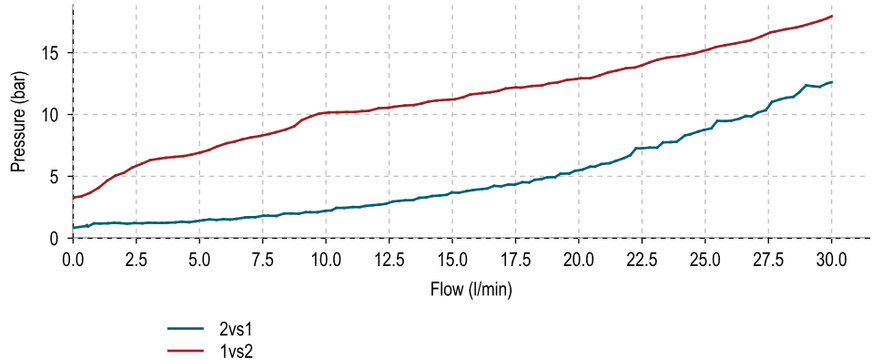
No filter can be done upon request.
Filter option is strongly suggested.

Specifications may change without notice.

PFRO.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized with max current @24 Vdc and de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

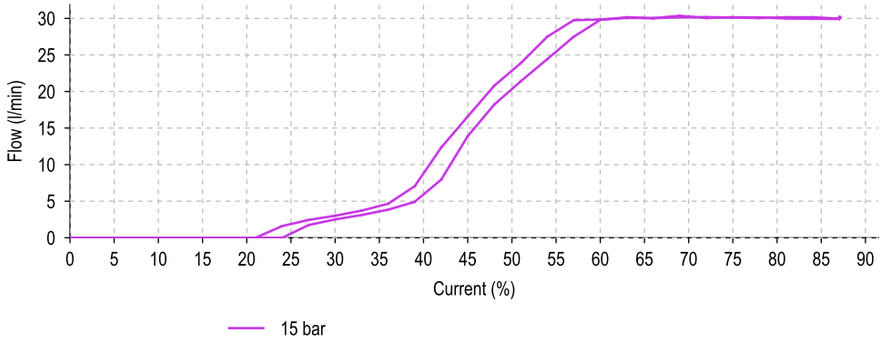
PRESSURE VS FLOW CURVE



NOTE

The performance chart illustrates flow handling capacity 2 to 1 (energized with max current @24 Vdc and de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

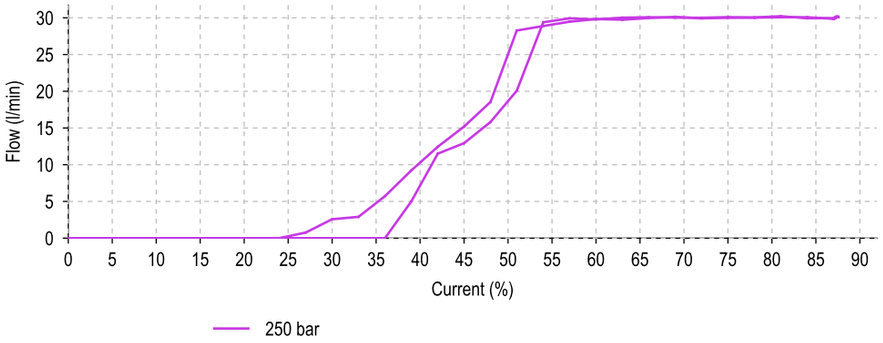
FLOW VS CURRENT AT 15BAR



NOTE

The performance chart illustrates flow regulation (energized @12 Vdc and @24 Vdc).
Current percentage referred to steady-state current of the coil. PWM frequency set to 120 Hz.
Q/I curves are recorded at Toil = 40°C and 46 cSt.

FLOW VS CURRENT AT 250BAR



NOTE

The performance chart illustrates flow regulation (energized @12 Vdc and @24 Vdc).
Current percentage referred to steady-state current of the coil. PWM frequency set to 120 Hz.
Q/I curves are recorded at Toil = 40°C and 46 cSt.

PFRW.S08 VALVE SERIES

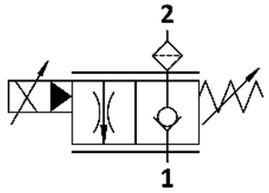
SAE Cartridge - 250 bar

Proportional Solenoid Valve

2 way proportional flow control

Adjustable version

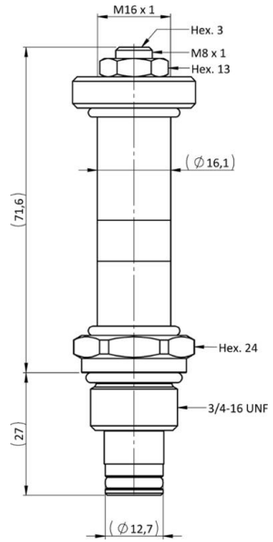
HYDRAULIC SYMBOL



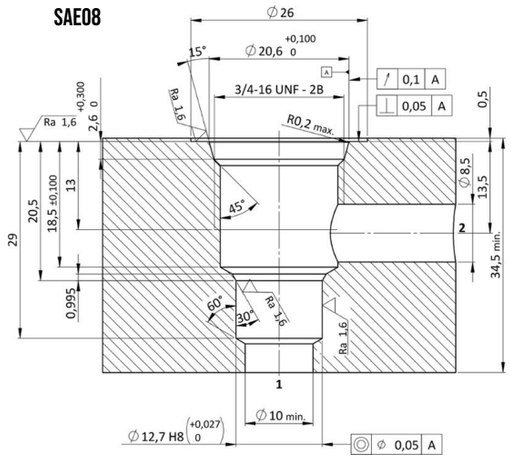
DESCRIPTION

The PFRW is a proportional solenoid operated, two way, poppet type, normally closed, screw-in hydraulic cartridge valve for low leakage blocking and load-holding applications. When de-energized, the valve operates as a check valve and allows flow from 1 to 2, while blocking flow from 2 to 1. When energized, the valve opens 2 to 1 flow path: flow is proportional to the current applied to the coil. The adjusting screw allows to change start/end current of flow regulation. This adjustment does not affect the flow ramp.

CROSS SECTION



CAVITY SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 10 bar 0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
MINIMUM PULL-IN VOLTAGE	85% od nominal
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D.C24.L0 (24Vdc-26W)
WEIGHT	0,150 kg

ORDERING CODE

P	F	R	W	·	S	0	8	·	0	*	·	F	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override

FILTRATION

Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

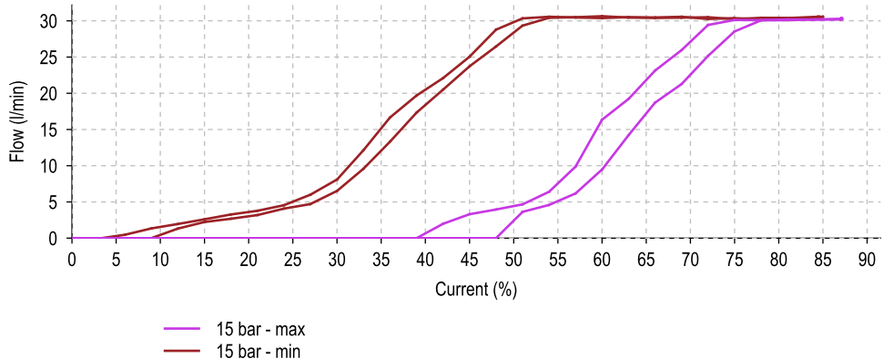
NOTE
Customized filters can be done upon request.
Filter option is strongly suggested.

Specifications may change without notice.

PFRW.S08 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized with max current @24 Vdc and de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

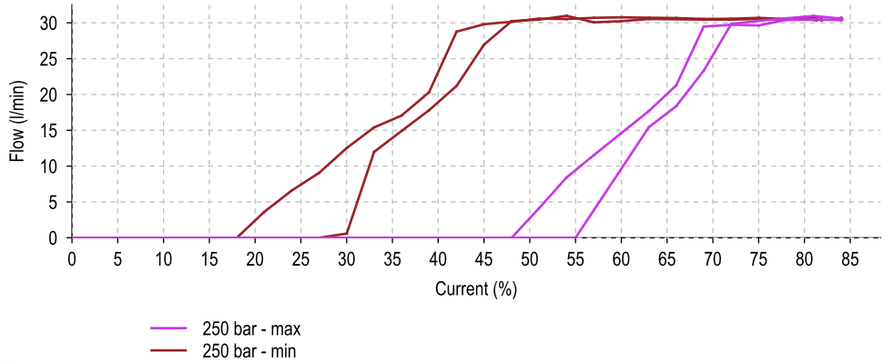
FLOW VS CURRENT AT 15BAR



NOTE

The performance chart illustrates flow regulation between Min and Max regulated adjusting screw (energized @12 Vdc and @24 Vdc).
Current percentage referred to steady-state current of the coil. PWM frequency set to 120 Hz.

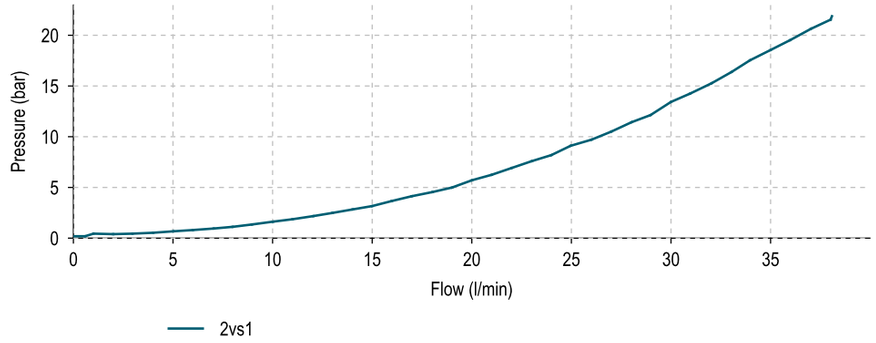
FLOW VS CURRENT AT 250BAR



NOTE

The performance chart illustrates flow regulation between Min and Max regulated adjusting screw (energized @12 Vdc and @24 Vdc).
Current percentage referred to steady-state current of the coil. PWM frequency set to 120 Hz.

PRESSURE VS FLOW CURVE



NOTE

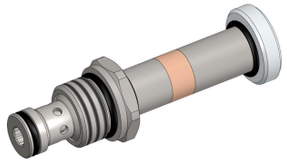
The performance chart illustrates flow handling capacity 2 to 1 (energized with max current @24 Vdc and de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

PFR0.S10 VALVE SERIES

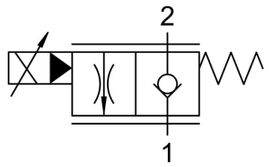
SAE Cartridge - 250 bar

Proportional Solenoid Valve

2 way proportional flow control



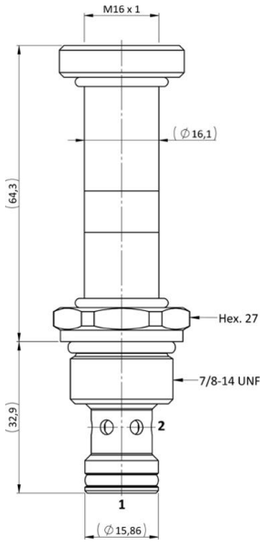
HYDRAULIC SYMBOL



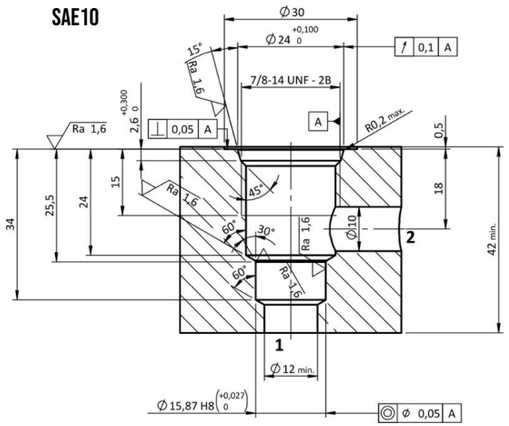
DESCRIPTION

The PFR0 is a proportional solenoid operated, poppet type, normally closed, screw-in hydraulic cartridge valve for low leakage blocking and load-holding applications. When de-energized, the valve operates as a check valve and allows flow from 1 to 2, while blocking flow from 2 to 1. When energized, the valve opens 2 to 1 flow path: flow is proportional to the current applied to the coil.

CROSS SECTION



CAVITY SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	70 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 30 bar 0,25 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	18/16/13 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	55-65 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D.C24.L0 (24Vdc-26W)
WEIGHT	0,175 kg

ORDERING CODE

P	F	R	0	·	S	1	0	·	0	*	·	N	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
1	Screw

FILTRATION

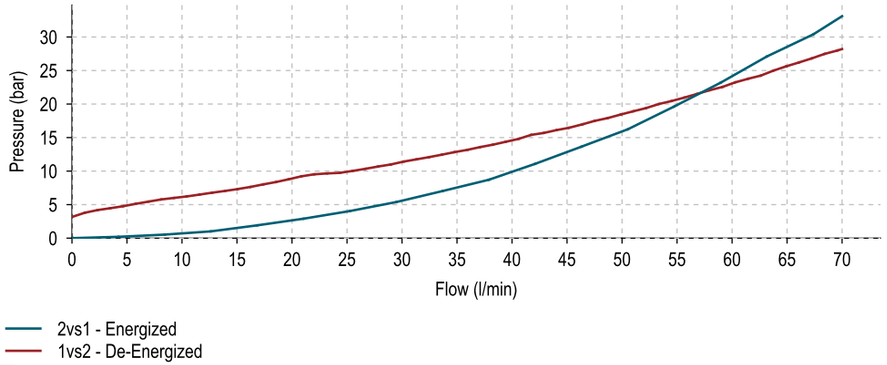
Model code	Type of filter
N	No filter

Specifications may change without notice.

PFRO.S10 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (energized with max current @24 Vdc and de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

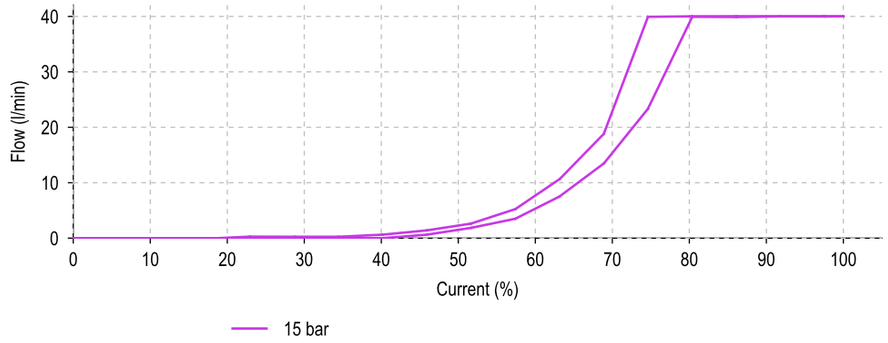
PRESSURE VS. FLOW



NOTE

The performance chart illustrates flow handling capacity 2 to 1 (energized with max current @24 Vdc and de-energized).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

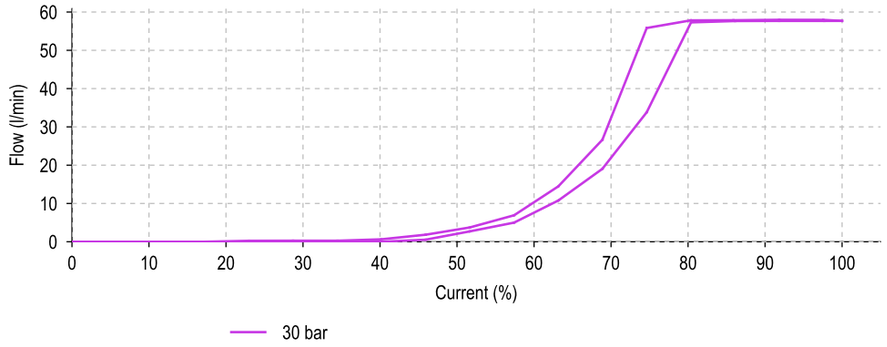
FLOW VS CURRENT AT 15 BAR



NOTE

The performance chart illustrates flow regulation.
Current percentage referred to steady-state current of the coil. PWM frequency set to 150 Hz.
Q/I curves are recorded at Toil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

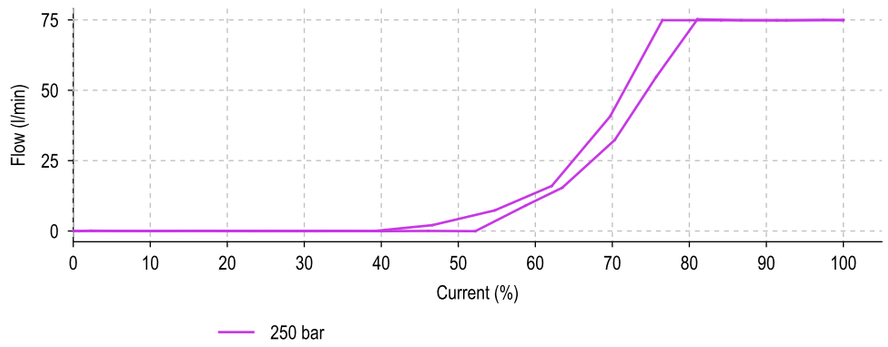
FLOW VS CURRENT AT 30 BAR



NOTE

The performance chart illustrates flow regulation.
Current percentage referred to steady-state current of the coil. PWM frequency set to 150 Hz.
Q/I curves are recorded at Toil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

