

Technical Features

- > Excellent stability throughout flow range with rapid response to dynamic pressure changes
- > Low hysteresis, accurate pressure control and low pressure drop
- > Wide pressure range up to 420 bar
- > High flow capacity
- > Hardened precision parts
- Ideal for use as control valve where accuracy and repeatability is required
- > External pilot and drain option
- > Adjustable by allen key or hand screw, optionally sealable (lockwire holes)
- > In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

A pilot-operated, spool-type hydraulic relief valve in the form of a screw-in cartridge intended for use as a pressure limiting device. Fast-acting with low hysteresis. Because of the absence of any internal seals, the valve shows excellent reseating and repeatability characteristics. It may be used as a main pressure control element but due to its two stage design it is not recommended for safety applications where operating speed is critical. Version SX has an external pilot line, version SY allows a separate drain connection.

Model	S	SX	SY
Symbol		T Y	T

Technical Data

Valve size		M30 x 1,5/RB2	M30 x 1,5/RB3	
Model		S, SY	SX	
Max. flow	I/min (GPM)	250	250 (66)	
Max. pressure ports (P, X)	bar (PSI)	420 (420 (6100)	
Max. pressure ports (T, Y)	bar (PSI)	160 (160 (2320)	
Fluid temperature range (NBR)	°C (°F)	-30 +100	-30 +100 (-22 212)	
Fluid temperature range (FPM)	°C (°F)	-20 +120	-20 +120 (-4 248)	
Weight	kg (lbs)	0.3 (0.66)		

		Datasheet	Ту	Туре	
General information		GI_0060	Products opera	Products operating conditions	
Valve bodies	In-line mounted	SB 0018	SB-RB2*	SB-RB3*	
Cavity details		SMT_0019	SMT-RB2*	SMT-RB3*	
Spare parts		SP_8010			

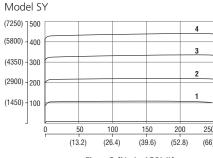
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Relief pressure related to flow rate

Model S (PSI) (7250) 7500 (5800) 400 Pressure p [bar (4350) - 300 (2900)(1450) -100 100 150 200 250 (13.2)(26.4)(39.6)(52.8)

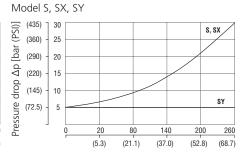
Flow Q [l/min (GPM)]

Relief pressure related to flow rate



Flow Q [l/min (GPM)]

Minimum set and circulation pressure

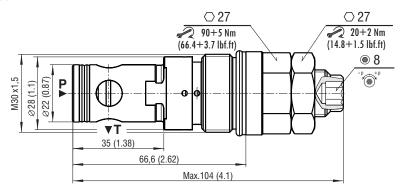


Flow Q [I/min (GPM)]

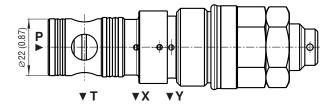
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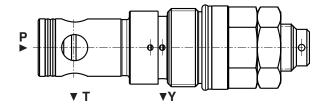
VPN1-20/S



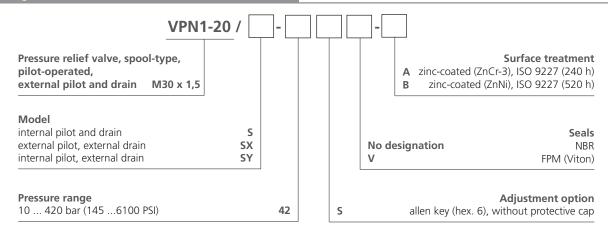
VPN1-20/SX



VPN1-20/SY



Ordering Code



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