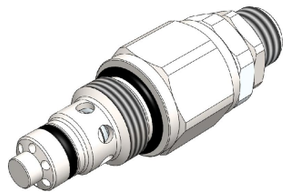
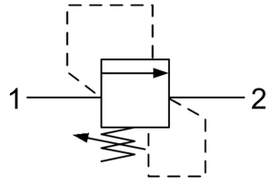
RVC0.S09 VALVE SERIES

Hybrid SAE Cartridge - 350 bar

Direct acting - Poppet type



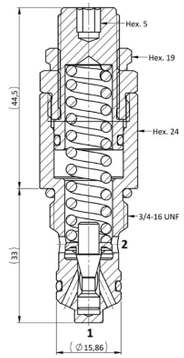
HYDRAULIC SYMBOL



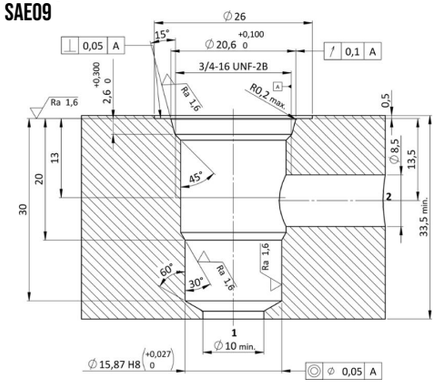
DESCRIPTION

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.

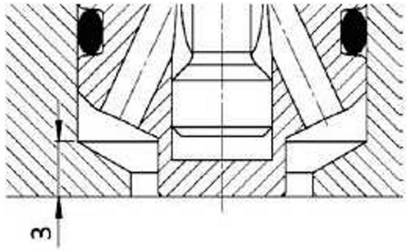
CROSS SECTION



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 811
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	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 793

Specifications may change without notice.

Rev. 1

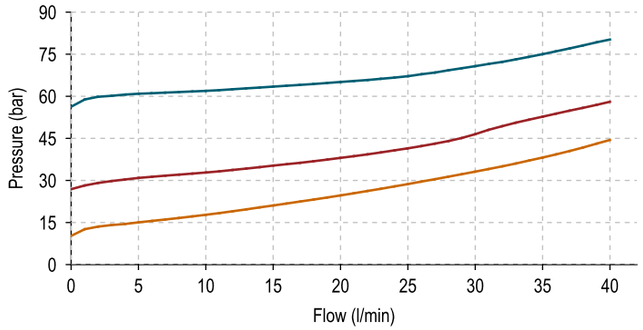
RVCO.S09 SPRINGS' GRAPHS

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

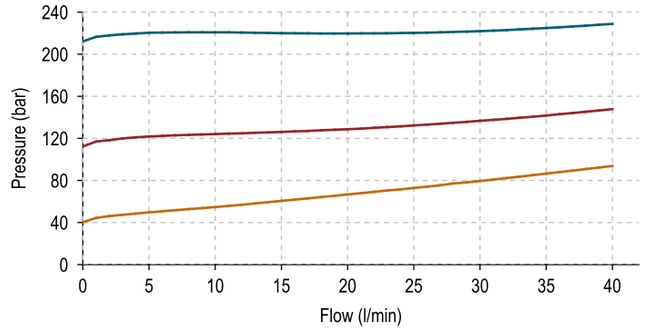
LEGEND

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

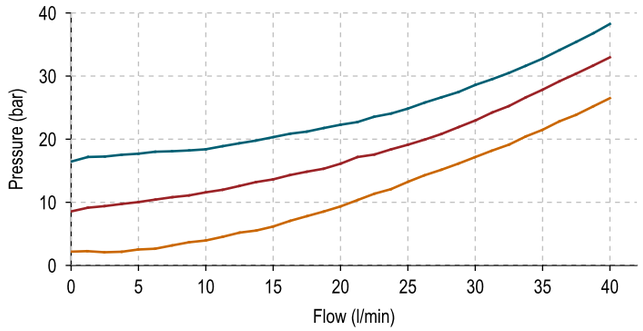
SPRING Y



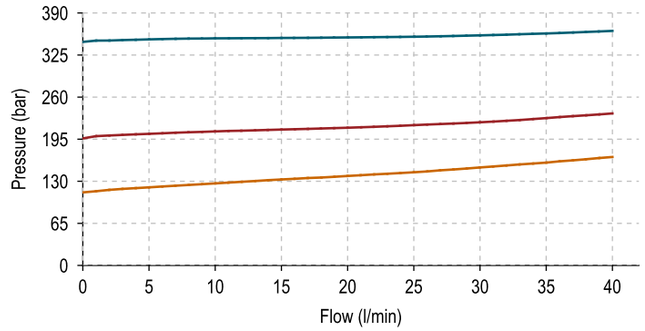
SPRING B



SPRING L



SPRING G



SPRING N