

Relief, pilot operated poppet type

Special cavity, FB

VMP1-16



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.

VMP1.100.NG

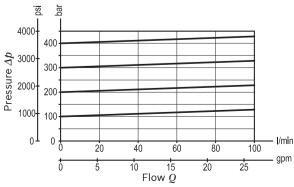
RE 18318-36 Edition: 07.2017 Replaces: 03.2016

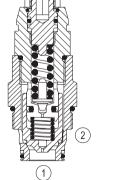
| Technical data | | |
|---|---|--|
| Max. operating pressure port 1 (P) | 420 bar (6000 psi) | |
| Max. pressure admitted port 2 (T) | 50 bar (725 psi) | |
| Max. flow | 100 l/min (26 gpm) | |
| Max. internal leakage ¹⁾ | 30 drops/min. for press. range 100-200 bar 15 drops/min. for press. range 200-420 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) | Code: RG16R2010520100 | |
| | material no: R931002592 | |
| Seal kit (Viton) | Code: RG16R2040520100 | |
| | material no: R931002593 | |
| Fluids | Mineral-based or synthetics with lubricating properties at viscosities of 10 to 380 mm²/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. | |

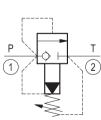
1) At 70% of pressure setting.

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

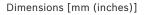
Characteristic curve

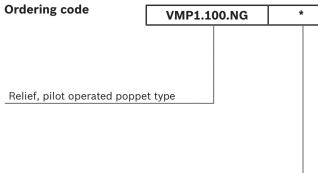












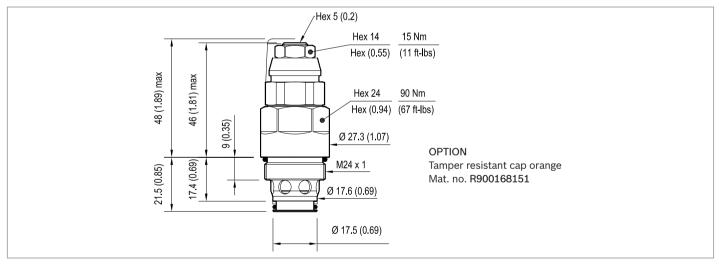
| | SPRINGS | | O-RING |
|-----|--------------------------------|--|-----------------|
| | Adj. press. range bar (psi) | Pressure increase bar/turn (psi/turn) | Material |
| 000 | 100-420 (1450-6090) | 300 (4350) | Buna N (NBR) |
| 070 | 100-420 (1450-6090) | 300 (4350) | Viton (FKM) |

* Valves are delivered without specifice 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

| Туре | Material number | Туре | Material number |
|-----------------|-----------------|------|-----------------|
| VMP1.100.NG.000 | R931002603 | | |
| VMP1.100.NG.070 | R930065660 | | |

Dimensions



Bosch Rexroth Oil Control S.p.A.

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