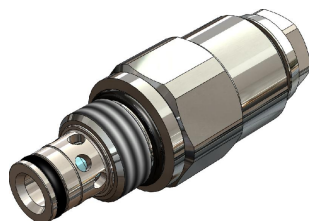
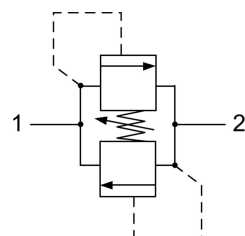


## RVIO.S08 VALVE SERIES

SAE08 Cartridge - 350 bar  
Direct acting - Poppet type  
Bi-directional



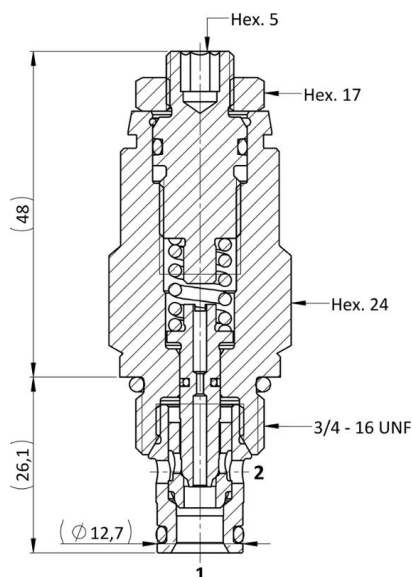
HYDRAULIC SYMBOL



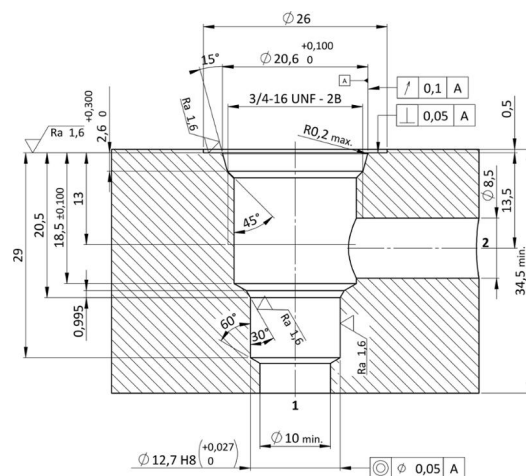
### DESCRIPTION

A screw-in, cartridge 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 <sup>3</sup> / 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 TIGHTENING TORQUE	10-15 Nm  Hex.17
TECH. SPEC. FOR CHARACTERIZATION	see page 811
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 O

VALVE BASIC CODE

S 0 8

#### MARKING

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

0 \* \* \*

#### SETTING PRESSURE IN [BAR]

000 = No specific setting required.

#### SIZE

3/4-16 UNF with  $\phi 12,7$  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

