

STACKABLE PRESSURE RELIEF VALVES

AM2-MO-*

20 l/min - 32 MPa (320 bar)

1 DESCRIPTION

Stackable pressure relief valve direct operated. The valve is made with a steel body combined with a pressure relief cartridge valve with an anti vibration system.

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)
AM2	- MO	-	/	-	-	/ 10

(1) AM2 : stackable valve CETOP 02 - Pressure 32 MPa (320 bar)

(2) MO : pressure relief, direct acting

(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

(4) Pressure adjustment ranges:

10: from 6,3 MPa to 12,5 MPa (from 63 to 125 bar)

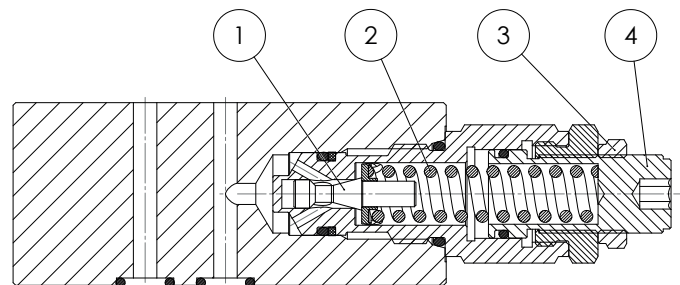
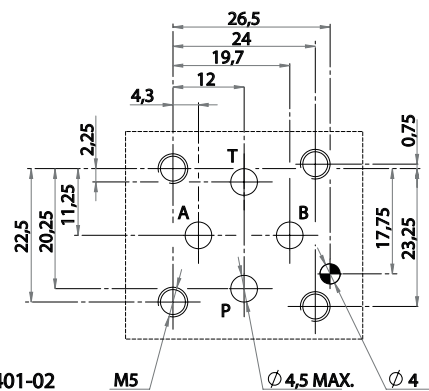
20: from 8 MPa to 21 MPa (from 80 to 210 bar)

32: from 12,5 MPa to 35 MPa (from 125 to 350 bar)

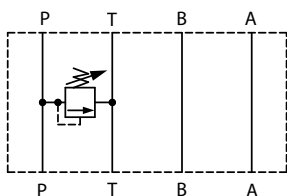
(5) Pressure adjustment range for relief on A (only for models AM2-MO-BA)

(6) Code reserved for special variants (materials, seals, surface treatments, etc.)

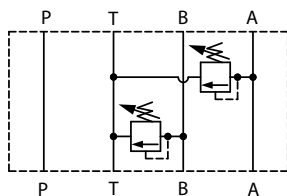
(7) Design number (progressive) of the valves.



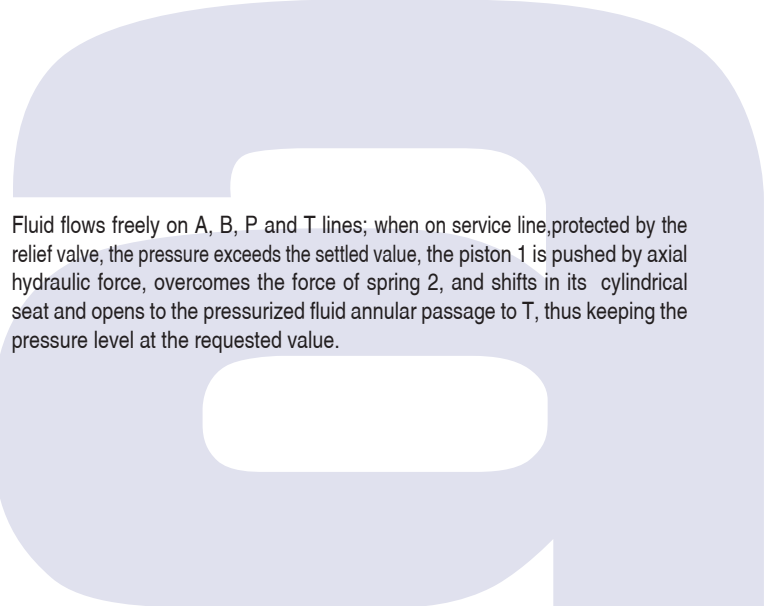
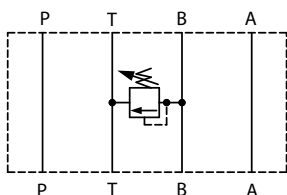
AM2-MO-P



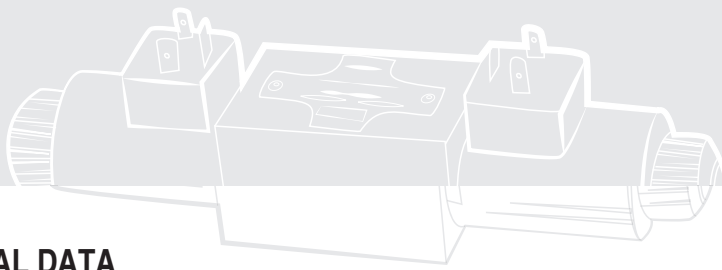
AM2-MO-BA



AM2-MO-B



Fluid flows freely on A, B, P and T lines; when on service line, protected by the relief valve, the pressure exceeds the settled value, the piston 1 is pushed by axial hydraulic force, overcomes the force of spring 2, and shifts in its cylindrical seat and opens to the pressurized fluid annular passage to T, thus keeping the pressure level at the requested value.

