

PRESSURE RELIEF VALVES

AM3-MP-*

60 l/min - 32 MPa (320 bar)

1 DESCRIPTION

Stackable pressure relief valve pilot operated. The valve is made with a steel body combined with a pressure relief cartridge valve pilot operated for a stable pressure control.

The body of the valve is phosphate coated. The cartridge valve is zinc coated. The pressure can be set in different pressure ranges.



2 ORDERING CODE

(1)	(2)	(3)	(4)	(5)	(6)	(7)
AM3	-	MP	-	/	-	-
						/ 10

(1) AM3: stackable valve CETOP 03 - Pressure 32 MPa (320 bar)

(2) MP: pressure relief- pilot operated

(3) Service lines where the controls operate:

P: relief on P and discharge to T

B: relief on B and discharge to T

BA: independent relief on B and on A and discharge to T

AB: relief on A and B with crossed discharge

(4) Pressure adjustment ranges:

6,3 : from 1 to 7 MPa (from 10 to 70 bar)

12,5: from 1 to 14 MPa (from 10 to 140 bar)

20: from 2 to 21 MPa (from 20 to 210 bar)

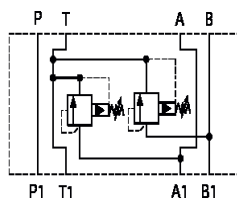
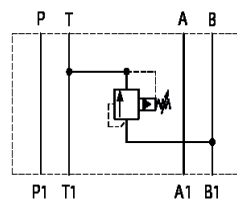
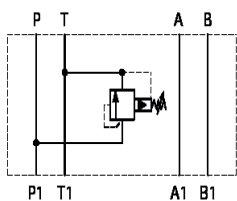
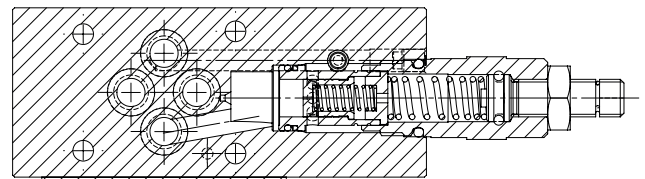
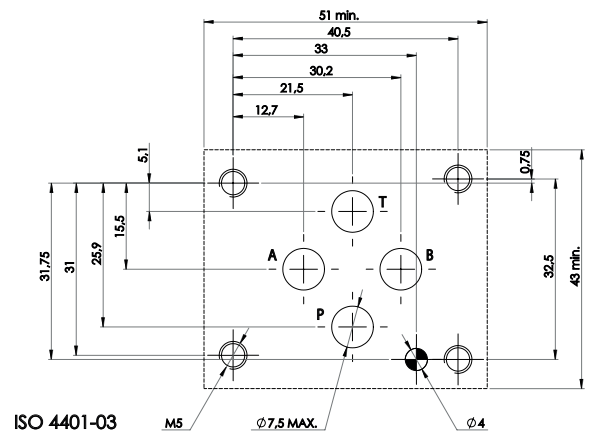
32: from 2 to 32 MPa (from 20 to 320 bar)

(5) Pressure adjustment range for relief on A

(only for models AM3-MP-BA) or for relief on B for models AM3-MP-AB

(6) Code reserved for more options and variants

(6) Design number (progressive) of the valves

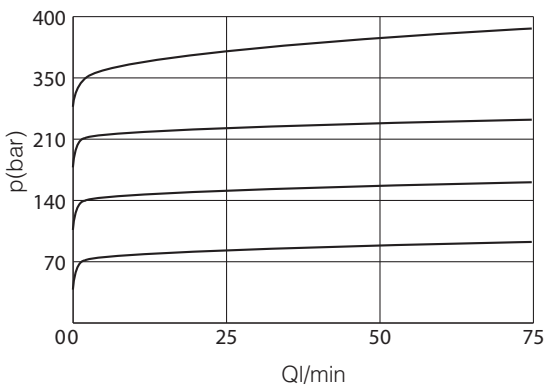


3 TECHNICAL DATA

Maximum nominal flow		Adjustment of the relief pressure:
Maximum rec. flow rate	1 dm ³ /s (60 l/min)	Relief pressure is reached when the axial hydraulic forces on piston 3 equal the force of spring; the value of the relief pressure can be therefore changed, within the limits of the chosen adjustment range, by changing the compression of spring. To increase the relief pressure, turn clock wise the adjustment screw CH5, after having unlocked ist nut CH17 mm.
Maximum nominal pressure	32 MPa (320 bar)	For each pressure adjustment range, the pressure gradient is approx:
Pressure relief curves	see 4	6,3: 2 MPa/turn (24 bar/turn)
Installation and dimensions	see 5	12,5: 4 MPa/turn (40 bar/turn)
Masses		20: 6,3 MPa/turn (630 bar/turn)
AM3-MP-P	approx 1,7 kg	32: 10 MPa/turn (100 bar/turn)
AM3-MP-BA	approx 2,3 kg	When the required level of pressure is reached, lock the nut CH17mm.

4 TYPICAL DIAGRAMS

Typical curves for valves AM3-MP in standard configuration, with mineral oil at 36 cSt and at 50°C



6 HYDRAULIC FLUIDS

Seals and materials used on standard valves AM3-* are fully compatible with hydraulic fluids of mineral oil base, upgraded with antifoaming and antioxidantizing agents. The hydraulic fluid must be kept clean and filtered to ISO 4406 class 19/17/14, or better, and used in a recommended viscosity range from 10 cSt to 60 cSt.

All stackable valves AM3-* conform with ISO and CETOP specifications for mounting surface dimensions and for valves height 40 mm. Leakage between valve and mounting surface is prevented by the positive compression on their seats of 4 seals type OR 2037.

5 INSTALLATION DIMENSIONS (mm)

