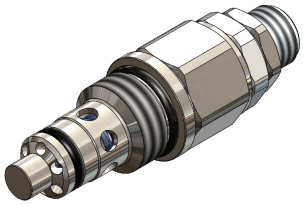
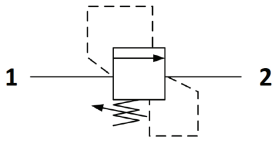
DB.S0.S10 Valve Series

SAE10 Cartridge - 350 Bar
Direct acting - Poppet type

Description & Operation

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 application





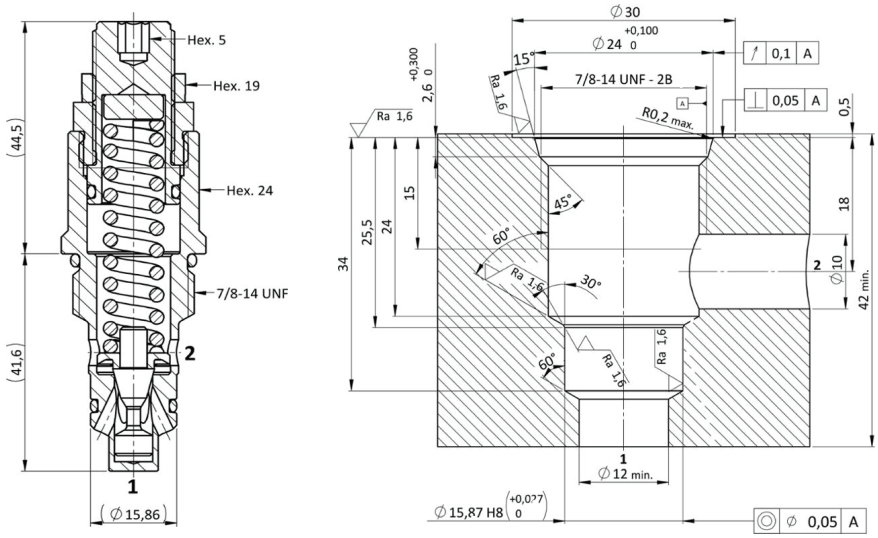
Hydraulic Symbol

Technical Data

Maximum operating pressure	350 bar
Maximum flow	80 LPM
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)
O-ring Temperature	-30° C to 110° C (standard sealing NBR - BUNA-N)
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)
Tightening torque nut	25-30 Nm (Hex. 19)
Oil testing condition	ISO VG 46 cSt
Seal kit code	SLKT.001
Weight	0.170 kg

Performance Curve

Cross Section and Cavity Details



Ordering Code

D	B	•	S	0	•	S	1	0	•	0	*	•	*	*	*

valve basic code

Cavity
S10 =7/8- 14 UNF with ⌀15.86 nose sizes

Marking
0 =standard factory marking. cutomized marking can be done upon request

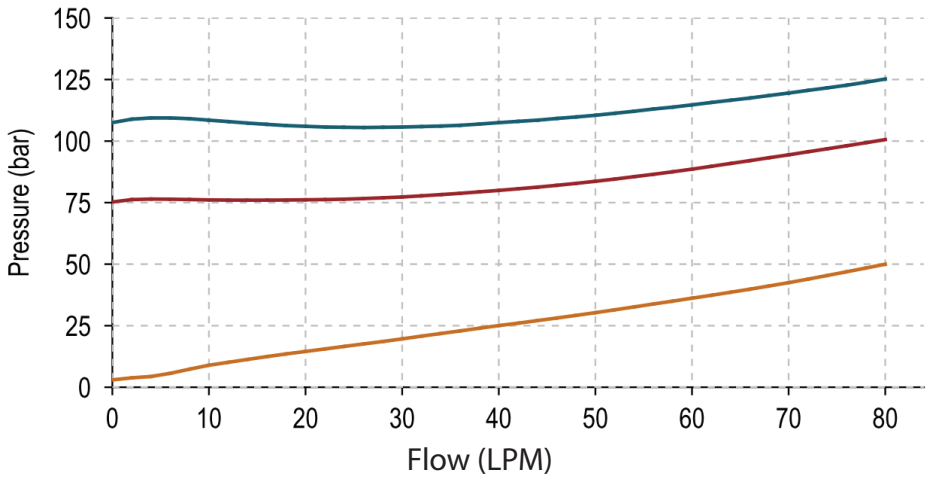
pressure setting in (bar)
Note=standard setting are multiple of 5 bars

Spring range

Spring model Code	Pressure setting range (Bar)	Pressure Increment per Turn (Bar)
Y	5-30	3
N	5-110	12
B	10-180	21
G	10-240	36
W	50-350	36