FLOW VS CURRENT AT 250 BAR



NOTE

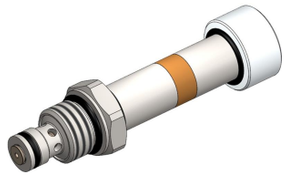
The performance chart illustrates flow regulation.
Current percentage referred to steady-state current of the coil. PWM frequency set to 150 Hz.
Q/I curves are recorded at Toil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

PSD0.S08 VALVE SERIES

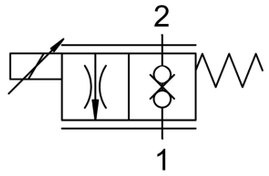
SAE Cartridge - 250 bar

Proportional Solenoid Valve

2 way proportional flow control



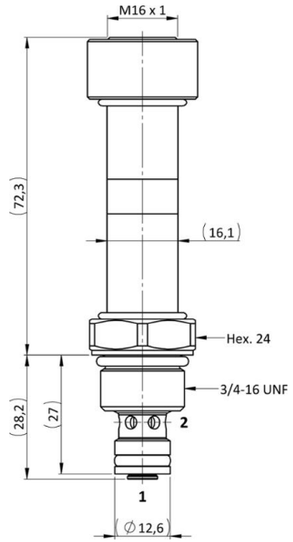
HYDRAULIC SYMBOL



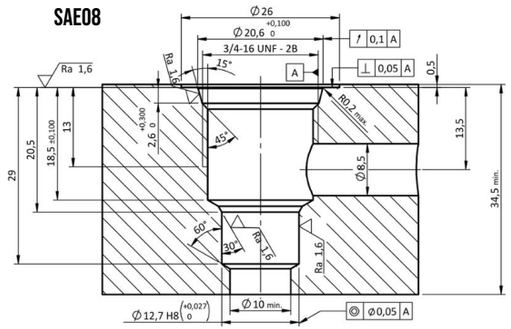
DESCRIPTION

The PSD0 is a proportional solenoid operated, two way, poppet type, double lock, normally closed, non compensated, screw-in hydraulic cartridge flow regulator valve for low leakage blocking and load-holding applications. When de-energized, the valve blocks flow from both ports. When energized, the valve opens flow in both directions: from 2 to 1 flow is proportional to the current applied to the coil, from 1 to 2 flow is allowed but not regulated.

CROSS SECTION



CAVITY SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar - 1vs2 - nose to side 1 cm^3 / min @ 250 bar - 2vs1 - side to nose
REGULATED FLOW RANGE	5 - 20 l/min 2vs1 (side to nose)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.030 SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D.C24.L0 (24Vdc-26W)
WEIGHT	0,165 kg

ORDERING CODE

P	S	D	0	·	S	0	8	·	0	*	·	N	0	0

VALVE BASIC CODE

SIZE

SAE08 = 3/4-16 UNF with Ø12,6 nose size

SAE09 = 3/4-16 UNF with Ø15,87 nose size

MARKING

0 = Standard factory marking. Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
D	Lever

FILTRATION

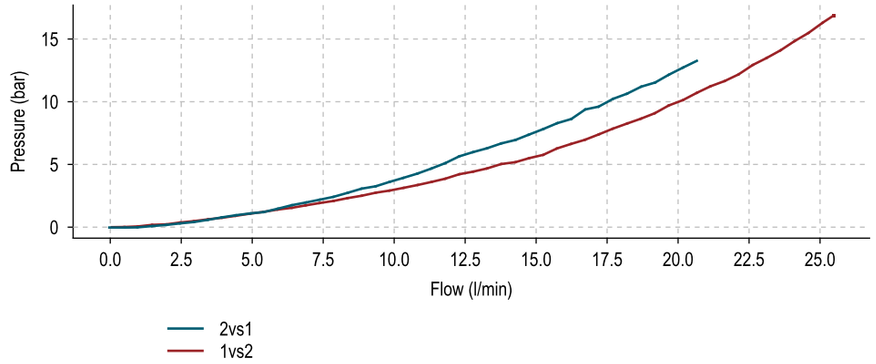
Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

Specifications may change without notice.

PSDO.S08 GRAPHS

The performance chat illustrates flow handling capacity 1 to 2 and 2 to 1
(energized with max current @12 Vdc).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

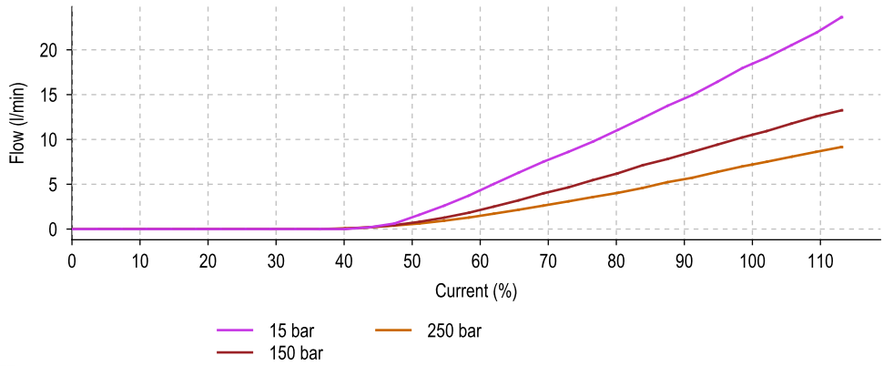
PRESSURE VS FLOW



NOTE

The performance chat illustrates flow handling capacity 1 to 2 and 2 to 1 (energized with max current @12 Vdc).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

FLOW VS CURRENT



NOTE

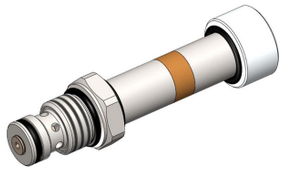
The performance chart illustrates flow regulation from 2 to 1. Current percentage is referred to steady-state current of the coil.
PWM frerquency set to 100 Hz.
Curves are recorded at TOil = 40°C and 46 cSt.(energized @12 vdc and @24 Vdc).

PSD0.S09 VALVE SERIES

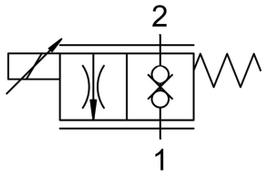
SAE Cartridge - 250 bar

Proportional Solenoid Valve

2 way proportional flow control



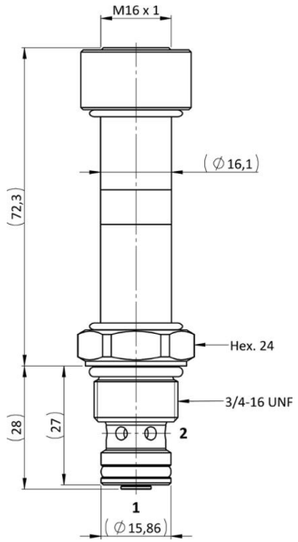
HYDRAULIC SYMBOL



DESCRIPTION

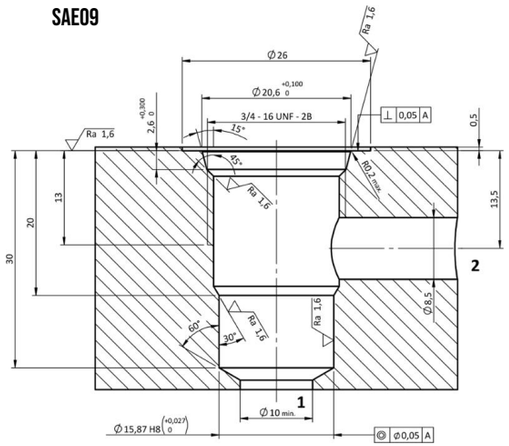
The PSD0 is a proportional solenoid operated, two way, poppet type, double lock, normally closed, non compensated, screw-in hydraulic cartridge flow regulator valve for low leakage blocking and load-holding applications. When de-energized, the valve blocks flow from both ports. When energized, the valve opens flow in both directions: from 2 to 1 flow is proportional to the current applied to the coil, from 1 to 2 flow is allowed but not regulated.

CROSS SECTION



CAVITY

SAE09



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	20 l/min
MAXIMUM INTERNAL LEAKAGE	0,25 cm^3 / min @ 250 bar - 1vs2 - nose to side 1 cm^3 / min @ 250 bar - 2vs1 - side to nose
REGULATED FLOW RANGE	5 - 20 l/min 2vs1 (side to nose)
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.031 SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D.C24.L0 (24Vdc-26W)
WEIGHT	0,171 kg

ORDERING CODE

P	S	D	0	·	S	0	9	·	0	*	·	N	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override
3	Push pin
D	Lever

FILTRATION

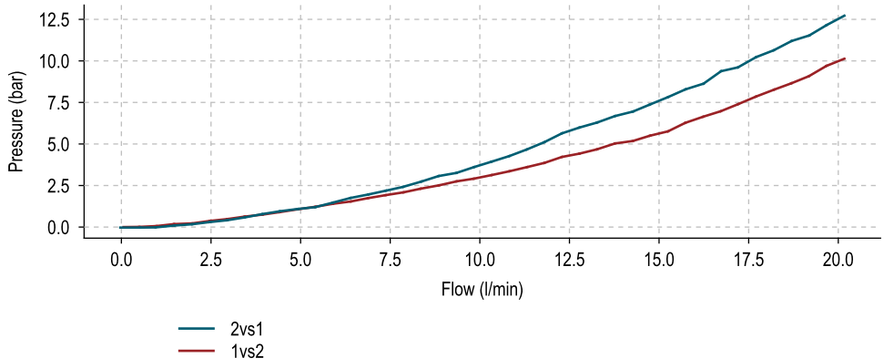
Model code	Type of filter
F	Standard filter (mesh size 280 µm)
N	No filter

Specifications may change without notice.

PSDO.S09 GRAPHS

The performance chat illustrates flow handling capacity 1 to 2 and 2 to 1
(energized with max current @12 Vdc).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

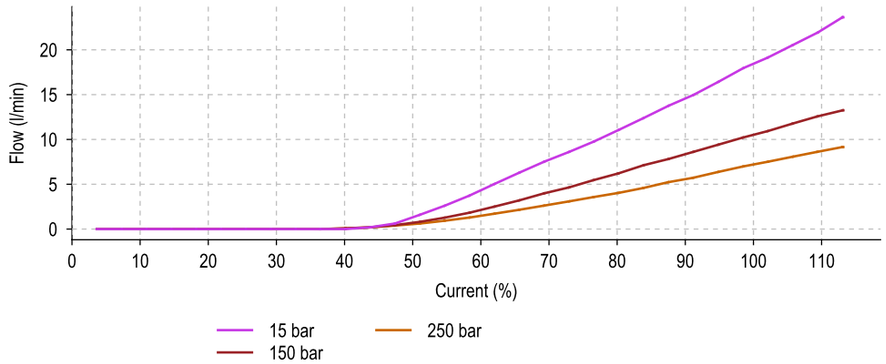
PRESSURE VS FLOW CURVES



NOTE

The performance chat illustrates flow handling capacity 1 to 2 and 2 to 1 (energized with max current @12 Vdc).
p/Q curves are recorded at TOil = 40°C and 46 cSt.

FLOW VS CURRENT



NOTE

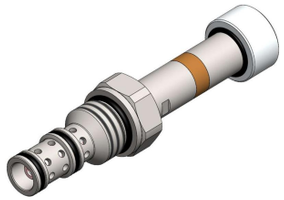
The performance chart illustrates flow regulation from 2 to 1. Current percentage is referred to steady-state current of the coil.
PWM frerquency set to 100 Hz.
Curves are recorded at TOil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

PSP0.S10 VALVE SERIES

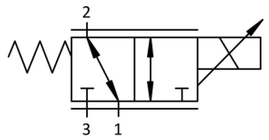
SAE Cartridge - 250 bar

Proportional Solenoid Valve

3/2 Flow Regulator - Scheme 200



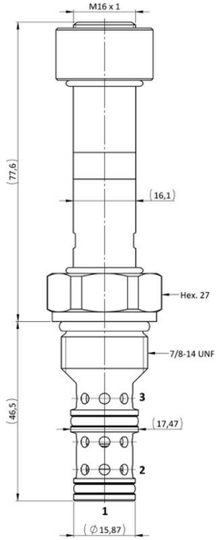
HYDRAULIC SYMBOL



DESCRIPTION

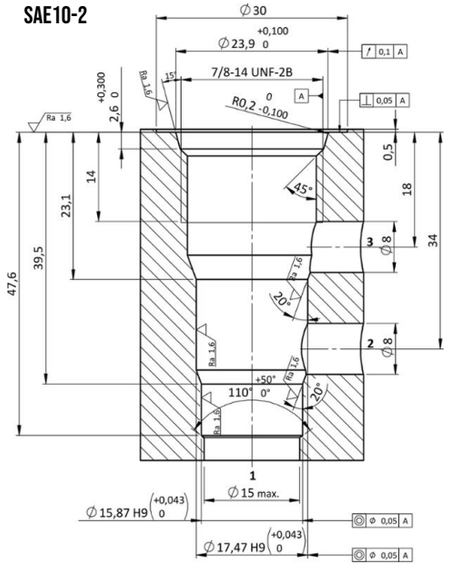
The PSP0 is a proportional solenoid not compensated flow regulator valve, 3 way 2 position, direct acting, spool type, screw-in hydraulic cartridge. When de-energized, full flow rate is allowed between ports 2 and port 1 while blocked at port 3. When the coil is energized the flow through port 2 and port 3 can be proportionally controlled by current increasing. The rigid 1-piece body design contributes to minimize the effect of eccentricities in cavity and provides great reliability.

CROSS SECTION



CAVITY

SAE10-2



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	115 cm^3 / min @ 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -30° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	40-45 Nm Hex.27
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.076 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	18W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.A0.08 (12Vdc-18W)
WEIGHT	0,229 kg

ORDERING CODE

P	S	P	0	·	S	1	0	·	0	*	·	2	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø17,47 and Ø15,87 nose sizes

MARKING
0 = Standard factory marking.Customized marking can be done upon request.

Flow Path: 1 and 2 connected, 3 blocked (De-energized) 2 and 3 connected, 1 blocked (Energized)

MANUAL OVERRIDE

Model code	Type of override
0	No override

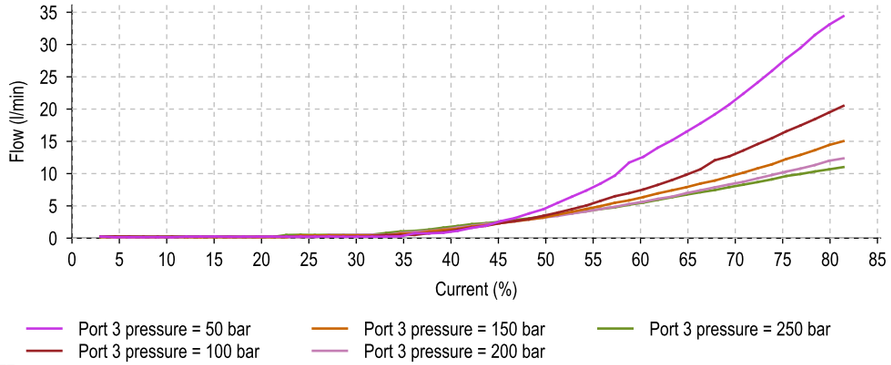
Specifications may change without notice.

