

Relief, pilot operated poppet type

Special cavity, FB

VMP1-16

VMP1.100.NG

RE 18318-36

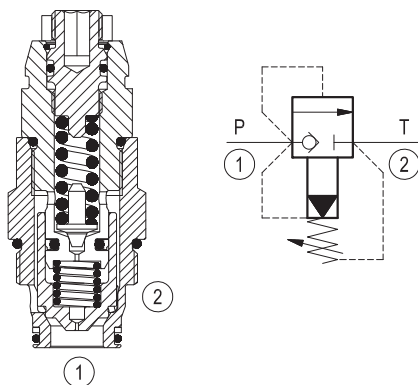
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Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the conical, pilot-stage poppet from its seat. This action exhausts oil above the main-stage poppet (low-leakage, seat type), allowing it to shift and provide relief flow through 2 to tank. Pressure at 2 is additive to the relief setting of the valve.



Technical data

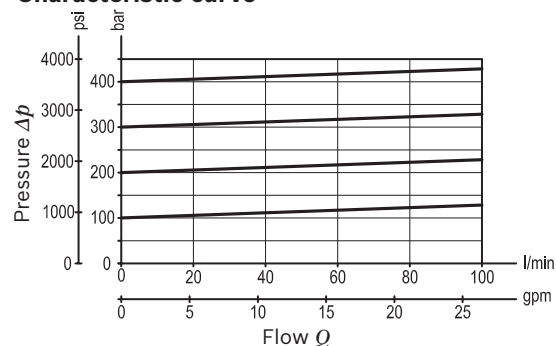
Max. operating pressure port 1 (P)	420 bar (6000 psi)
Max. pressure admitted port 2 (T)	50 bar (725 psi)
Max. flow	100 l/min (26 gpm)
Max. internal leakage ¹⁾	30 drops/min. for press. range 100-200 bar 15 drops/min. for press. range 200-420 bar
Fluid temperature range	-30 to 100 °C (-22 to 212 °F) (Buna N) -20 to 120 °C (-4 to 248 °F) (Viton)
Installation torque ²⁾	90 Nm (67 ft-lbs)
Weight	0.16 kg (0.35 lbs)
Special cavity	FB (see data sheet 18325-75)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit (Buna N) ³⁾	Code: RG16R2010520100 material no: R931002592
Seal kit (Viton) ³⁾	Code: RG16R2040520100 material no: R931002593
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 380 mm ² /s (cSt)
Recommended degree of fluid contamination	Nominal value max. 10µm (NAS 8) / ISO 4406 20/18/15
Installation position	No restrictions
Other Technical Data	See data sheet 18350-50
Without surface protection	In case of need of surface protection, please consult factory.

1) At 70% of pressure setting.

2) Torque value valid for installation in cast iron and steel manifolds.
In case of different body materials, please consult factory.

3) Only external seals for 10 valves.

Characteristic curve



Ordering code

VMP1.100.NG	*
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	SPRINGS		O-RING
	Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Material
000	100-420 (1450-6090)	300 (4350)	Buna N (NBR)
070	100-420 (1450-6090)	300 (4350)	Viton (FKM)

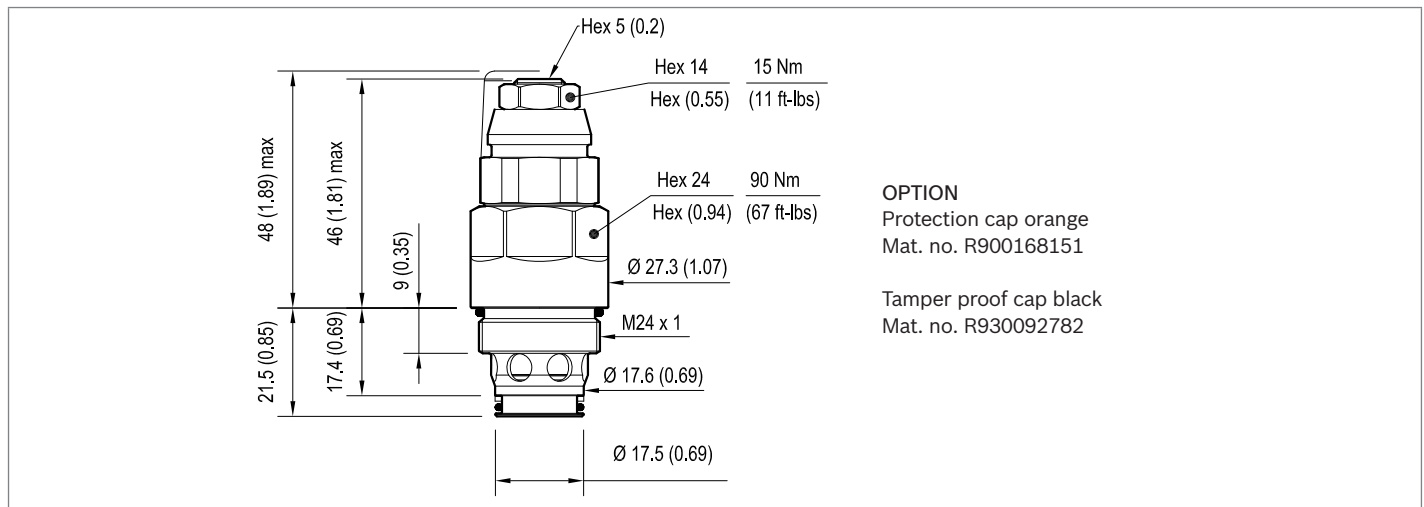
* Valves are delivered without specific pressure set at the factory and with adjustment device not tighten. Fine setting to be done by customer. For case of request of factory set valve, please consult factory.

Preferred types

Type	Material number
VMP1.100.NG.000	R931002603
VMP1.100.NG.070	R930065660

Type	Material number

Dimensions



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