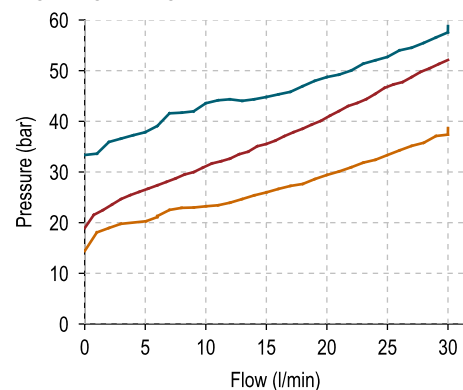
## RV10.S08 SPRINGS' GRAPHS

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

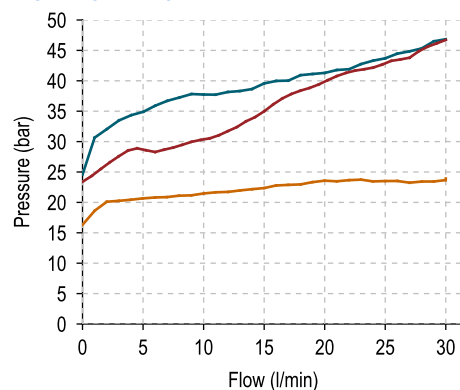
### LEGEND

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

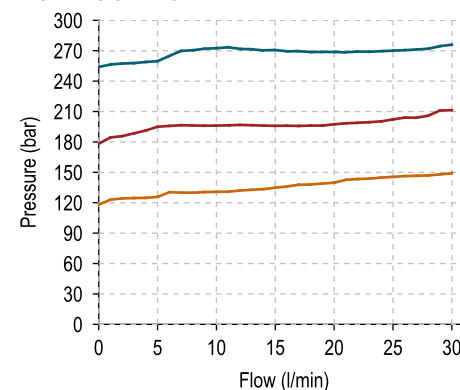
#### SPRING Y - 1VS2



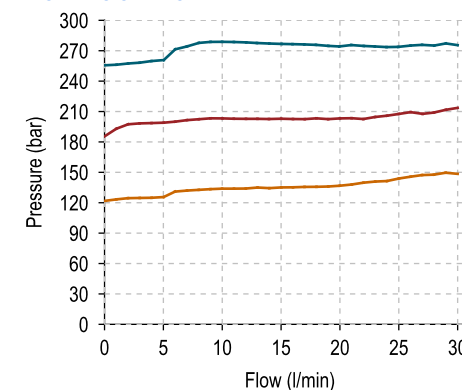
#### SPRING Y - 2VS1



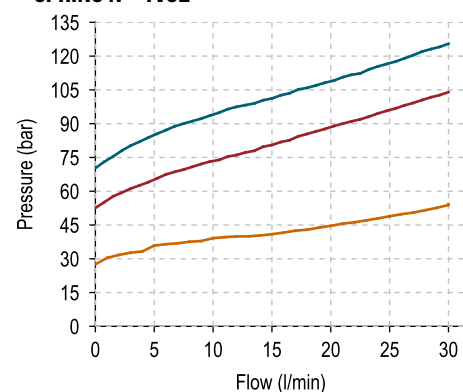
#### SPRING G - 1VS2



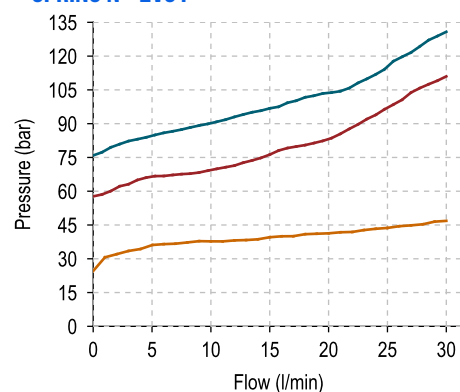
#### SPRING G - 2VS1



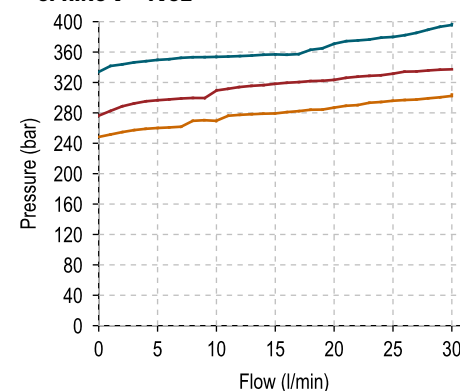
#### SPRING N - 1VS2



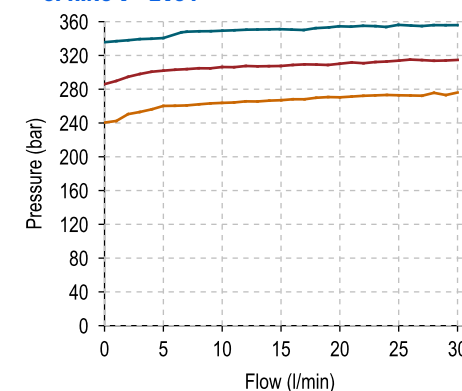
#### SPRING N - 2VS1



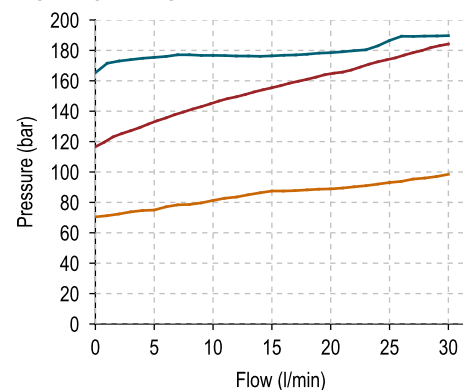
#### SPRING V - 1VS2



#### SPRING V - 2VS1



#### SPRING B - 1VS2



#### SPRING B - 2VS1