Rev. 1

PSP0.S10 GRAPHS

The performance chart illustrates flow handling capacity 2 to 1 (de-energized) and 3 to 2 (energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

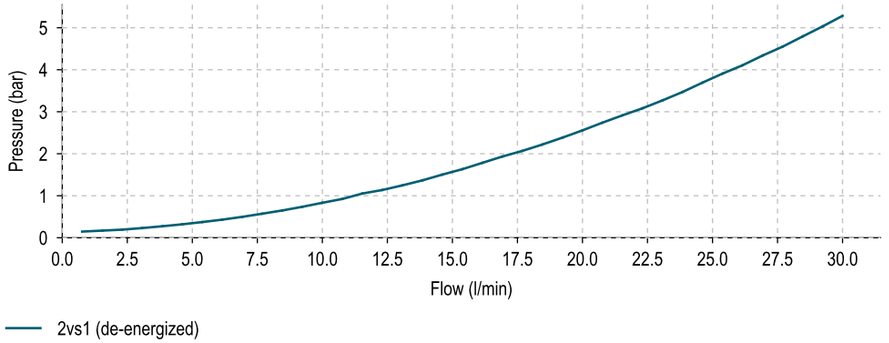
FLOW VS CURRENT



NOTE

The performance chart illustrates flow regulation. Current percentage is referred to steady-state current of the coil. PWM frequency set to 120 Hz. Curves are recorded at TOil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

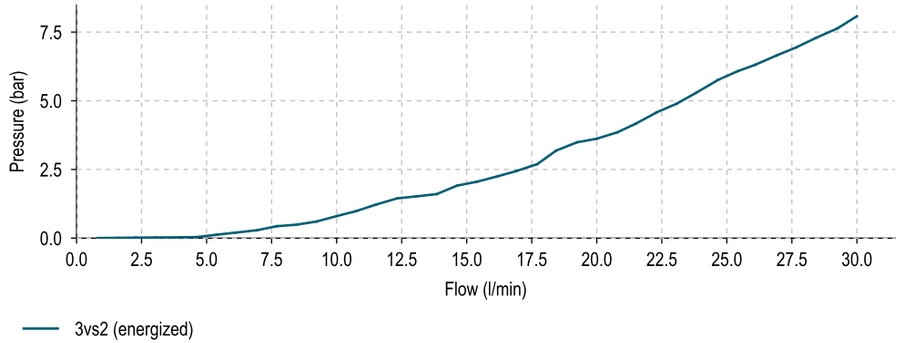
PRESSURE VS FLOW DE-ENERGIZED



NOTE

The performance chart illustrates flow handling capacity 2 to 1 (de-energized) and 3 to 2 (energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

PRESSURE VS FLOW ENERGIZED



NOTE

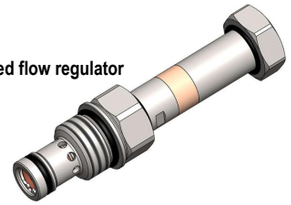
The performance chart illustrates flow handling capacity 2 to 1 (de-energized) and 3 to 2 (energized). p/Q curves are recorded at TOil = 40°C and 46 cSt.

PCD0.S10 VALVE SERIES

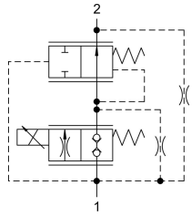
SAE Cartridge - 250 bar

Proportional Solenoid Valve

2 way proportional pressure compensated flow regulator



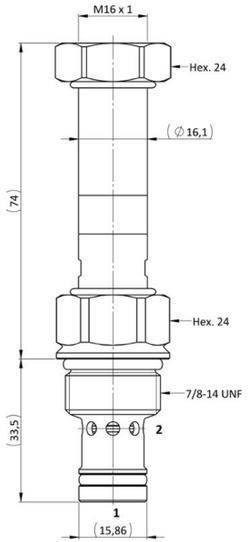
HYDRAULIC SYMBOL



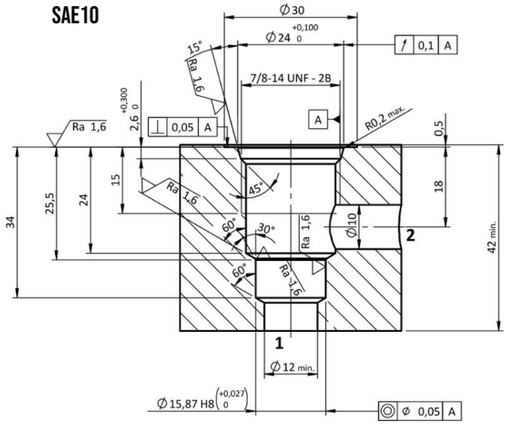
DESCRIPTION

The PCD0 is a proportional solenoid operated, direct acting, poppet type, two way, screw-in hydraulic cartridge normally closed pressure compensated flow regulator. When de-energized the flow is fully restricted. When energized the regulated flow is proportional to the applied control current. The regulated flow rate is independent of the pressure differential between the ports.

CROSS SECTION



CAVITY SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	250 bar
MAXIMUM FLOW	30 l/min
MAXIMUM INTERNAL LEAKAGE	20 cm^3 / min @ 30 bar 150 cm^3 / min @ 250 bar
PRESSURE COMPENSATION RANGE	30 - 250 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) ZN/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -25° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.032 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D.C24.L0 (24Vdc-26W)
WEIGHT	0,210 kg

ORDERING CODE

P	C	D	0	·	S	1	0	·	0	*	·	0	0	0

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

000 = Standard Configuration.

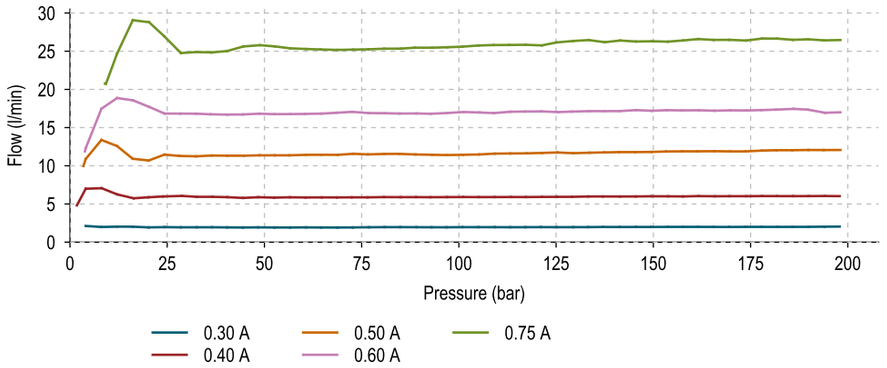
MANUAL OVERRIDE

Model code	Type of override
0	No override

Specifications may change without notice.

PCDO.S10 GRAPHS

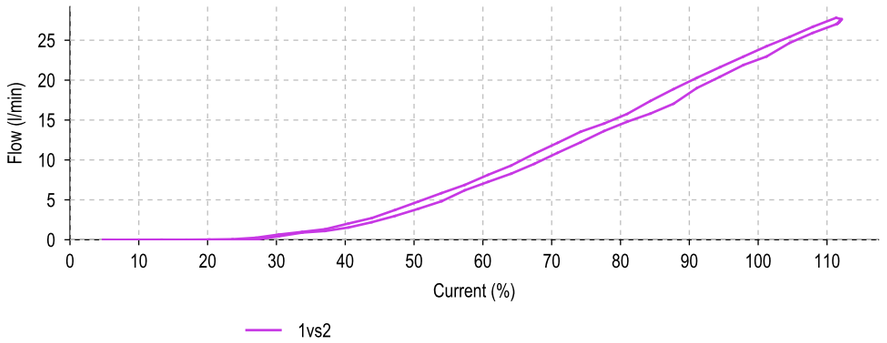
PRESSURE VS FLOW



NOTE

The performance chart illustrates compensated flow with coil energized at different current value. Curves are recorded at TOil = 40°C and 46 cSt.

FLOW VS CURRENT



NOTE

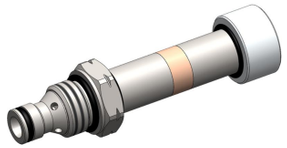
The performance chart illustrates flow regulation. Current percentage is referred to steady-state current of the coil. PWM frequency set to 100 Hz. Curves are recorded at TOil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

PRB0.S08 VALVE SERIES

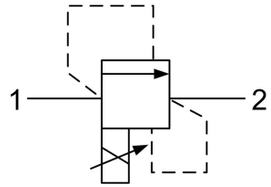
SAE Cartridge - 350 bar

Proportional Solenoid Valve

2 way proportional relief valve



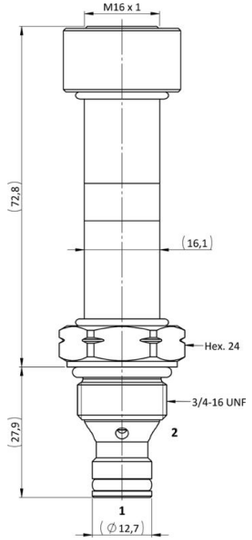
HYDRAULIC SYMBOL



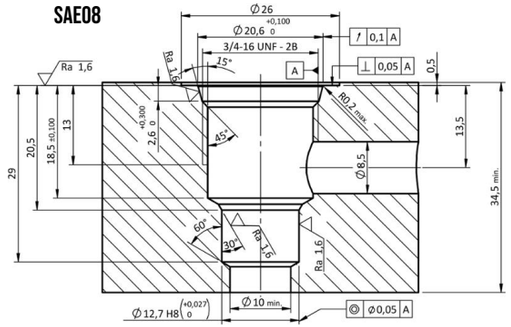
DESCRIPTION

The PRB0 is a proportional solenoid relief Valve, direct acting, poppet type, SAE-08. In the energized mode, the relief pressure is proportional to the current applied to the coil. When the pressure at the port 1 reaches the pressure setting, the valve starts to open to port 2 (Tank). When de-energized, reverse flow is blocked. Back pressure additive to pressure setting at 1:1 ratio.

CROSS SECTION



CAVITY SAE08



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	8 l/min
MAXIMUM INTERNAL LEAKAGE	4,50 cm^3 / min @ 70 bar 4,50 cm^3 / min @ 300 bar
PORT 1 - MAX OPERATING PRESSURE	380 bar
PORT 2 - MAX OPERATING PRESSURE	50 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral-based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	35-40 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.093 e SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	26W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR1D.C12.L0 (12Vdc-26W) and CCR1D. C24.L0 (24Vdc-26W)
WEIGHT	0,171 kg

ORDERING CODE

P	R	B	0	·	S	0	8	·	0	*	·	N	0	0

VALVE BASIC CODE

SIZE
3/4-16 UNF with Ø12,7 nose size

MARKING
0 = Standard factory marking.
Customized marking can be done upon request.

MANUAL OVERRIDE

Model code	Type of override
0	No override

FILTRATION

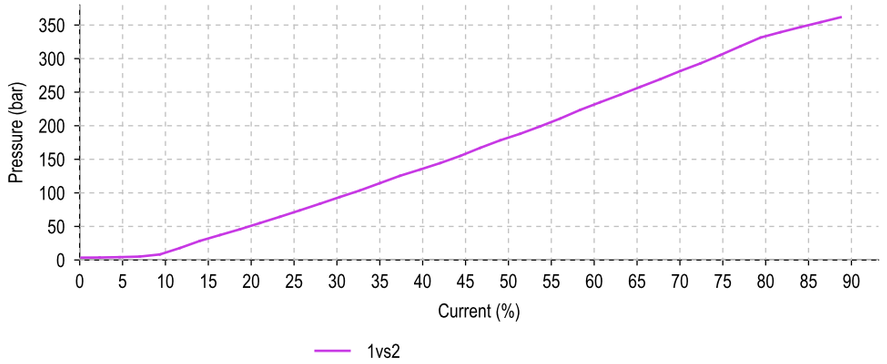
Model code	Type of filter
F	Axial filter (Mesh size 150 µm)
N	No filtration

Specifications may change without notice.

PRBO.SO8 GRAPHS

The performance chart illustrates flow handling capacity 1 to 2 (energized with 24 Vdc). p/Q curves are recorded at TOil = 40°C and 46 cSt.

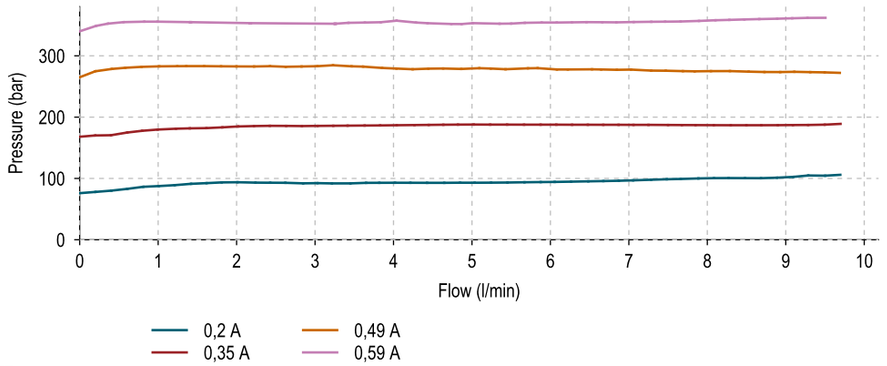
PRESSURE VS CURRENT



NOTE

The performance chart illustrates pressure regulation. Current percentage is referred to steady-state current of the coil.
PWM frequency is set to 100 Hz.
Curve is recorded at TOil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

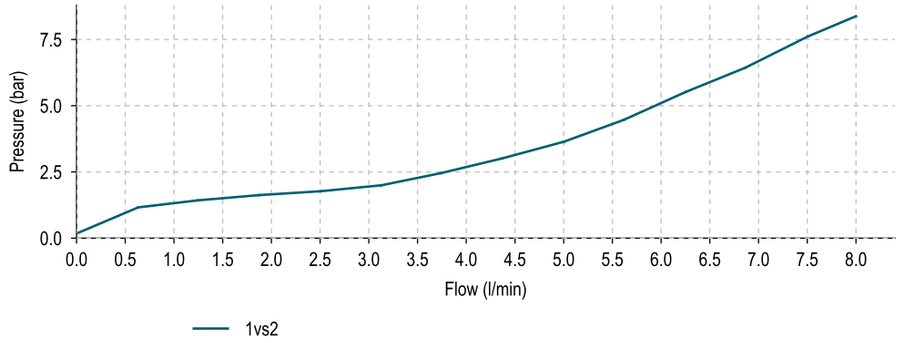
PRESSURE VS FLOW - ENERGIZED



NOTE

The performance chart illustrates flow handling capacity 1 to 2 (energized with 24 Vdc). p/Q curves are recorded at TOil = 40°C and 46 cSt.

PRESSURE VS FLOW - DE-ENERGIZED



NOTE

The performance chart illustrates flow handling capacity 1 to 2 (energized with 24 Vdc). p/Q curves are recorded at TOil = 40°C and 46 cSt.

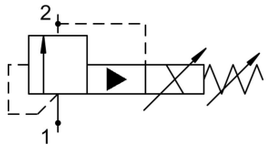
PRQ0.S10 VALVE SERIES

SAE Cartridge - 350 bar

Proportional Solenoid Valve

2 way proportional pressure relief

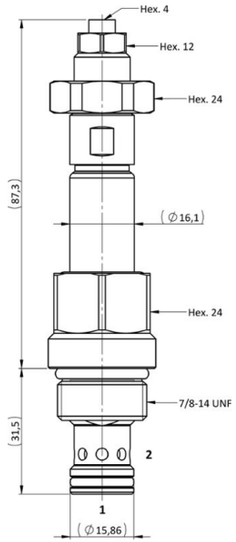
HYDRAULIC SYMBOL



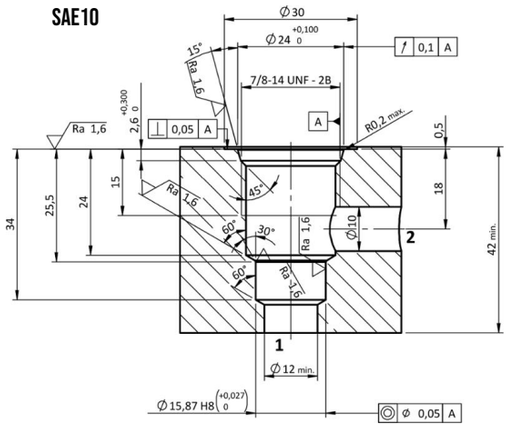
DESCRIPTION

The PRQ0 is a two way proportional solenoid pilot-operated, spool type, screw-in hydraulic cartridge relief valve with a decreasing pressure-current characteristic. When de-energized the relief pressure at port 1 is set to a relieving pressure value, based via the adjustment screw regulation. When energized, the pressure setting decrease proportionally to the applied current from this pre-setted maximum pressure to the minimum allowable. The valve has also an air bleeding function, operated via a special nut, that allows to reduce vibration and, if used, to install the valve with no restriction on orientation.

CROSS SECTION



CAVITY SAE10



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	120 l/min
MAXIMUM INTERNAL LEAKAGE	500 cm^3 / min at 80 % of nominal set point
PRESSURE SETTING RANGE - LOW	15 - 60 bar
PRESSURE SETTING RANGE - MED	15 - 230 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	Recommended below tank level or alternatively in coil side down orientation
INSTALLATION TORQUE	55-65 Nm Hex.24
TECH. SPEC. FOR CHARACTERIZATION	see page 807
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.226 and SK.087 (coil) (standard sealing NBR-BUNA-N)
COILS	19W (for more details see page 769 - 781)Performance and Validation test performed with VIS products CCR0D.C12.E0 (12Vdc-19W) and CCR0D. C24.E0 (24Vdc-19W)
WEIGHT	0,231 kg

ORDERING CODE

P	R	Q	0	·	S	1	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
7/8-14 UNF with Ø15,86 nose size

MARKING
0 = Standard factory marking. Customized marking can be done upon request

000 = No specific pressure setting required

BIAS SPRING OPTIONS

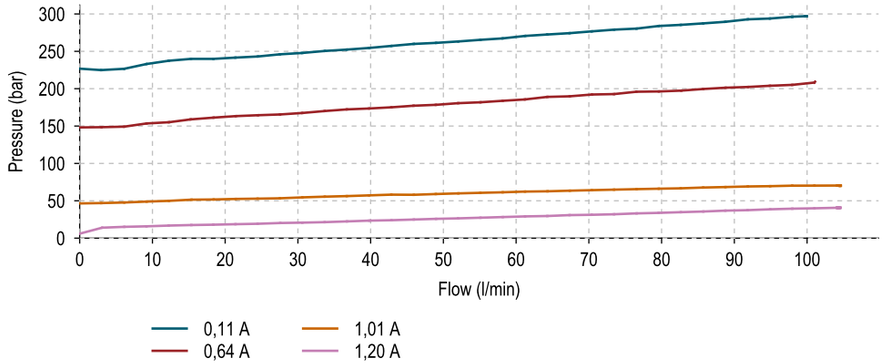
Spring model code	Pressure setting range
Y	15-60
N	15-230

Specifications may change without notice.

