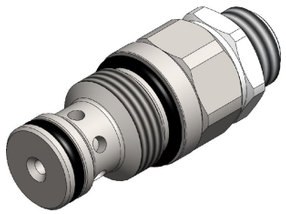
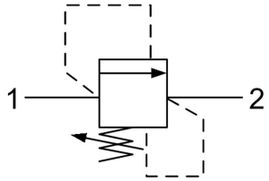
RVBO.S09 VALVE SERIES

Hybrid SAE Cartridge - 420 bar

Direct acting - Poppet type



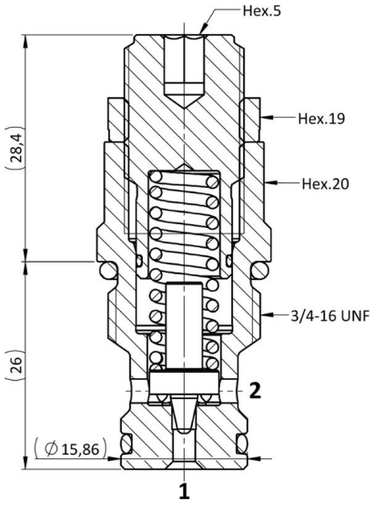
HYDRAULIC SYMBOL



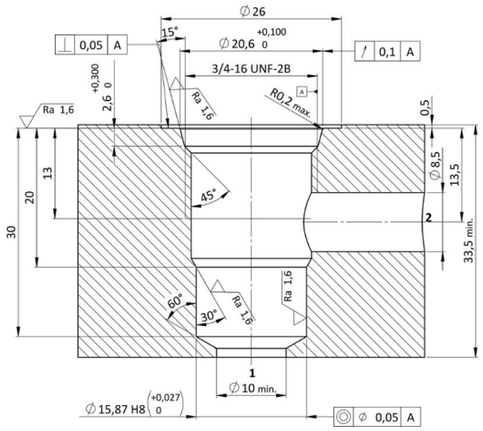
DESCRIPTION

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 811
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.

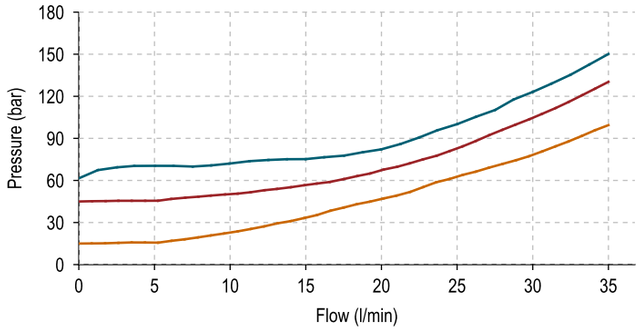
RVBO.S09 SPRINGS' GRAPHS

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

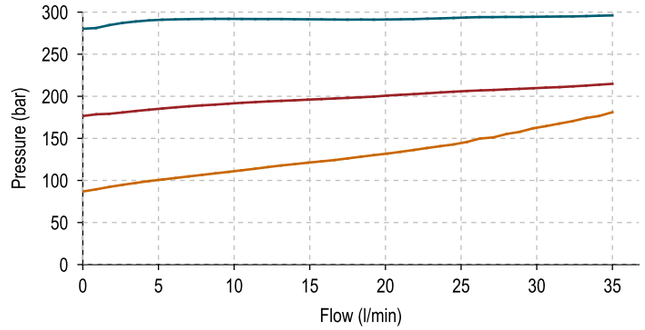
LEGEND

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

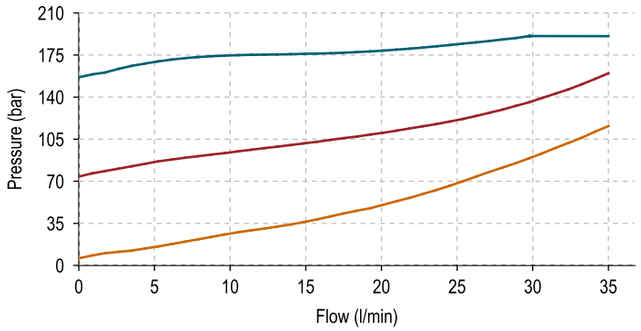
SPRING Y



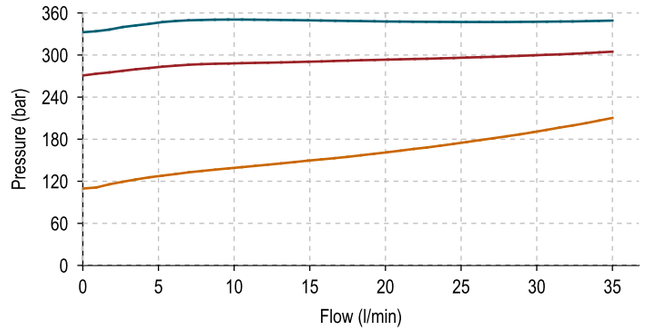
SPRING B



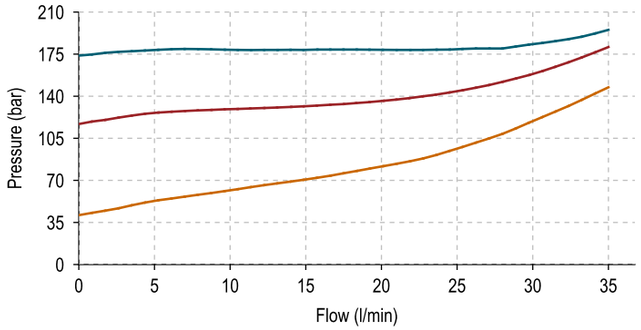
SPRING S



SPRING G



SPRING N



SPRING V