



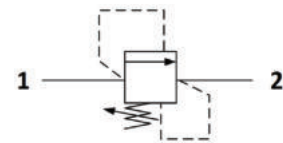
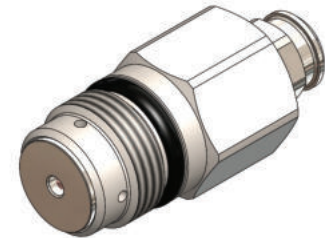
## DB.B0.M16 Valve Series

**METRIC Cartridge - 450 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) providing a limited pressure rise. The reduced dimensions and the excellent response time make this valve ideally suited for pilot circuits. Hysteresis is also extremely low.



Hydraulic Symbol

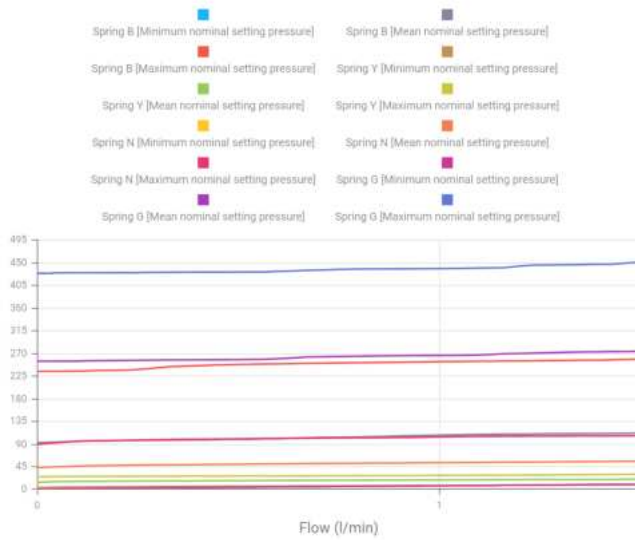
### Technical Data

Maximum operating pressure	450 Bar
Maximum flow	1.5 LPM
Setting Pressure	See table below
Maximum internal leakage	0.25 cm <sup>3</sup> /min to 80% of nominal set point
External component treatment	Zn/Fe - standard (96h) Zn/Ni (720h) upon customer request
O-ring Temperature	-30° C to 110° C (standard sealing NBR - BUNA-N)
Oil Temperature Range	-30° C to 110° C
Pressure settings established	@ 1.50 LPM
Reseat pressure	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	35 - 40 Nm Hex. 17
Tightening torque nut	6.5- 8.5 Nm Hex. 10
Oil testing condition	ISO VG 46 cSt
Seal kit code	SLKT.004
Plastic tamper proof cap	CTP.002
Weight	0.050 kg

**Performance Curve**

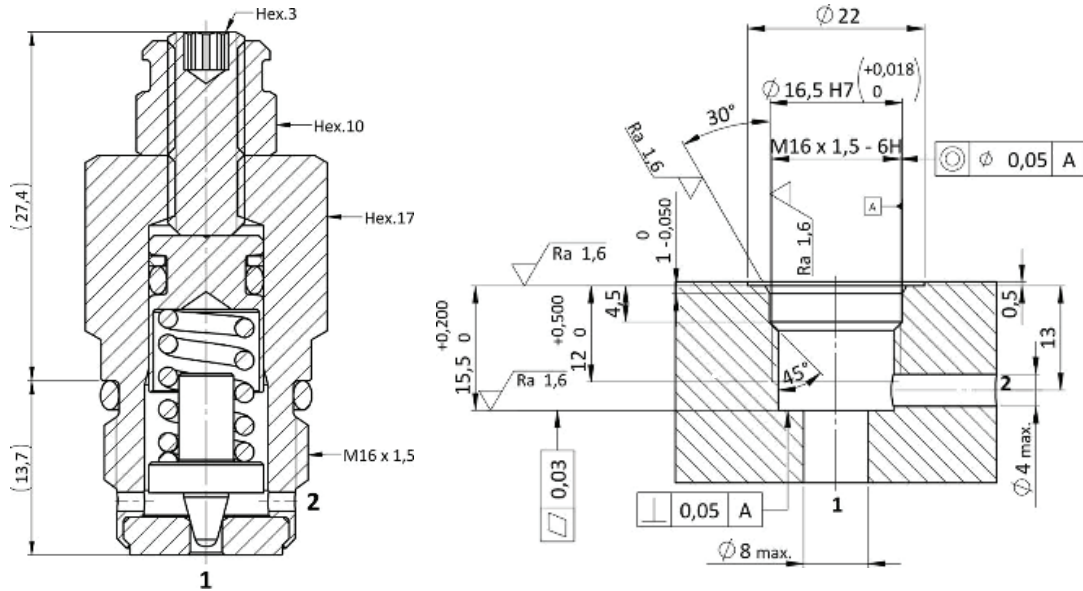
**Note:**  
The performance chart illustrates flow handling capacity for significant spring bias options. p/Q curves are recorded at TOil = 40°C and 46 cSt.