PRQO.S10 GRAPHS

The performance chart illustrates flow handling capacity at maximum setting of 230 bar with de-energized coil and with coil energized at different current values (@ 12 Vdc). p/Q curves are recorded at TOil = 40°C and 46 cSt.

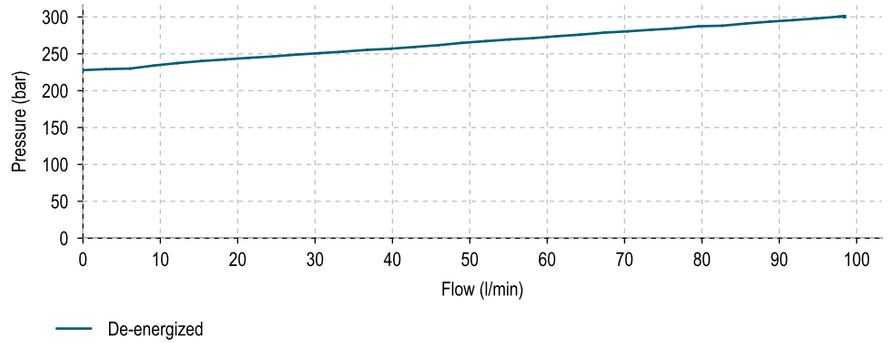
PRESSURE VS FLOW ENERGIZED



NOTE

The performance chart illustrates flow handling capacity at maximum setting of 230 bar with de-energized coil and with coil energized at different current values (@ 12 Vdc). p/Q curves are recorded at TOil = 40°C and 46 cSt.

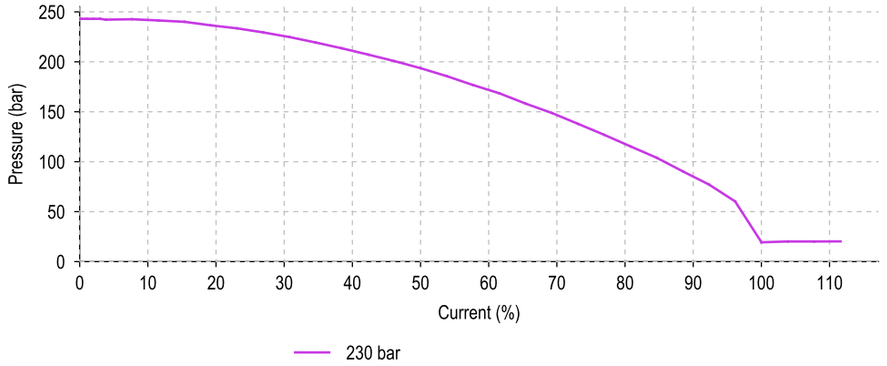
PRESSURE VS FLOW DE-ENERGIZED



NOTE

The performance chart illustrates flow handling capacity at maximum setting of 230 bar with de-energized coil and with coil energized at different current values (@ 12 Vdc). p/Q curves are recorded at TOil = 40°C and 46 cSt.

PRESSURE VS CURRENT



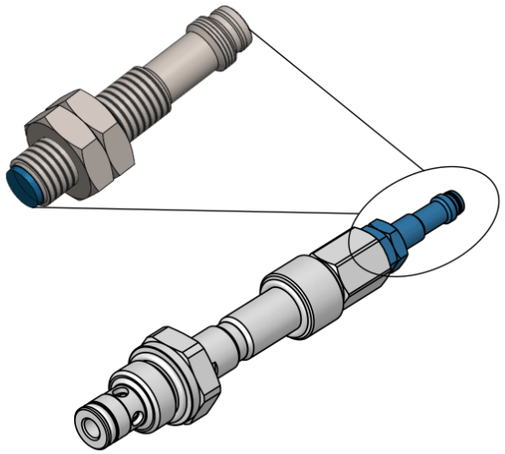
NOTE

The performance chart illustrates pressure setting regulation. Current percentage is referred to steady-state current of the coil. PWM frequency set to 200 Hz. Curves are recorded at TOil = 40°C and 46 cSt (energized @12 vdc and @24 Vdc).

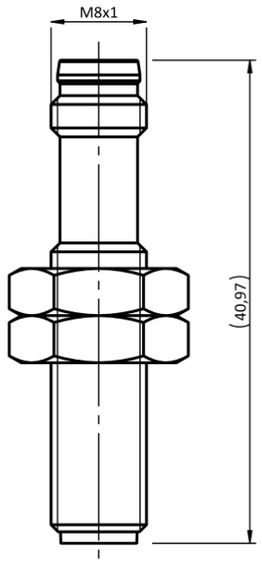
CIS.001

Inductive Position Switch for on/off solenoid valves

Metal encapsulation - with fastening nut



OVERALL DIMENSIONS



TECHNICAL DATA

THREAD SIZE	M8 x 1
CONNECTION TYPE	Connector M8, 3-pin (see table below)
SENSING RANGE	2 mm
SWITCHING OUTPUT	PNP
SUPPLY VOLTAGE	10 Vdc…30 Vdc
VOLTAGE DROP	≤ 2 V
CONTINUOUS CURRENT	≤ 200 mA
TURN ON TIME	≤ 100 ms
SHORT-CIRCUIT PROTECTION	present
POWER-UP PULSE PROTECTION	present
PROTECTION RATING	IP67
SHOCK AND VIBRATION RESISTANCE	30g, 11ms/10Hz…55Hz, 1mm
AMBIENT OPERATING TEMPERATURE	-25°C… +75°C
TIGHTENING TORQUE, MAX	≤ 5 Nm

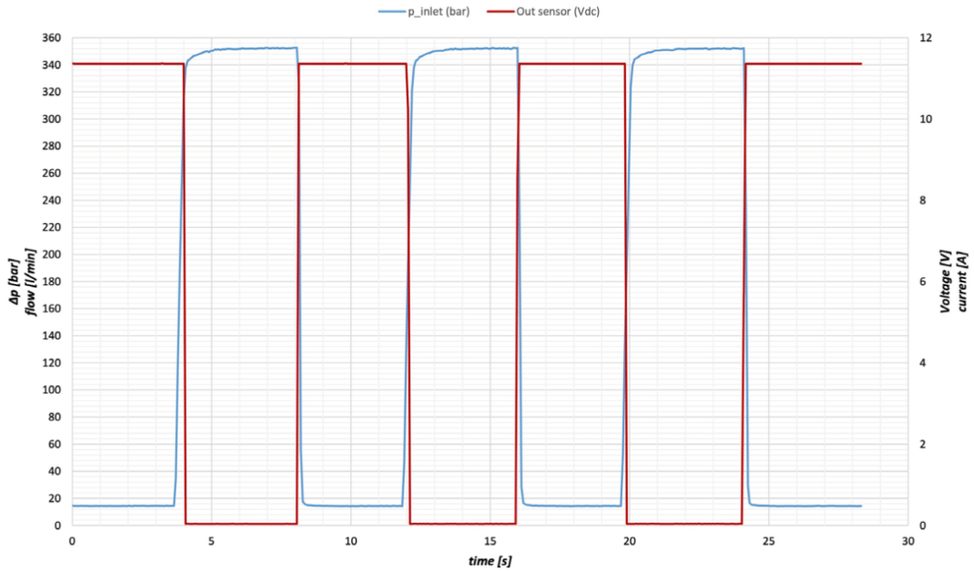
NOTE

Not for individual sale. Must be combined with selected solenoid valves.
For more details please contact our sales team.

DESCRIPTION

Inductive proximity sensor installed onto a solenoid valve that is able to detect any change in the on/off state of the valve and transmit back a voltage signal.

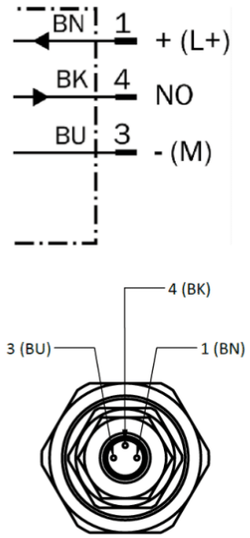
INDUCTIVE SENSOR VOLTAGE - STEP RESPONSE - EXAMPLE OF A N.O. ON/OFF VALVE



AVAILABLE CABLE LENGTHS

Length [m]
1,0
1,5
2,0
3,0
5,0
6,0
10,0
20,0
30,0
50,0

WIRING DIAGRAM



Specifications may change without notice.

CPR Proportional Regulator

24Vcc - 12Vcc - Continuous duty - ED100%

Plastic Encapsulation

DESCRIPTION

Electronic regulator for open loop control of proportional valves. Encapsulated with thermoplastic compound. Black standard colour. Five potentiometers to adjust minimum and maximum current, rise and fall ramps, frequency. Led switched on when system is powered .

TECHNICAL DATA

VOLTAGE	24 - 12 Vdc
INPUT	0 - 10 Volt
PWM FREQUENCY SET 120 HZ (ADJUSTABLE)	50 - 400 Hz
CONNECTOR	EN 175301-803 (DIN 43650)
OPERATING RANGE	-10°C, +50°C
PRETECTION CLASS	IP65

ORDERING CODE

VALVE BASIC CODE:

C	P	R	·	1	·	*	·	C	P	R

LABELLING

0 = Supplier standard labelling

1 = Vis standard labelling

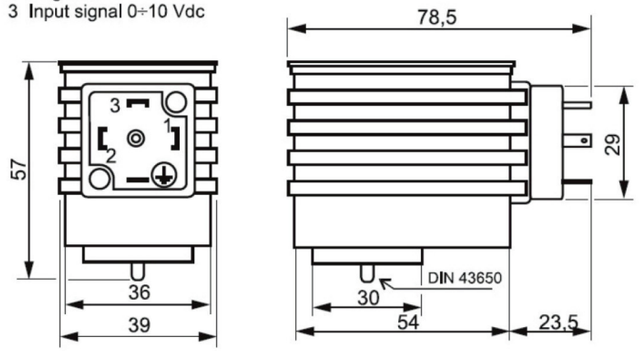
Customized labelling can be done upon request.

CONNECTOR

Model Code	Type of connector
001	DIN 43650

EXTERNAL DIMENSIONS

1 Positive 24 - 12 Vdc ±10%
2 Negative
3 Input signal 0÷10 Vdc



CCN Connector

Vac - Vdc Continuous duty - ED100%

Plastic Encapsulation

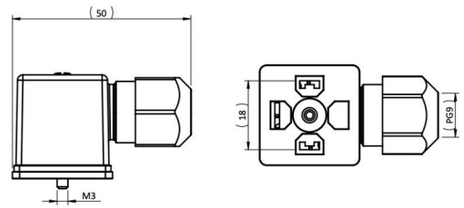
DESCRIPTION

Connector P18 with screw pin M3, NBR seal, ground (PE), Gratz bridge (rectifier) and VDR pro- tection. This type of connector are necessary to switch VAC in DC current.

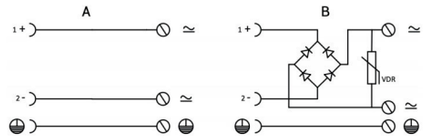
TECHNICAL DATA

VOLTAGE	See ordering code
MAX CURRENT	1A
SUPPRESSOR	See ordering code
N° OF ELECTRICAL CONTACTS	2 + PE (ground)
CONNECTOR	EN 175301-803 (DIN 43650)
TEMPERATURE OPERATING RANGE	-40°C, +80°C
IP - PRETECTION CLASS	IP65

EXTERNAL DIMENSIONS



CIRCUITS



ORDERING CODE

CONNECTOR BASIC CODE:

C	C	N	·	*	*	*

VAC/RAC - VDC CONVERSION

Model Code	Input Voltage	Output Voltage	Suppressor	Circuit
001	Same as output voltage	Same as input voltage	DIN 43650	A
002	230 VAC	207 VDC	VDR 275 Vrms 8,6 Joule	B
003	24 VAC	20 VDC	VDR 30 Vrms 8,6 Joule	B
004	115 VAC	103 VDC	VDR 130 Vrms 8,6 Joule	B

Specifications may change without notice.

CCSOA COILS SERIES

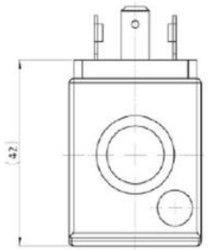
18W - Continuous duty - ED100%

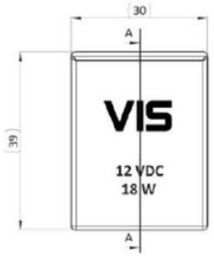
Plastic Encapsulation

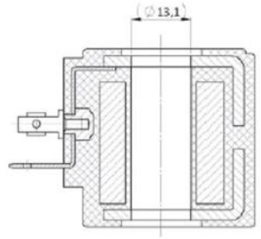
DESCRIPTION

Magnetic circuit encapsulated with thermoplastic compound.
Black standard colour.
Metal parts are protected against oxidation according to RoHS directive.
Bore size: Ø13.1 mm

PROSPECTIVE





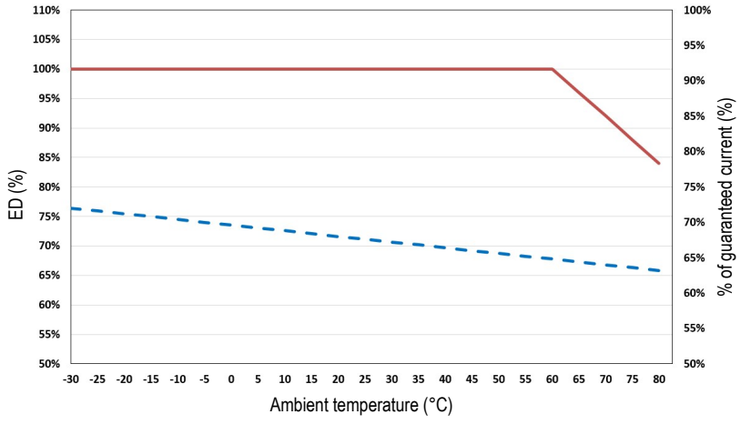


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



ED with Vdc +10% [%]
Steady current guaranteed with Vdc -10% [%]

TECHNICAL DATA

POWER	18W
VARIOUS VOLTAGE OPTIONS AVAILABLE	both AC and DC
COILS INSULATION CLASS	"F " (155°)
WIRE INSULATION CLASS	"H " (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-30°C, 60° C (standard) -40°C, 80° C (with IXEF encapsulation)
IP COIL WITH CONNECTOR	see page 783
IP COIL (WITHOUT O-RINGS AND NUT)	54
SEAL KIT CODE	SK.027 (standard sealing NBR-BUNA-N)
WEIGHT	0,170 kg

ORDERING CODE

C	C	S	0	A	.	*	*	*	.	A	0	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 13,1 mm

TYPE OF CURRENT
C = Direct current
R = Alternate current
*please note alternate current coils have to be supplied with rectified current. Vis is suppling proper CCN connector to be used with different alternate current input voltages

VOLTAGE

POWER
A = 18W

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

Model code	Type of connector
00	DIN43650
01	Flying Leads (200 mm)
02	AMP Junior
04	Bipolar cable
05	AMP Superseal
08	DEUTSCH (90°)
09	DEUTSCH
10	Faston
11	KOSTAL (M27 x 1)
13	KOSTAL (M24 x 1)
17	Dual spade

NOTE

Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage.
Specific models can be supplied upon customer request

Specifications may change without notice.