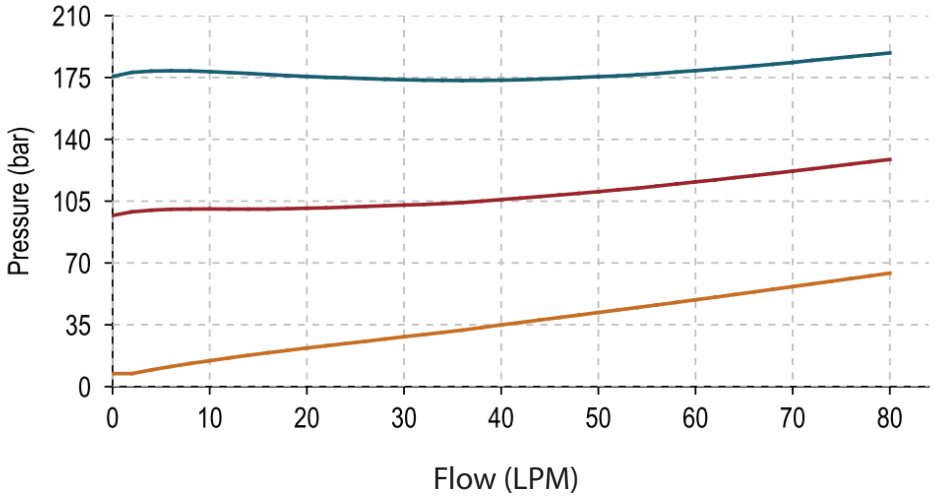
Spring Graph

- **Spring =** N

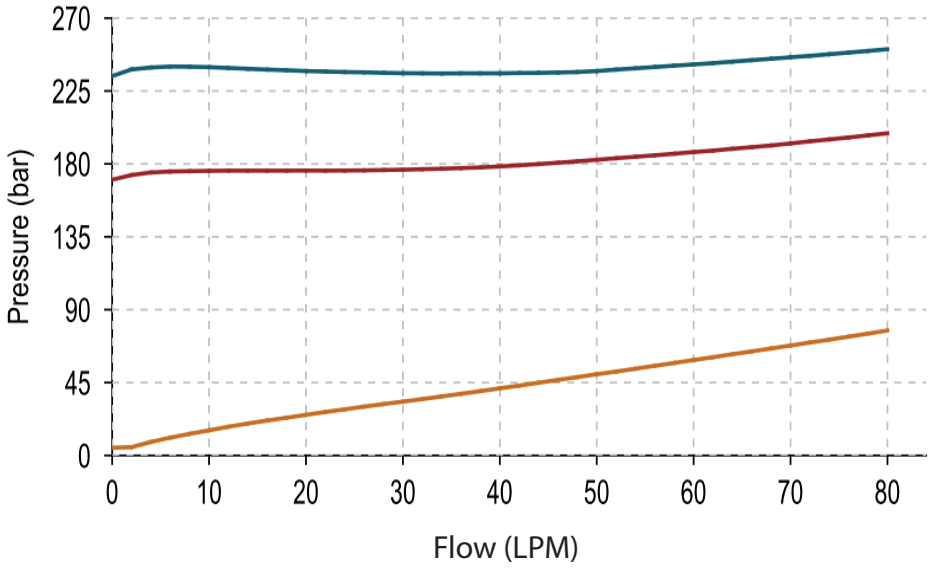


Spring Graph

- **Spring =** B

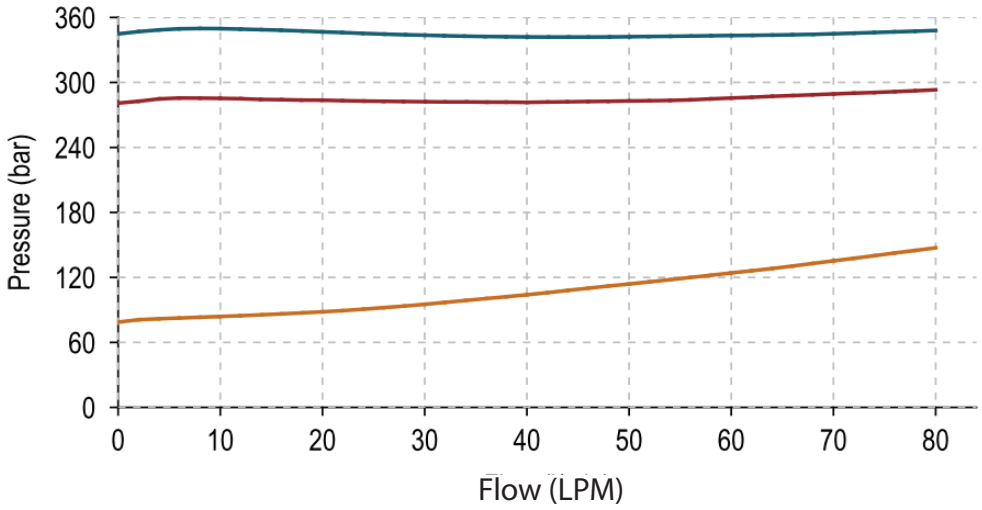


- **Spring =** G



Spring Graph

- **Spring =** W (50 - 350bar)



- **Spring =** Y (50 - 35bar)