Spring B



**Dimensional Drawing**

**Cross Section and Cavity Details**



**Ordering Code**

**D B • B 0 • M 1 6 • 0 \* • \* \* \***

valve basic code

**Cavity**  
16 = METRIC M16 X 1,5  
No other cavity option available

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

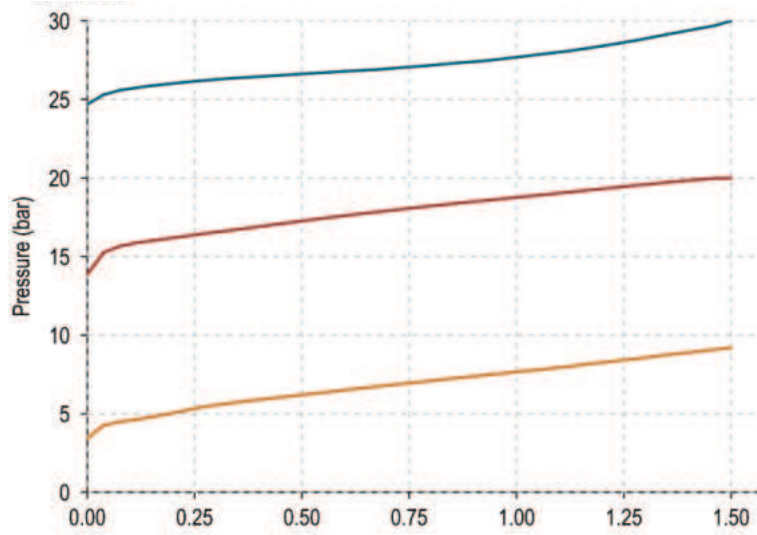
**Setting Pressure in (Bar)**  
000=No specific setting required

**Bias Spring Options**

Spring model Code	Pressure setting range (Bar)	Pressure Increment Per Turn ( Bar/ Turn )
Y	1-30	10
N	10-100	56
B	10-250	136
G	10-450	258

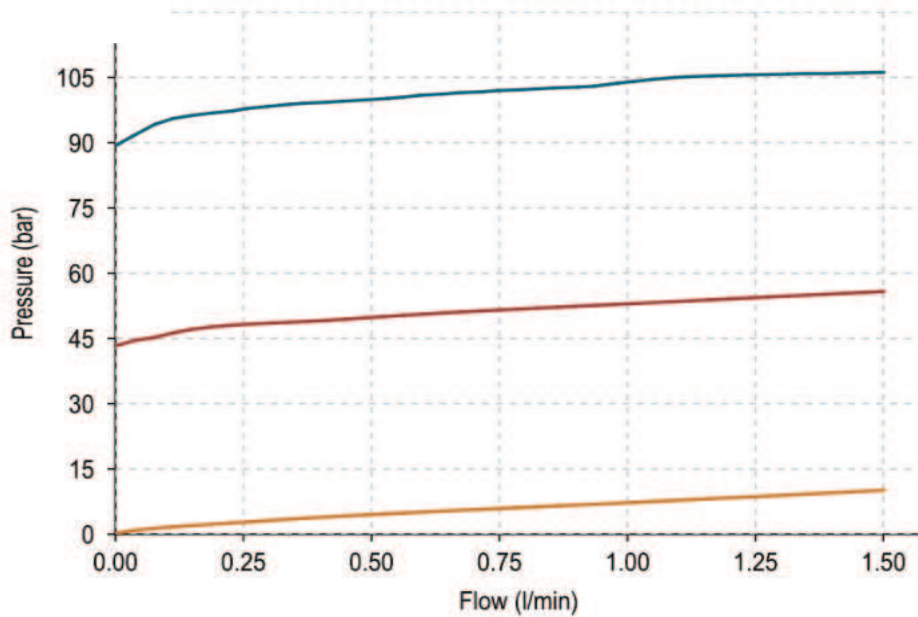
 Spring Graph

- Spring = Y



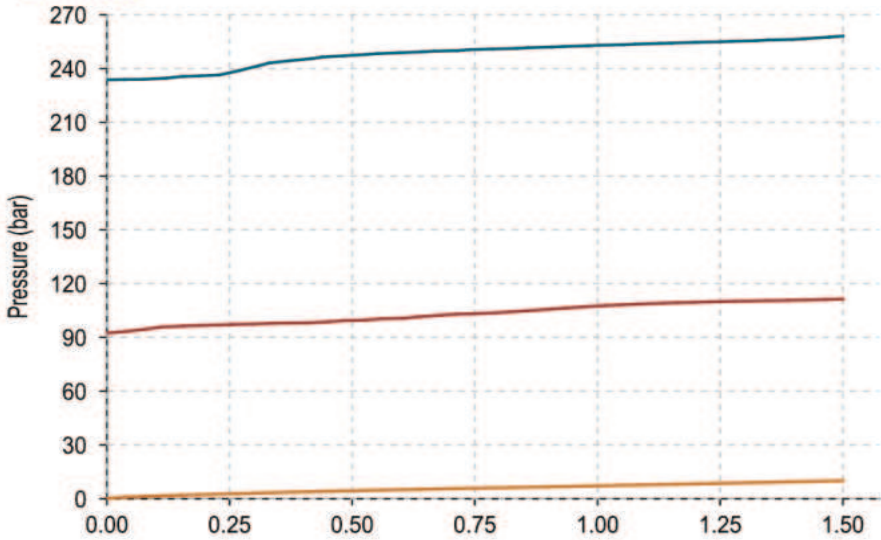
- Spring = N

**SPRING N**



 Spring Graph

● Spring = B



● Spring = G