CCHOA COILS SERIES

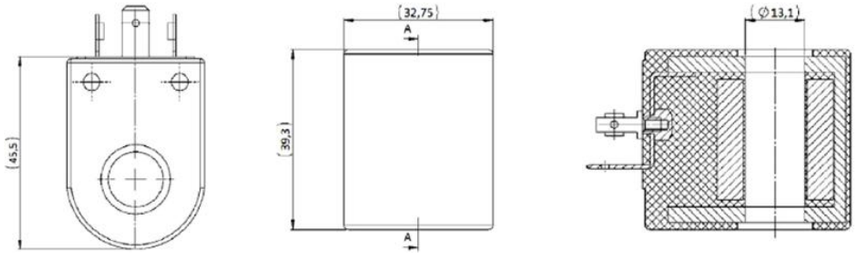
20W - Continuous duty - ED100%

Plastic Encapsulation

DESCRIPTION

Magnetic circuit encapsulated with thermoplastic compound.
Black standard colour.
Metal parts are protected against oxidation according to RoHS directive.
Bore size: Ø13.1 mm

PROSPECTIVE

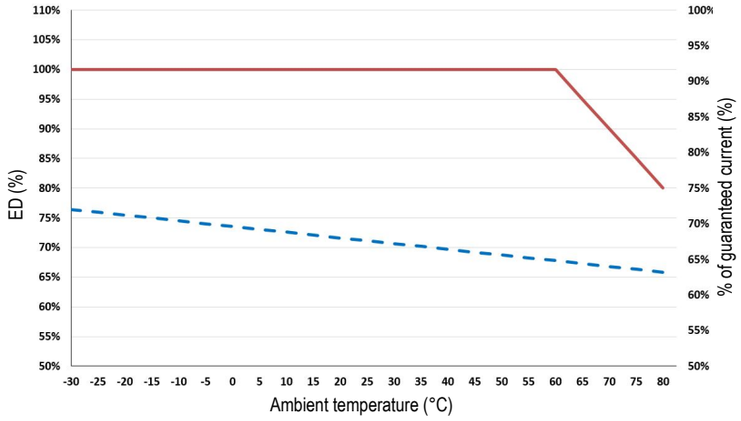


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



TECHNICAL DATA

POWER	20W
VARIOUS VOLTAGE OPTIONS AVAILABLE	both AC and DC
COILS INSULATION CLASS	"F " (155°)
WIRE INSULATION CLASS	"H " (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-30°C, 60° C (standard) -40°C, 80° C (with IXEF encapsulation)
IP COIL WITH CONNECTOR	see page 783
IP COIL (WITHOUT O-RINGS AND NUT)	54
SEAL KIT CODE	SK.027 (standard sealing NBR-BUNA-N)
WEIGHT	0,190 kg

ORDERING CODE

C	C	H	0	A	.	*	*	*	.	B	0	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 13,1 mm

TYPE OF CURRENT
C = Direct current
R = Alternate current
*please note alternate current coils have to be supplied with rectified current. Vis is suppling proper CCN connector to be used with different alternate current input voltages

VOLTAGE

POWER
B = 20W

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

Model code	Type of connector
00	DIN43650
01	Flying Leads (200 mm)
02	AMP Junior
05	AMP Superseal
08	DEUTSCH (90°)
17	Dual spade

NOTE

Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage.
Specific models can be supplied upon customer request

Specifications may change without notice.

CCSOA COILS SERIES

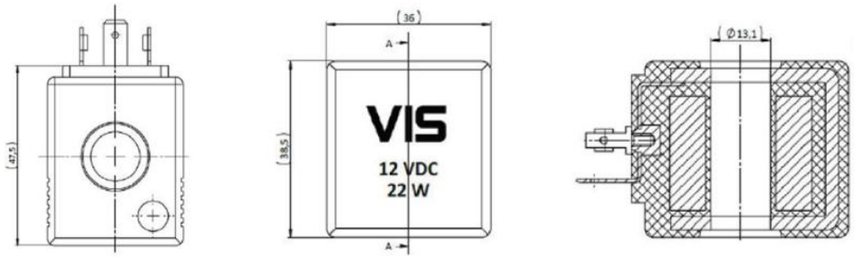
22W - Continuous duty - ED100%

Plastic Encapsulation

DESCRIPTION

Magnetic circuit encapsulated with thermoplastic compound.
Black standard colour.
Metal parts are protected against oxidation according to RoHS directive.
Bore size: Ø13,1 mm

PROSPECTIVE

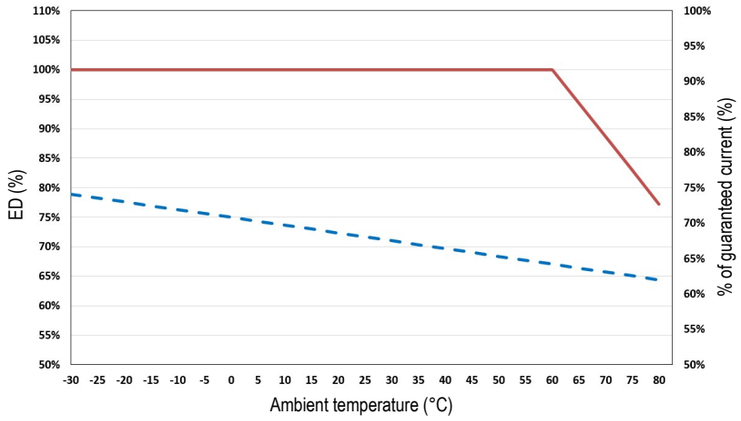


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



TECHNICAL DATA

POWER	22W
VARIOUS VOLTAGE OPTIONS AVAILABLE	both AC and DC
COILS INSULATION CLASS	"F " (155°)
WIRE INSULATION CLASS	"H " (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-30°C, 60° C (standard) -40°C, 80° C (with IXEF encapsulation)
IP COIL WITH CONNECTOR	see page 783
IP COIL (WITHOUT O-RINGS AND NUT)	54
SEAL KIT CODE	SK.027 (standard sealing NBR-BUNA-N)
WEIGHT	0,190 kg

ORDERING CODE

C	C	S	0	A	.	*	*	*	.	C	0	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 13,1 mm

TYPE OF CURRENT
C = Direct current
R = Alternate current
*please note alternate current coils have to be supplied with rectified current. Vis is suppling proper CCN connector to be used with different alternate current input voltages

VOLTAGE

POWER
C = 22W

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

Model code	Type of connector
00	DIN43650
01	Flying Leads (200 mm)
02	AMP Junior
04	Bipolar cable
05	AMP Superseal
08	DEUTSCH (90°)
09	DEUTSCH
10	Faston
11	KOSTAL (M27 x 1)
13	KOSTAL (M24 x 1)
17	Dual spade

NOTE

Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage.
Specific models can be supplied upon customer request

Specifications may change without notice.

CCSOA COILS SERIES

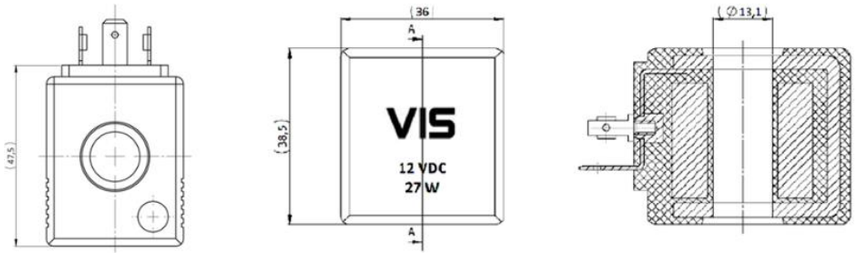
27W - Continuous duty - ED100%

Plastic Encapsulation

DESCRIPTION

Magnetic circuit encapsulated with thermoplastic compound.
Black standard colour.
Metal parts are protected against oxidation according to RoHS directive.
Bore size: Ø13.1 mm

PROSPECTIVE

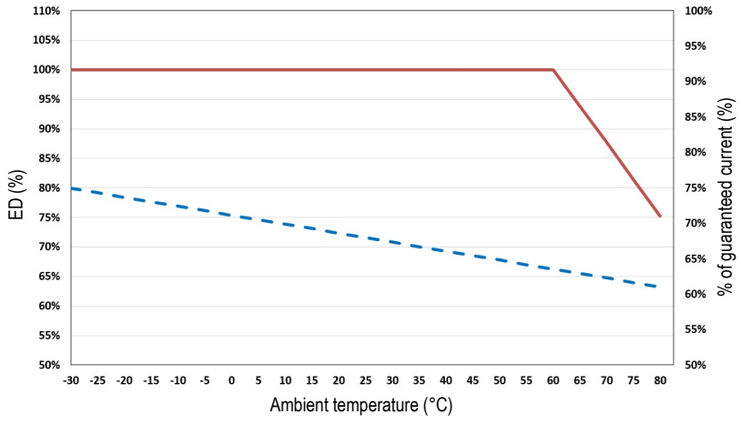


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



ED with Vdc +10% [%]
Steady current guaranteed with Vdc -10% [%]

TECHNICAL DATA

POWER	27W
VARIOUS VOLTAGE OPTIONS AVAILABLE	both AC and DC
COILS INSULATION CLASS	"F " (155°)
WIRE INSULATION CLASS	"H " (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-30°C, 60° C (standard) -40°C, 80° C (with IXEF encapsulation)
IP COIL WITH CONNECTOR	see page 783
IP COIL (WITHOUT O-RINGS AND NUT)	54
SEAL KIT CODE	SK.027 (standard sealing NBR-BUNA-N)
WEIGHT	0,250 kg

ORDERING CODE

C	C	S	0	A	.	*	*	*	.	D	0	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 13,1 mm

TYPE OF CURRENT
C = Direct current
R = Alternate current
*please note alternate current coils have to be supplied with rectified current. Vis is suppling proper CCN connector to be used with different alternate current input voltages

VOLTAGE

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

POWER
D = 27W

Model code	Type of connector
00	DIN43650
01	Flying Leads (200 mm)
02	AMP Junior
04	Bipolar cable
05	AMP Superseal
08	DEUTSCH (90°)
09	DEUTSCH
10	Faston
11	KOSTAL (M27 x 1)
13	KOSTAL (M24 x 1)
17	Dual spade

NOTE

Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage.
Specific models can be supplied upon customer request

Specifications may change without notice.

CCR1D COILS SERIES

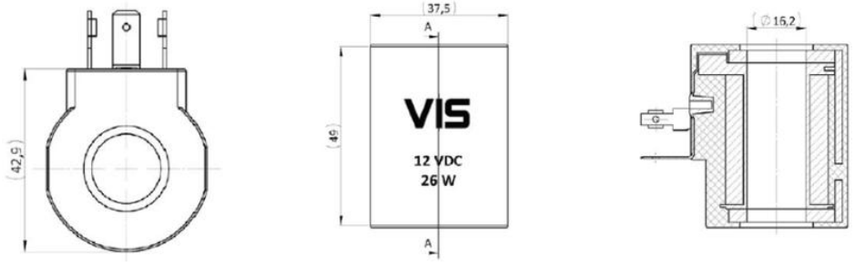
26W - Continuous duty - ED100%

Plastic Encapsulation

DESCRIPTION

Magnetic circuit encapsulated with thermoplastic compound.
Black standard colour.
Metal parts are protected against oxidation according to RoHS directive.
Bore size: Ø16.2 mm

PROSPECTIVE

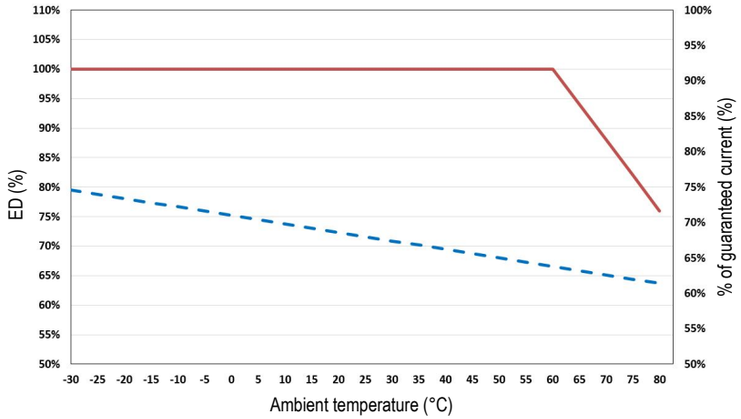


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



TECHNICAL DATA

POWER	26W
VARIOUS VOLTAGE OPTIONS AVAILABLE	both AC and DC
COILS INSULATION CLASS	"F " (155°)
WIRE INSULATION CLASS	"H " (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-30°C, 60° C (standard) -40°C, 80° C (with IXEF encapsulation)
IP COIL WITH CONNECTOR	see page 783
IP COIL (WITHOUT O-RINGS AND NUT)	54
SEAL KIT CODE	SK.087 (standard sealing NBR-BUNA-N)
WEIGHT	0,170 kg

ORDERING CODE

C	C	R	1	D	.	*	*	*	.	L	0	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 16,2 mm

TYPE OF CURRENT
C = Direct current
R = Alternate current *please note alternate current coils have to be supplied with rectified current. Vis is suppling proper CCN connector to be used with different alternate current input voltages

VOLTAGE

POWER
L = 26W

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

Model code	Type of connector
00	DIN43650
01	Flying Leads (200 mm)
02	AMP Junior
04	Bipolar cable
05	AMP Superseal
08	DEUTSCH (90°)
17	Dual Spade

NOTE

Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage.
Specific models can be supplied upon customer request

Specifications may change without notice.

Rev. 1

CCROD COILS SERIES

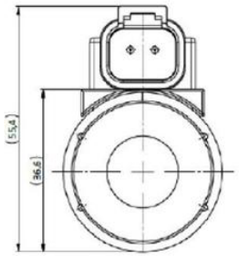
19W - Continuous duty - ED100%

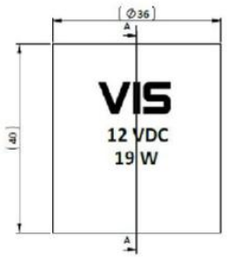
Robust design with outer metal cage

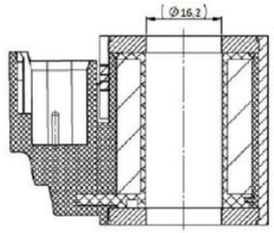
DESCRIPTION

External plated metal cage and shims to maximize electromagnetic output.
Metal parts are protected against oxidation according to RoHS directive.
Bore size: Ø16,2 mm.
Suitable for HEAVY DUTY operations.

PROSPECTIVE





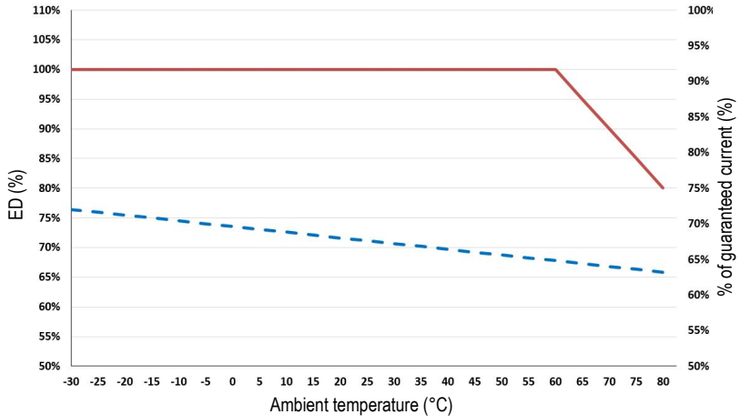


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



ED with Vdc +10% [%]
Steady current guaranteed with Vdc -10% [%]

TECHNICAL DATA

POWER	19W
VARIOUS VOLTAGE OPTIONS AVAILABLE	DC
COILS INSULATION CLASS	"H" (180°)
WIRE INSULATION CLASS	"H" (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-40°C, 80° C (standard)
IP COIL WITH CONNECTOR	see page 783
IP COIL (WITHOUT O-RINGS AND NUT)	0
WEIGHT	0,210 kg

ORDERING CODE

C	C	R	0	D	.	*	*	*	.	E	*	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 16,2 mm

TYPE OF CURRENT
C = Direct current

VOLTAGE

POWER
E = 19W

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

Model code	Type of connector
00	DIN43650
02	AMP Junior
08	DEUTSCH (90°)
11	KOSTAL (27 x 1)

NOTE

Coil design is water proof and therefore doesn't require external sealings. Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage. Specific models can be supplied upon customer request.

Specifications may change without notice.

CCROA COILS SERIES

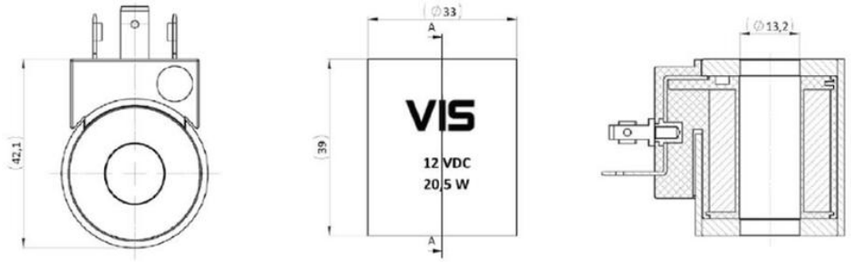
20,5W - Continuous duty - ED100%

Robust design with outer metal cage

DESCRIPTION

External plated metal cage and shims to maximize electromagnetic output.
Metal parts protected are against oxidation according to RoHS directive.
Bore size: Ø13.1 mm.
Suitable for HEAVY DUTY operations.

