



Pilot Check Valves

SP.C4.M33 Valve Series

METRIC Cartridge - 420 bar

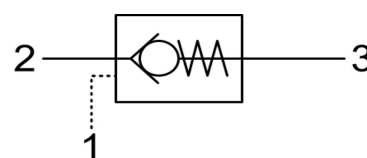
Direct acting check valve

Pilot piston to open



Description & Operation

Cartridge style, normally closed, single pilot check valve. Cartridge is closed until sufficient pressure is applied on port 1 to reach the bias spring setting, lift the poppet and allow free flow to 2. The valve is normally closed from 2 to 1. When sufficient pressure is applied on port 3, the pilot piston lifts the poppet from its seat and allows flow from 2 to 1. Very limited leakage in the check condition.



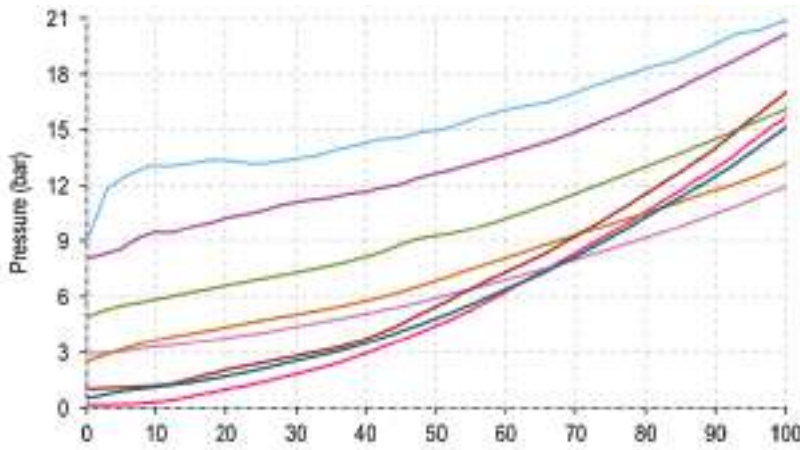
Hydraulic Symbol



Technical Data

Maximum operating pressure	420 bar
Maximum flow	100 LPM
Maximum internal leakage	0,10 cm ³ / min @ 10 bar 0,10 cm ³ / min @ 420 bar
Pilot Ratio	2,8:1
External component treatment	Zn/Fe - standard (96h) Zn/Ni (720h)
O-ring Temperature Range	-30° C to 110° C (standard sealing NBR - BUNA-N)
Oil Temperature Range	-30° C to 110° C
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	150-160 Nm
Oil testing condition	ISO VG 46 cSt
Seal kit code	SLKT.067
Weight	0.338 kg

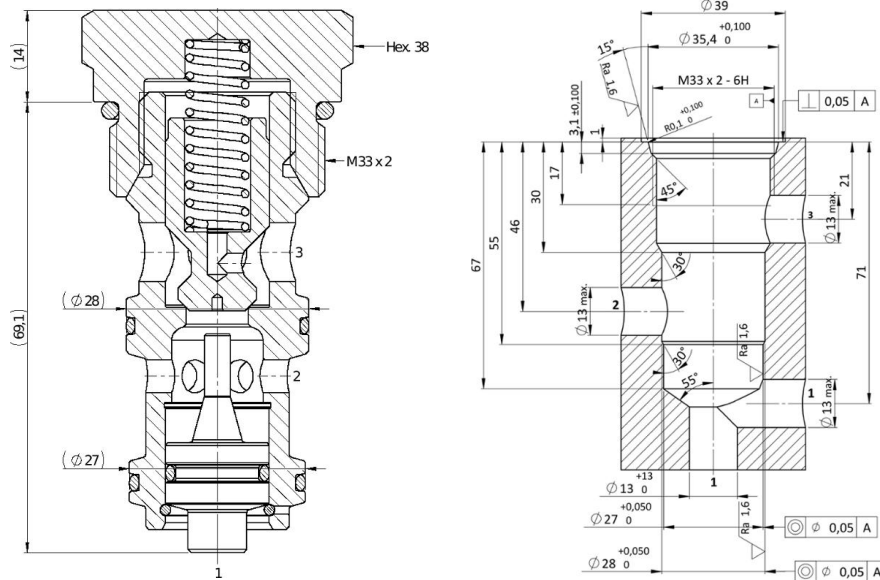
Performance Curve



Note:
The performance chart illustrates flow handling capacity for standard bias springs. p/Q curves are recorded at T_{Oil} = 40°C and 46 cSt

Dimensional Drawing

Cross Section and Cavity Details



Ordering Code

S P • C 4 • M 3 3 • 0 * • 0 0 0

valve basic code

Options
5=Without O-Ring on the pilot piston

Cavity
M33 = METRIC M33 x 2 with ø28 and ø27 nose sizes

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

000= standard configuration

Bias spring

Spring model code	Cracking pressure (Bar)	Spring model code	Cracking pressure (Bar)
Y	0.5	P	5.0
N	1.0	G	8.0
S	2.5	V	9.0
B	3.0		

PILOT CHECK VALVES