PROSPECTIVE

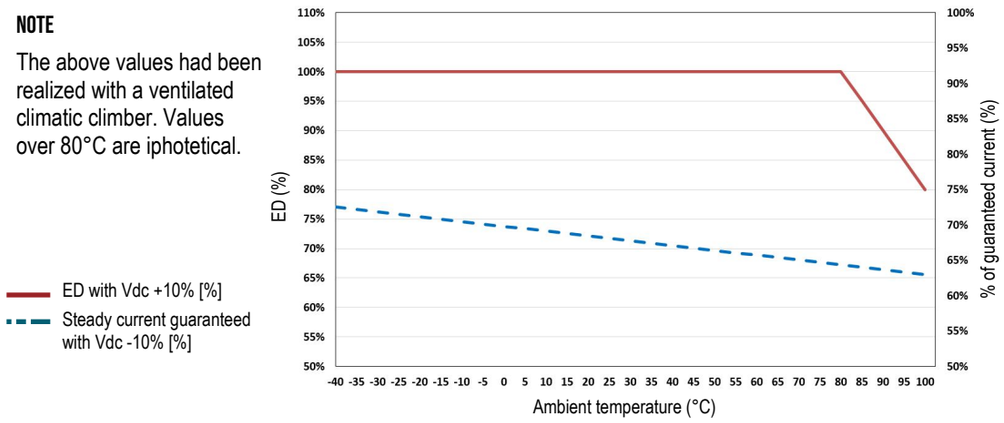


PERFORMANCE DETAILS

NOTE

The above values had been realized with a ventilated climatic climber. Values over 80°C are iphotetical.

Duty cycle vs ambient temperature & steady current vs ambient temperature



TECHNICAL DATA

POWER	20.5W
VARIOUS VOLTAGE OPTIONS AVAILABLE	both AC and DC
COILS INSULATION CLASS	"H " (180°)
WIRE INSULATION CLASS	"H " (200°)
ED	100%
SUPPLY POWER TOLERANCE	±10% (DC); +10% -5% (AC)
SEVERAL CONNECTOR OPTIONS AVAILABLE	see page 783
AMBIENT TEMPERATURE RANGE	-40°C, 80° C (standard)
IP COIL WITH CONNECTOR	see page 783
WEIGHT	0,190 kg

ORDERING CODE

C	C	R	0	A	.	*	*	*	.	I	*	.	*	*

COIL BASIC CODE

BOOR SIZE
A = Ø 13,1 mm

TYPE OF CURRENT
C = Direct current
R = Alternate current
*please note alternate current coils have to be supplied with rectified current. Vis is suppling proper CCN connector to be used with different alternate current input voltages

VOLTAGE

POWER
I = 20.5W

MARKING
0 = Standard factory marking (logo+voltage+power). Customized marking can be done upon request.

Model code	Type of connector
00	DIN43650
01	Flying Leads (200 mm)
05	AMP-Superseal
08	DEUTSCH (90°)
13	KOSTAL (24 x 1)
17	Dual spade

NOTE

Coil design is water proof and therefore doesn't require external sealings. Our standard diodes are P6KE33CA or P6KE62CA, depending on the voltage. Specific models can be supplied upon customer request. Zener Diode upon request.

Specifications may change without notice.

AMP JUNIOR

Coil connector

PROTECTION DEGREE: IP 65

KOSTAL (M24 X 1)

Coil connector

PROTECTION DEGREE: IP 67

DUALSPADE

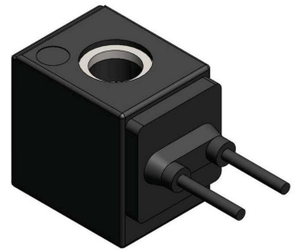
Coil connector

PROTECTION DEGREE: IP 65

FLYING LEADS

Coil connector

PROTECTION DEGREE: IP 67



DEUTSCH

Coil connector

PROTECTION DEGREE: IP 69K

DIN 43650

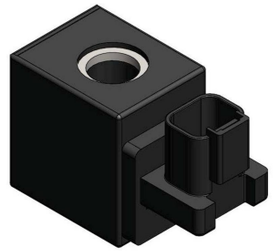
Coil connector

PROTECTION DEGREE: IP 65

DEUTSCH (90°)

Coil connector

PROTECTION DEGREE: IP 69K



BIPOLAR CABLE

Coil connector

PROTECTION DEGREE: IP 65

FASTON

Coil connector

PROTECTION DEGREE: IP 65

AMP SUPERSEAL

Coil connector

PROTECTION DEGREE: IP 69K

KOSTAL (M27 X 1)

Coil connector

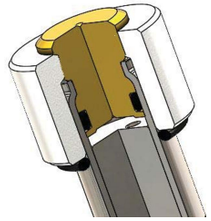
PROTECTION DEGREE: IP 67

Specifications may change without notice.

NO OVERRIDE

standard configuration

Model code:0



DESCRIPTION

-

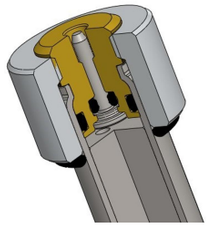
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Knurled closed nut (1)
- Hexagonal open nut (4)

PUSH PIN

Push type pole tube

Model code:3



DESCRIPTION

In order to operate this override, press the pin with a screwdriver, or a similar tool, and maintain constant pressure. Once released, the valve will get back to the de-energized mode.
External valve dimensions don't change.
Contact factory for more information.

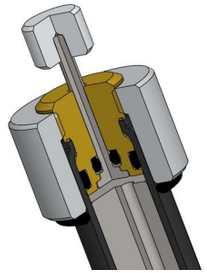
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Knurled closed nut (1)
- Hexagonal open nut (4)

PUSH KNOB

Push type pole tube

Model code:4



DESCRIPTION

In order to operate this override, press the pin with a finger and maintain constant pressure. Once released, the valve will get back to the de-energized mode.
External valve dimensions increase.
Contact factory for more information.

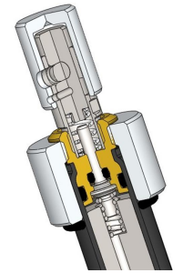
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Hexagonal open nut (4)

PUSH & TWIST

Push type pole tube

Model code:2



DESCRIPTION

To operate this override, manually screw-in the adjusting screw to full stroke position. To return to the starting condition, unscrew the adjusting screw until it contacts the retaining ring.
External dimensions change depending on the valve type.
Contact factory for more information.

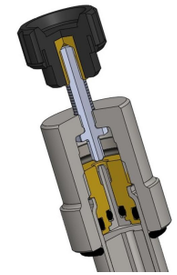
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Hexagonal open nut (4)

SCREW WITH KNOB

Push type pole tube

Model code: 8



DESCRIPTION

To operate this override, manually screw-in the knob to full stroke position. Once in this mode, the override is self-detended. To return to the de-energized mode, unscrew the override knob until positive stop occurs.
External dimensions change depending on the valve type.
Contact factory for more information.

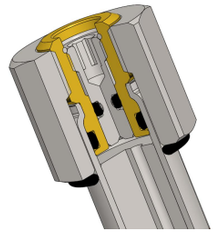
AVAILABLE NUT

- Knurled closed nut (1 as in the picture)

SPECIAL SCREW

Push type pole tube

Model code: C



DESCRIPTION

To operate this override, manually screw-in the adjusting screw to full stroke position. To return to the starting condition, unscrew the adjusting screw until it contacts the retaining ring.
External dimensions change depending on the valve type.
Contact factory for more information.

AVAILABLE NUT

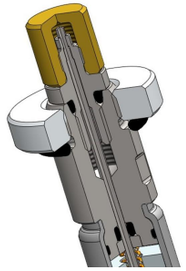
- Hexagonal open nut (9 as in the picture)

Specifications may change without notice.

SCREW

Pull type pole tube

Model code: 1



DESCRIPTION

To operate this override, manually unscrew the knob to full stroke position. Once in this mode, the override is self-detended. To return to the de-energized mode, screw-in the override knob until positive stop occurs.
External dimensions change depending on the valve type.
Contact factory for more information.

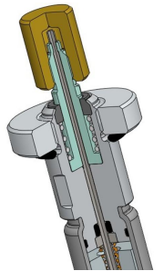
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Knurled closed nut (1)
- hexagonal open nut (4)

PULL & HOLD

Pull type pole tube

Model code: 6



DESCRIPTION

In order to operate this override, manually pull the knurled knob to the full stroke position and maintain constant load. Once released, the valve will get back to the de-energized mode.
External dimensions change depending on the valve type.
Contact factory for more information.

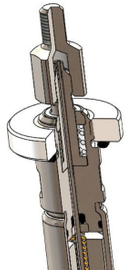
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Knurled closed nut (1)
- Hexagonal open nut (4)

PULL & HOLD WITH SCREW 10-32 UNF

Pull type pole tube

Model code: 9



DESCRIPTION

In order to operate this override, manually pull the threaded knob to the full stroke position and maintain constant load. Once released, the valve will get back to the de-energized mode.
External dimensions change depending on the valve type.
Contact factory for more information.

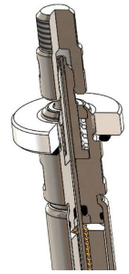
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Hexagonal open nut (4)

PULL & HOLD WITH SCREW M8

Pull type pole tube

Model code: A



DESCRIPTION

In order to operate this override, manually pull the threaded knob to the full stroke position and maintain constant load. Once released, the valve will get back to the de-energized mode.
External dimensions change depending on the valve type.
Contact factory for more information.

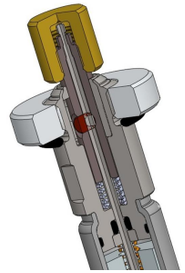
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Hexagonal open nut (4)

PUSH & TWIST

Pull type pole tube

Model code: 2



DESCRIPTION

To operate this override, manually push and twist the knurled knob counterclockwise. Once in this mode, the override is selfdetended. To return to the de-energized mode, push and twist the override knob clockwise.
External dimensions change depending on the valve type.
Contact factory for more information.

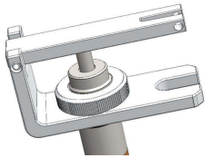
AVAILABLE NUT

- Knurled open nut (0 as in the picture)
- Hexagonal open nut (4)

LEVER OPTION FOR FLEXIBLE CABLE

Push type pole tube

Model code:D



DESCRIPTION

System created for push type manual override, activated remotely by mean of the proper cable.
External dimensions change depending on the valve type.
Contact factory for more information.

Specifications may change without notice.

COINING KIT

CK.001

DESCRIPTION

In order to minimize the external leakage we recommend to coin the cavity using the tool shown here.
Create a chamfer of 0,10 - 0,15 mm.

COINING KIT

CK.002

DESCRIPTION

In order to minimize the external leakage we recommend to coin the cavity using the tool shown here.
Create a chamfer of 0,10 - 0,15 mm.

COINING KIT

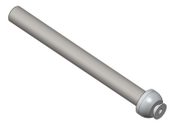
CK.003

DESCRIPTION

In order to minimize the external leakage we recommend to coin the cavity using the tool shown here.
Create a chamfer of 0,10 - 0,15 mm.

COINING KIT

CK.004



DESCRIPTION

In order to minimize the external leakage we recommend to coin the cavity using the tool shown here.
Create a chamfer of 0,10 - 0,15 mm.

COINING KIT

CK.005

DESCRIPTION

In order to minimize the external leakage we recommend to coin the cavity using the tool shown here.
Create a chamfer of 0,10 - 0,15 mm.

COINING KIT

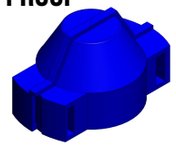
CK.006

DESCRIPTION

In order to minimize the external leakage we recommend to coin the cavity using the tool shown here.
Create a chamfer of 0,10 - 0,15 mm.

PLASTIC TAMPER PROOF CAP

CTP.001



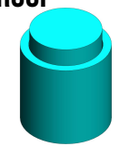
DESCRIPTION

Plastic tamper proof cap.
2 pieces are needed to build one complete cap.

Available in other colors.

PLASTIC TAMPER PROOF CAP

CTP.002



DESCRIPTION

Available in other colors.

PLASTIC TAMPER PROOF CAP

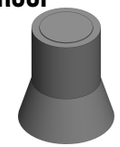
CTP.003

DESCRIPTION

Available in other colors.

PLASTIC TAMPER PROOF CAP

CTP.005



DESCRIPTION

Available in other colors.

FLOW ADJUSTMENT

0 = Hex Allen Head

FLOW ADJUSTMENT

V = Top Plastic Knob

FLOW ADJUSTMENT

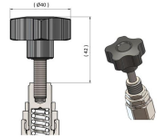
W = Top Plastic Knob and Plastic Counter Knob

ADJUSTING KNOB

Model 1

ADJUSTING KNOB

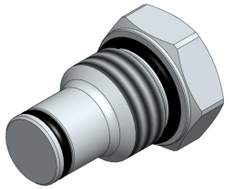
Model 2

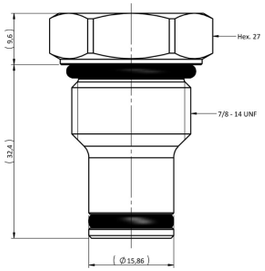


Specifications may change without notice.

SHUT-OFF PLUG

SAE10





ORDERING CODE

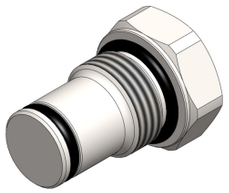
S	P	·	P	G	·	0	0	1

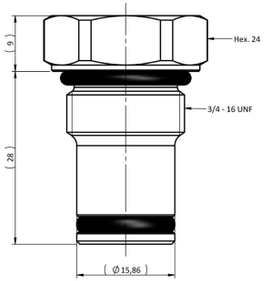
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	55-65 Nm	Hex.27
SEAL KIT CODE	SK.001	(standard sealing NBR-BUNA-N)
WEIGHT	0,120 kg	

SHUT-OFF PLUG

SAE09





ORDERING CODE

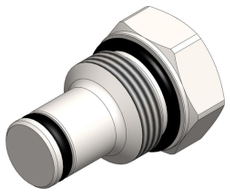
S	P	·	P	G	·	0	0	2

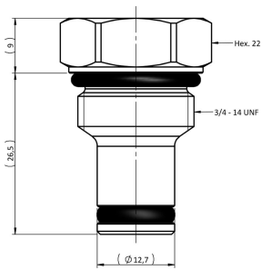
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.24
SEAL KIT CODE	SK.002	(standard sealing NBR-BUNA-N)
WEIGHT	0,085 kg	

SHUT-OFF PLUG

SAE08





ORDERING CODE

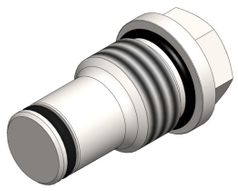
S	P	·	P	G	·	0	0	3

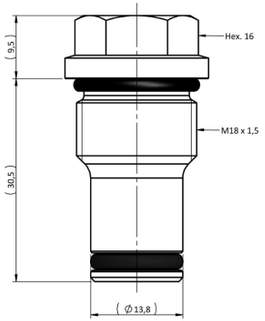
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.22
SEAL KIT CODE	SK.003	(standard sealing NBR-BUNA-N)
WEIGHT	0,070 kg	

SHUT-OFF PLUG

VH002





ORDERING CODE

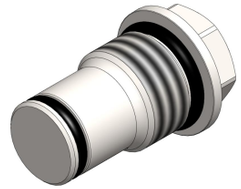
S	P	·	P	G	·	0	0	7

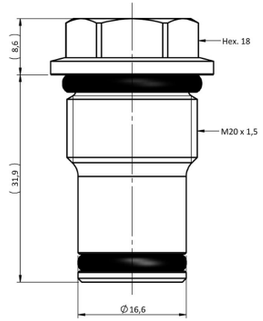
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.16
SEAL KIT CODE	SK.006	(standard sealing NBR-BUNA-N)
WEIGHT	0,065 kg	

SHUT-OFF PLUG

VH003





ORDERING CODE

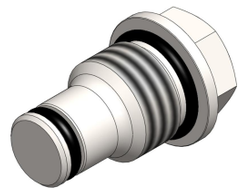
S	P	·	P	G	·	0	0	8

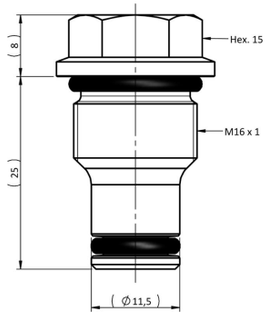
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.18
SEAL KIT CODE	SK.012	(standard sealing NBR-BUNA-N)
WEIGHT	0,085 kg	

SHUT-OFF PLUG

VH004





ORDERING CODE

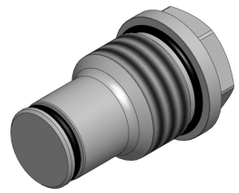
S	P	·	P	G	·	0	0	9

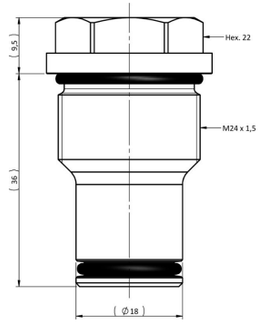
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	25-30 Nm	Hex.15
SEAL KIT CODE	SK.011	(standard sealing NBR-BUNA-N)
WEIGHT	0,045 kg	

SHUT-OFF PLUG

VH005





ORDERING CODE

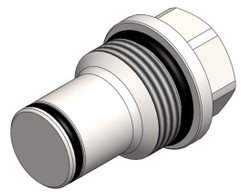
S	P	·	P	G	·	0	1	0

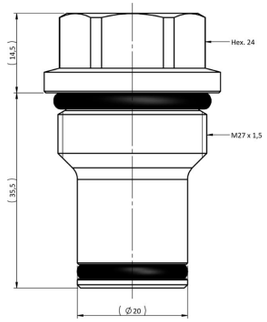
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	50-55 Nm	Hex.22
SEAL KIT CODE	SK.010	(standard sealing NBR-BUNA-N)
WEIGHT	0,135 kg	

SHUT-OFF PLUG

VH054





ORDERING CODE

S	P	·	P	G	·	0	1	1

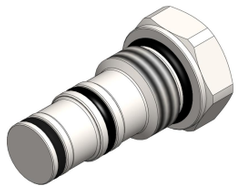
TECHNICAL DATA

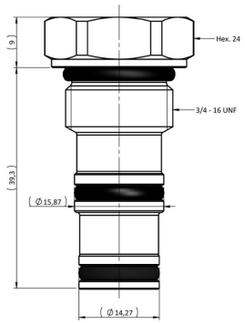
MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.24
SEAL KIT CODE	SK.021	(standard sealing NBR-BUNA-N)
WEIGHT	0,180 kg	

Specifications may change without notice.

SHUT-OFF PLUG

SAE08-2





ORDERING CODE

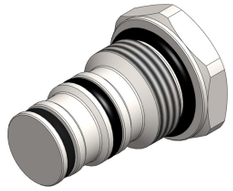
S	P	·	P	G	·	0	1	2

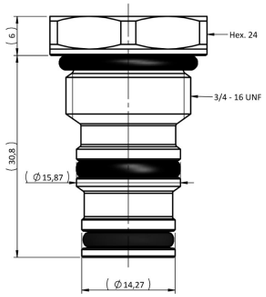
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.24
SEAL KIT CODE	SK.035	(standard sealing NBR-BUNA-N)
WEIGHT	0,095 kg	

SHUT-OFF PLUG

VH085





ORDERING CODE

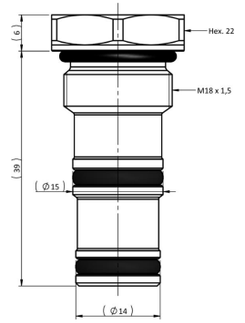
S	P	·	P	G	·	0	1	6

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.24
SEAL KIT CODE	SK.047	(standard sealing NBR-BUNA-N)
WEIGHT	0,070 kg	

SHUT-OFF PLUG

VH079



ORDERING CODE

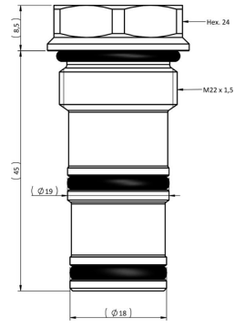
S	P	·	P	G	·	0	1	7

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.22
SEAL KIT CODE	SK.141	(standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg	

SHUT-OFF PLUG

VH080



ORDERING CODE

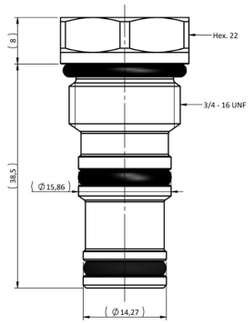
S	P	·	P	G	·	0	1	8

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	55-65 Nm	Hex.24
SEAL KIT CODE	SK.042	(standard sealing NBR-BUNA-N)
WEIGHT	0,135 kg	

SHUT-OFF PLUG

SAE08-1



ORDERING CODE

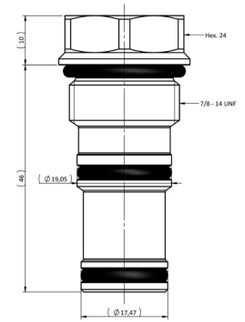
S	P	·	P	G	·	0	1	9

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.22
SEAL KIT CODE	SK.047	(standard sealing NBR-BUNA-N)
WEIGHT	0,085 kg	

SHUT-OFF PLUG

SAE10-1



ORDERING CODE

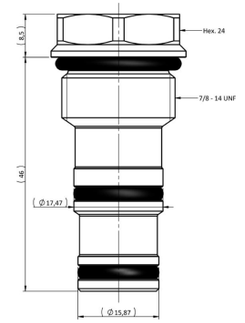
S	P	·	P	G	·	0	2	0

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.24
SEAL KIT CODE	SK.048	(standard sealing NBR-BUNA-N)
WEIGHT	0,140 kg	

SHUT-OFF PLUG

SAE10-2



ORDERING CODE

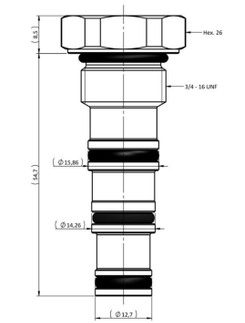
S	P	·	P	G	·	0	2	1

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	55-65 Nm	Hex.24
SEAL KIT CODE	SK.049	(standard sealing NBR-BUNA-N)
WEIGHT	0,125 kg	

SHUT-OFF PLUG

SAE08-3



ORDERING CODE

S	P	·	P	G	·	0	2	2

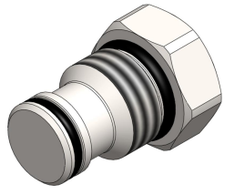
TECHNICAL DATA

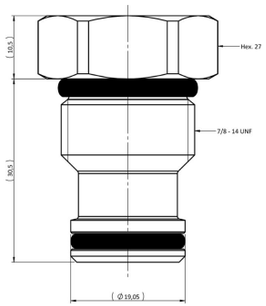
MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.26
SEAL KIT CODE	SK.065	(standard sealing NBR-BUNA-N)
WEIGHT	0,115 kg	

Specifications may change without notice.

SHUT-OFF PLUG

VH011





ORDERING CODE

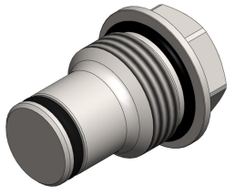
S	P	·	P	G	·	0	2	8

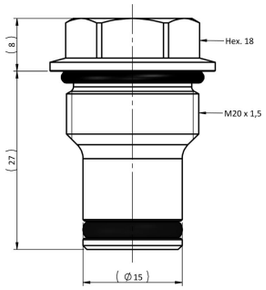
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	80-85 Nm	Hex.27
SEAL KIT CODE	SK.033	(standard sealing NBR-BUNA-N)
WEIGHT	0,125 kg	

SHUT-OFF PLUG

VH037





ORDERING CODE

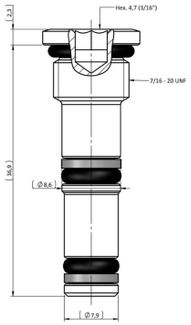
S	P	·	P	G	·	0	3	0

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.18
SEAL KIT CODE	SK.140	(standard sealing NBR-BUNA-N)
WEIGHT	0,070 kg	

SHUT-OFF PLUG

VH131



ORDERING CODE

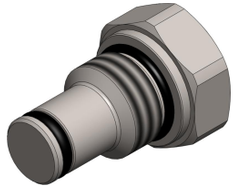
S	P	·	P	G	·	0	3	1

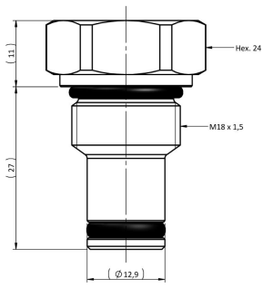
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	20-25 Nm	Hex.4.7
SEAL KIT CODE	SK.072	(standard sealing NBR-BUNA-N)
WEIGHT	0,020 kg	

SHUT-OFF PLUG

VH116





ORDERING CODE

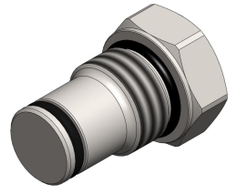
S	P	·	P	G	·	0	3	2

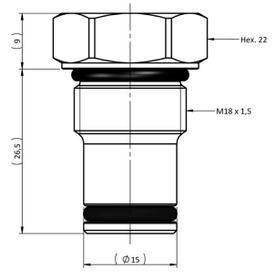
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.24
SEAL KIT CODE	SK.134	(standard sealing NBR-BUNA-N)
WEIGHT	0,080 kg	

SHUT-OFF PLUG

VH099





ORDERING CODE

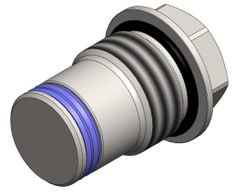
S	P	·	P	G	·	0	3	3

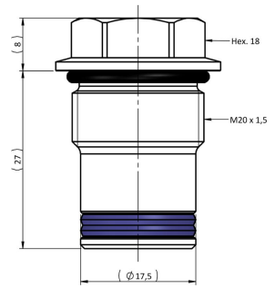
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.22
SEAL KIT CODE	SK.006	(standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg	

SHUT-OFF PLUG

VH069





ORDERING CODE

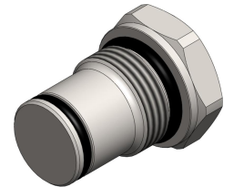
S	P	·	P	G	·	0	3	4

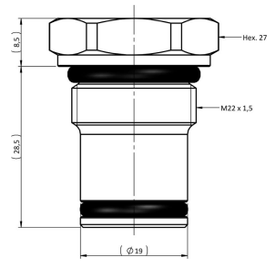
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.18
SEAL KIT CODE	SK.142	(standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg	

SHUT-OFF PLUG

VH045





ORDERING CODE

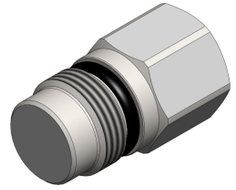
S	P	·	P	G	·	0	3	5

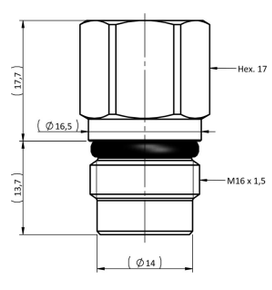
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.27
SEAL KIT CODE	SK.019	(standard sealing NBR-BUNA-N)
WEIGHT	0,110 kg	

SHUT-OFF PLUG

VH001





ORDERING CODE

S	P	·	P	G	·	0	3	7

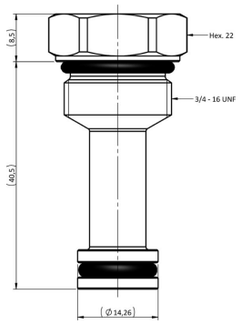
TECHNICAL DATA

MAXIMUM OPERATING	450 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.17
SEAL KIT CODE	SK.004	(standard sealing NBR-BUNA-N)
WEIGHT	0,055 kg	

Specifications may change without notice.

SHUT-OFF PLUG

SAE08-3



ORDERING CODE

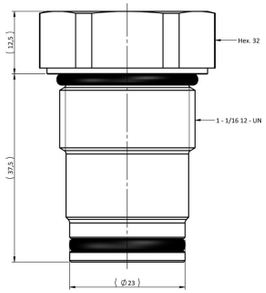
S	P	·	P	G	·	0	3	9

TECHNICAL DATA

MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	45-50 Nm	Hex.22	
SEAL KIT CODE	SK.143		(standard sealing NBR-BUNA-N)
WEIGHT	0,080 kg		

SHUT-OFF PLUG

VH194



ORDERING CODE

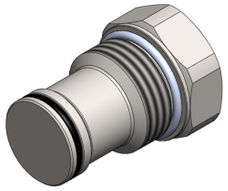
S	P	·	P	G	·	0	4	3

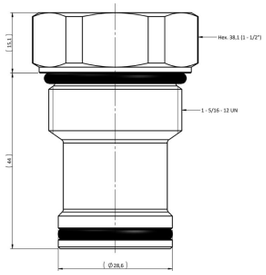
TECHNICAL DATA

MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	90-100 Nm	Hex.32	
SEAL KIT CODE	SK.100		(standard sealing NBR-BUNA-N)
WEIGHT	0,230 kg		

SHUT-OFF PLUG

SAE16





ORDERING CODE

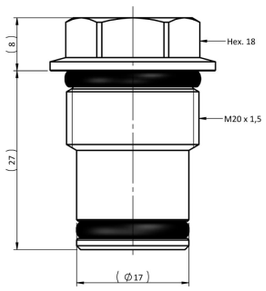
S	P	·	P	G	·	0	4	5

TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	150-160 Nm	Hex.	
SEAL KIT CODE	SK.074		(standard sealing NBR-BUNA-N)
WEIGHT	0,375 kg		

SHUT-OFF PLUG

VH041



ORDERING CODE

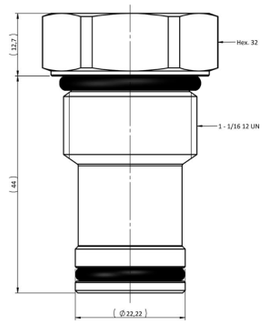
S	P	·	P	G	·	0	4	7

TECHNICAL DATA

MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	40-45 Nm	Hex.18	
SEAL KIT CODE	SK.053		(standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg		

SHUT-OFF PLUG

SAE12



ORDERING CODE

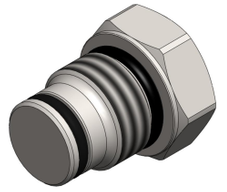
S	P	·	P	G	·	0	4	8

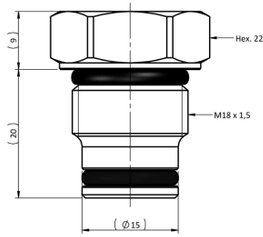
TECHNICAL DATA

MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	85-95 Nm	Hex.32	
SEAL KIT CODE	SK.077		(standard sealing NBR-BUNA-N)
WEIGHT	0,235 kg		

SHUT-OFF PLUG

VH039





ORDERING CODE

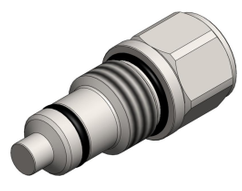
S	P	·	P	G	·	0	5	2

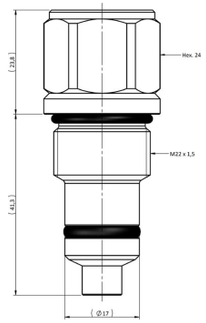
TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	35-40 Nm	Hex.22	
SEAL KIT CODE	SK.144		(standard sealing NBR-BUNA-N)
WEIGHT	0,065 kg		

SHUT-OFF PLUG

VH243





ORDERING CODE

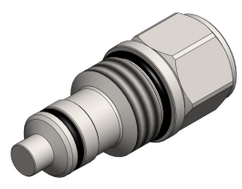
S	P	·	P	G	·	0	5	7

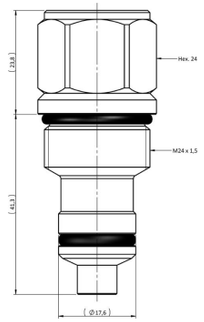
TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	40-45 Nm	Hex.24	
SEAL KIT CODE	SK.119		(standard sealing NBR-BUNA-N)
WEIGHT	0,175 kg		

SHUT-OFF PLUG

VH244





ORDERING CODE

S	P	·	P	G	·	0	5	8

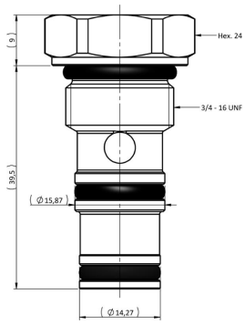
TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	45-50 Nm	Hex.24	
SEAL KIT CODE	SK.120		(standard sealing NBR-BUNA-N)
WEIGHT	0,180 kg		

Specifications may change without notice.

SHUT-OFF PLUG

SAE08-2



ORDERING CODE

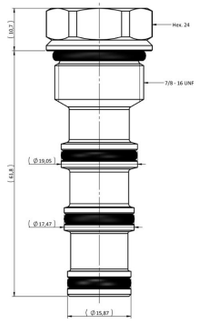
S	P	·	P	G	·	0	6	4

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.24
SEAL KIT CODE	SK.035	(standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg	

SHUT-OFF PLUG

SAE10-3



ORDERING CODE

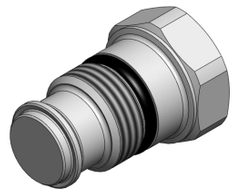
S	P	·	P	G	·	0	6	7

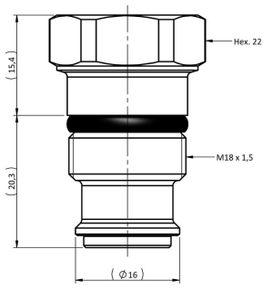
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	60-70 Nm	Hex.24
SEAL KIT CODE	SK.103	(standard sealing NBR-BUNA-N)
WEIGHT	0,155 kg	

SHUT-OFF PLUG

VH160





ORDERING CODE

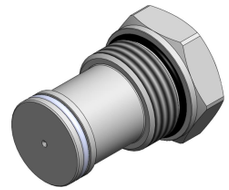
S	P	·	P	G	·	0	6	8

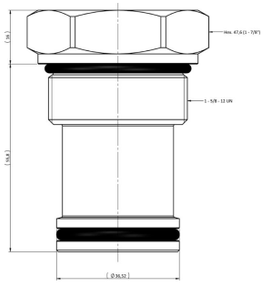
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	45-50 Nm	Hex.22
SEAL KIT CODE	SK.102	(standard sealing NBR-BUNA-N)
WEIGHT	0,075 kg	

SHUT-OFF PLUG

SAE20





ORDERING CODE

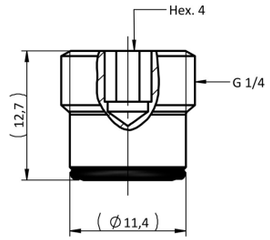
S	P	·	P	G	·	0	7	0

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	200-215 Nm	Hex.
SEAL KIT CODE	SK.078	(standard sealing NBR-BUNA-N)
WEIGHT	0,690 kg	

SHUT-OFF PLUG

VH007



ORDERING CODE

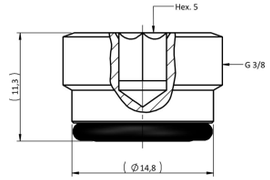
S	P	·	P	G	·	0	7	1

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	6-8 Nm	Hex.4
SEAL KIT CODE	SK.016	(standard sealing NBR-BUNA-N)
WEIGHT	0,040 kg	

SHUT-OFF PLUG

VH008



ORDERING CODE

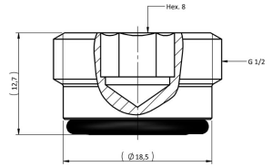
S	P	·	P	G	·	0	7	2

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	6 Nm	Hex.5
SEAL KIT CODE	SK.017	(standard sealing NBR-BUNA-N)
WEIGHT	0,020 kg	

SHUT-OFF PLUG

VH009



ORDERING CODE

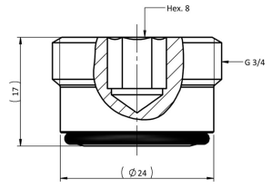
S	P	·	P	G	·	0	7	3

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	30 Nm	Hex.8
SEAL KIT CODE	SK.148	(standard sealing NBR-BUNA-N)
WEIGHT	0,030 kg	

SHUT-OFF PLUG

VH015



ORDERING CODE

S	P	·	P	G	·	0	7	4

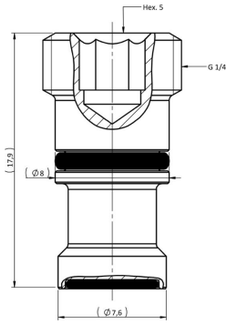
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	30 Nm	Hex.8
SEAL KIT CODE	SK.015	(standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg	

Specifications may change without notice.

SHUT-OFF PLUG

VH017



ORDERING CODE

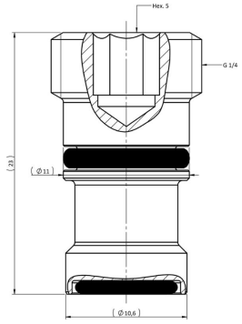
S	P	·	P	G	·	0	7	5

TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	7-9 Nm	Hex.5	
SEAL KIT CODE	SK.023		(standard sealing NBR-BUNA-N)
WEIGHT	0,010 kg		

SHUT-OFF PLUG

VH018



ORDERING CODE

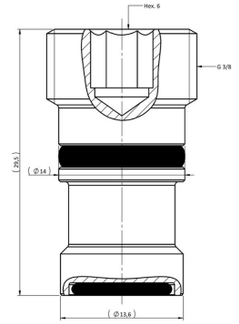
S	P	·	P	G	·	0	7	6

TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	15-18 Nm	Hex.5	
SEAL KIT CODE	SK.024		(standard sealing NBR-BUNA-N)
WEIGHT	0,020 kg		

SHUT-OFF PLUG

VH020



ORDERING CODE

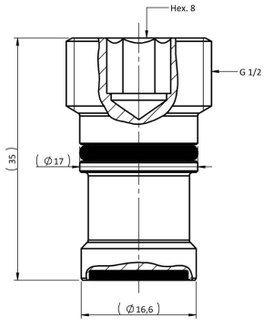
S	P	·	P	G	·	0	7	7

TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	16-18 Nm	Hex.6	
SEAL KIT CODE	SK.025		(standard sealing NBR-BUNA-N)
WEIGHT	0,240 kg		

SHUT-OFF PLUG

VH021



ORDERING CODE

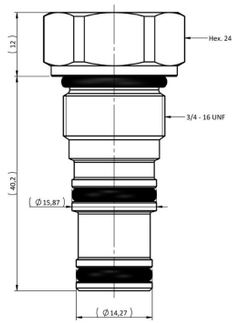
S	P	·	P	G	·	0	7	8

TECHNICAL DATA

MAXIMUM OPERATING	350 bar		
INSTALLATION TORQUE	20-22 Nm	Hex.8	
SEAL KIT CODE	SK.026		(standard sealing NBR-BUNA-N)
WEIGHT	0,065 kg		

SHUT-OFF PLUG

VH023



ORDERING CODE

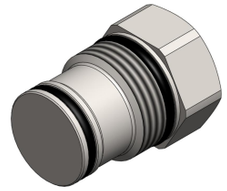
S	P	·	P	G	·	0	7	9

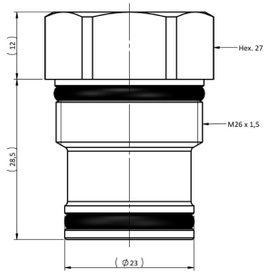
TECHNICAL DATA

MAXIMUM OPERATING	250 bar		
INSTALLATION TORQUE	45-50 Nm	Hex.24	
SEAL KIT CODE	SK.069		(standard sealing NBR-BUNA-N)
WEIGHT	0,295 kg		

SHUT-OFF PLUG

VH024





ORDERING CODE

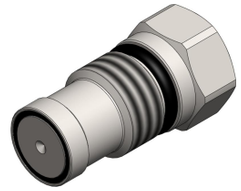
S	P	·	P	G	·	0	8	0

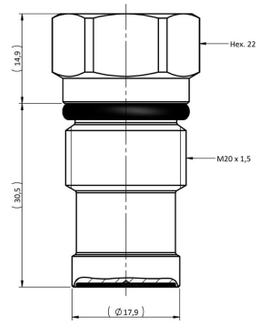
TECHNICAL DATA

MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	60-80 Nm	Hex.27	
SEAL KIT CODE	SK.145		(standard sealing NBR-BUNA-N)
WEIGHT	0,160 kg		

SHUT-OFF PLUG

VH043





ORDERING CODE

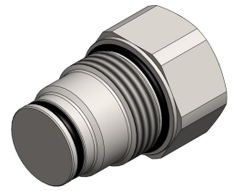
S	P	·	P	G	·	0	8	4

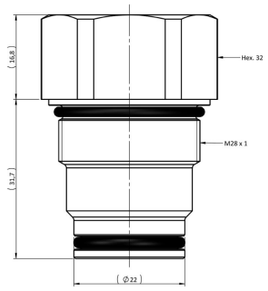
TECHNICAL DATA

MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	45-50 Nm	Hex.22	
SEAL KIT CODE	SK.159		(standard sealing NBR-BUNA-N)
WEIGHT	0,110 kg		

SHUT-OFF PLUG

VH091





ORDERING CODE

S	P	·	P	G	·	0	9	5

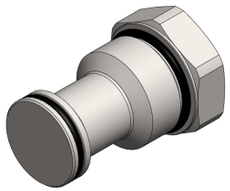
TECHNICAL DATA

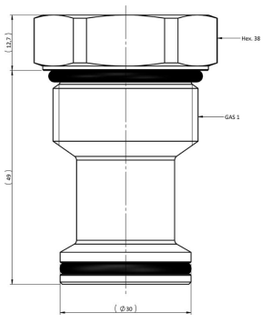
MAXIMUM OPERATING	420 bar		
INSTALLATION TORQUE	90-100 Nm	Hex.32	
SEAL KIT CODE	SK.050		(standard sealing NBR-BUNA-N)
WEIGHT	0,235 kg		

Specifications may change without notice.

SHUT-OFF PLUG

VH104





ORDERING CODE

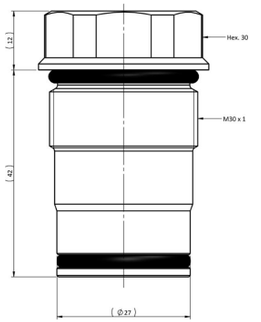
S	P	·	P	G	·	1	1	3

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	130-150 Nm	Hex.38
SEAL KIT CODE	SK.122	(standard sealing NBR-BUNA-N)
WEIGHT	0,360 kg	

SHUT-OFF PLUG

VH242



ORDERING CODE

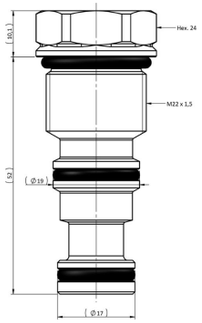
S	P	·	P	G	·	1	1	5

TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	140-150 Nm	Hex.30
SEAL KIT CODE	SK.123	(standard sealing NBR-BUNA-N)
WEIGHT	0,280 kg	

SHUT-OFF PLUG

VH294



ORDERING CODE

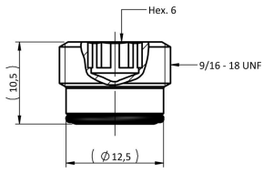
S	P	·	P	G	·	1	1	6

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.24
SEAL KIT CODE	SK.048	(standard sealing NBR-BUNA-N)
WEIGHT	0,145 kg	

SHUT-OFF PLUG

VH169



ORDERING CODE

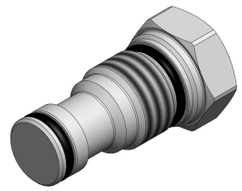
S	P	·	P	G	·	1	1	7

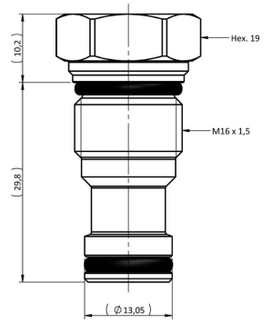
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	6 Nm	Hex.6
SEAL KIT CODE	SK.121	(standard sealing NBR-BUNA-N)
WEIGHT	0,015 kg	

SHUT-OFF PLUG

VH238





ORDERING CODE

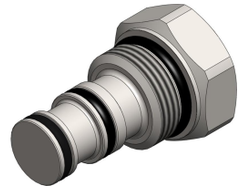
S	P	·	P	G	·	1	1	8

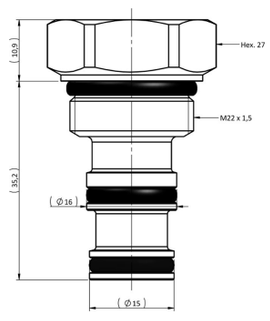
TECHNICAL DATA

MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.19
SEAL KIT CODE	SK.131	(standard sealing NBR-BUNA-N)
WEIGHT	0,060 kg	

SHUT-OFF PLUG

VH193





ORDERING CODE

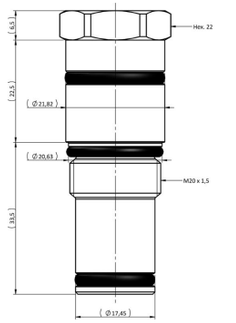
S	P	·	P	G	·	1	1	9

TECHNICAL DATA

MAXIMUM OPERATING	250 bar	
INSTALLATION TORQUE	35-40 Nm	Hex.27
SEAL KIT CODE	SK.129	(standard sealing NBR-BUNA-N)
WEIGHT	0,115 kg	

SHUT-OFF PLUG

VH211



ORDERING CODE

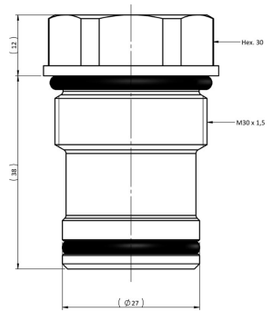
S	P	·	P	G	·	1	2	0

TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	40-45 Nm	Hex.22
SEAL KIT CODE	SK.132	(standard sealing NBR-BUNA-N)
WEIGHT	0,155 kg	

SHUT-OFF PLUG

VH242-01



ORDERING CODE

S	P	·	P	G	·	1	2	1

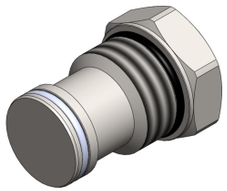
TECHNICAL DATA

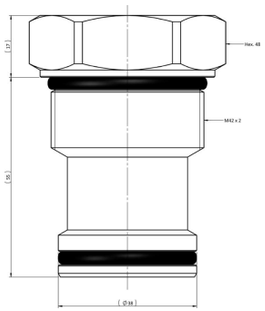
MAXIMUM OPERATING	420 bar	
INSTALLATION TORQUE	100-120 Nm	Hex.30
SEAL KIT CODE	SK.146	(standard sealing NBR-BUNA-N)
WEIGHT	0,250 kg	

Specifications may change without notice.

SHUT-OFF PLUG

VH252





ORDERING CODE

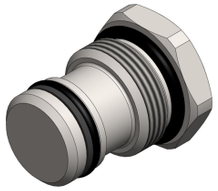
S	P	·	P	G	·	1	2	2

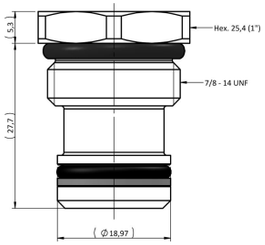
TECHNICAL DATA

MAXIMUM OPERATING	350 bar	
INSTALLATION TORQUE	200-215 Nm	Hex.48
SEAL KIT CODE	SK.078	(standard sealing NBR-BUNA-N)
WEIGHT	0,740 kg	

SHUT-OFF PLUG

VH110





ORDERING CODE

S	P	·	P	G	·	1	2	5

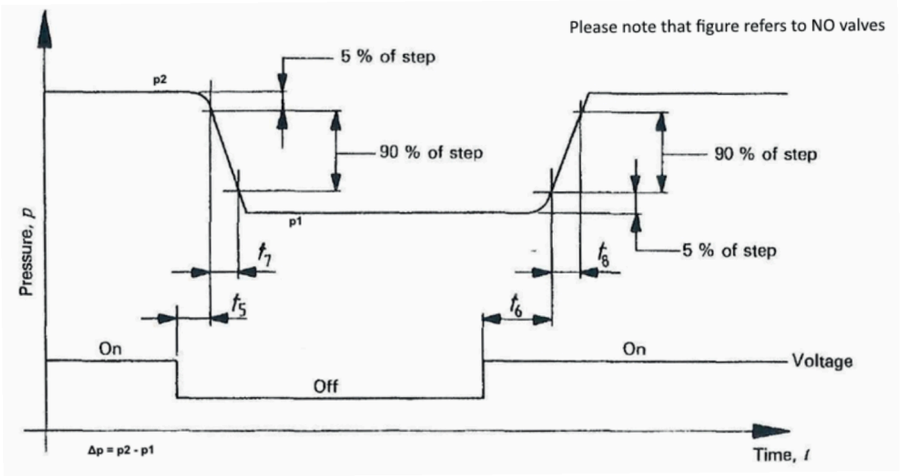
TECHNICAL DATA

MAXIMUM OPERATING	475 bar	
INSTALLATION TORQUE	40-50 Nm	Hex.
SEAL KIT CODE	SK.136	(standard sealing NBR-BUNA-N)
WEIGHT	0,085 kg	

Specifications may change without notice.

Functional Testing

OIL TEMPERATURE	All tests are performed at 40°C (104°F).
OIL VISCOSITY	All tests are performed using mineral based hydraulic oil with 46cSt.
FILTRATION	All tests are performed with a filtration ≤ 10 µm.
LEAKAGE PERFORMANCE	Checked with volumetric system with flow in stable conditions.
CHECK VALVES CRACKING PRESSURE	Referred to 0,05 l/min.
PERFORMANCE CURVES	Δp are obtained as difference between p_inlet – p_outlet measured on external ports of the testing block. All performance curves represent the average trend of real tested valves.
ELECTRICAL PARAMETERS (ON/OFF SOLENOID VALVES)	All solenoid valves performances are measured using Vdc coil. The coil power used is shown on each solenoid valve datasheet. Please note that "Minimum pull-in voltage 85% of nominal" has to be considered with cold coil.
PERFORMANCE LIMITS (ON/OFF SOLENOID VALVES)	Performance limits are conducted supplying the coil with its own steady current. It is possible to receive these data upon request.
SWITCHING TIMES (ON/OFF SOLENOID VALVES)	Delay time t5, t6 (reported on each single datasheet): times needed to change pressure by 5% of the valve Δp in response to the electrical signal. Response time t7, t8 (depending on the final application): times needed to change pressure from 5% to 95% of the valve Δp in response to the electrical signal.



VIS's GLOBAL FOOTPRINT

We understand the importance to be close to our customers world wide.
All customers located in Europe and Americas are welcome to contact us directly.
In India and China we successfully cooperate with our preferred partners in order to provide a closer and valuable support.

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