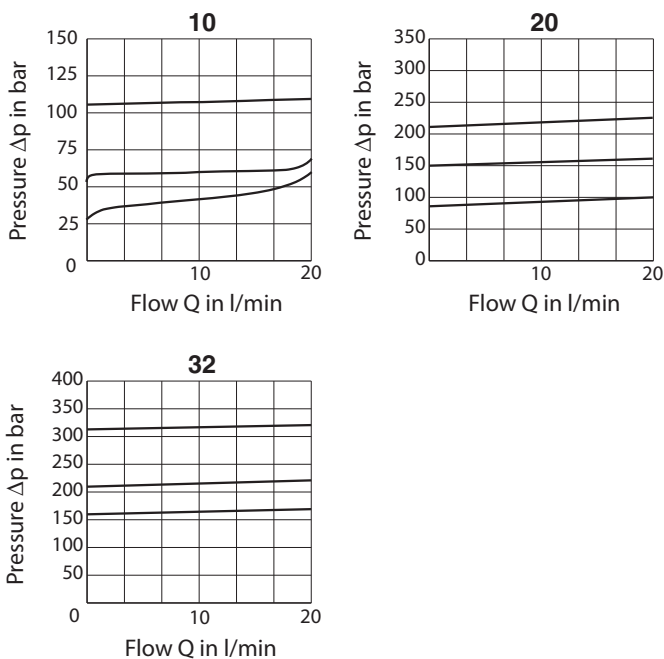


3 TECHNICAL DATA

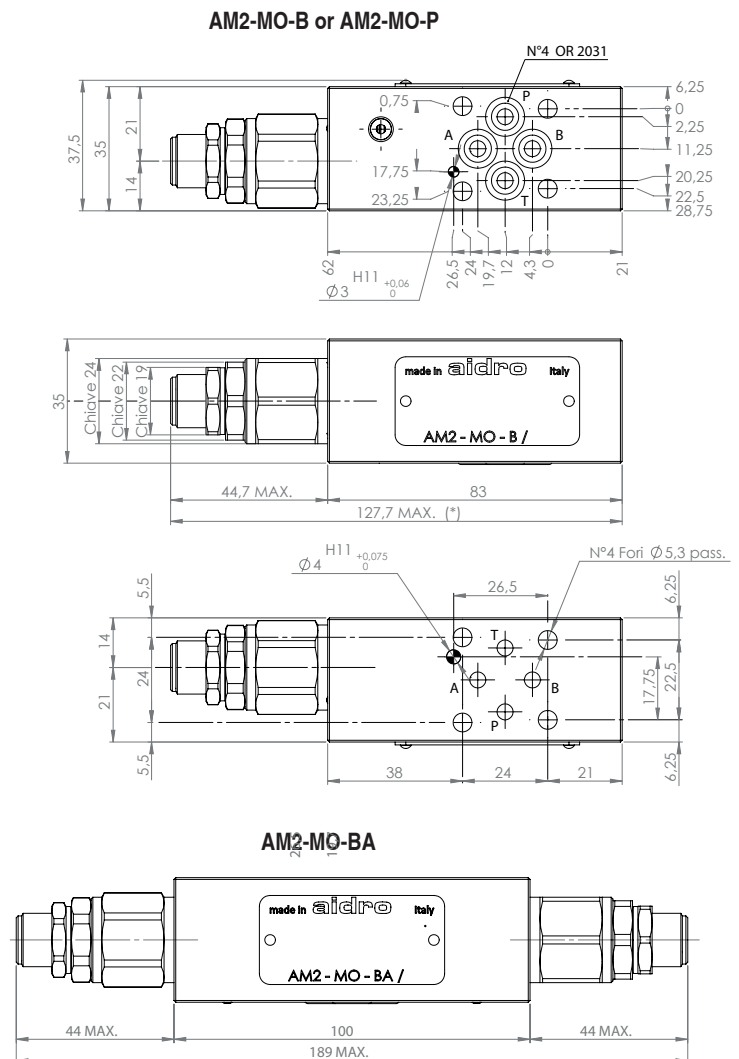
Maximum rec. flow rate	20 l/min	Adjustment of the relief pressure: Relief pressure is reached when the axial hydraulic forces on piston equal the force of spring; the value of the relief pressure can be therefore changed, within the limits of the chosen adjustment range, by changing the compression of spring. To increase the relief pressure, turn clock wise the adjustment screw, after having unlocked its nut. For each pressure adjustment range, the pressure gradient is approx: 10 : 1,6 MPa/mm (16 bar/turn) 20 : 2,6 MPa/mm (26 bar/turn) 32 : 5 MPa/mm (50 bar/turn) When the required level of pressure is reached, lock the nut.
Maximum nominal pressure	32 MPa (320 bar)	
Pressure relief curves	see 4	
Installation and dimensions	see 5	
Masses:		
AM2-MO-P or -B	approx 0,85 kg	
AM2-MO-BA	approx 1 kg	

4 TYPICAL DIAGRAMS

Typical curves for valves AM2-MO-* in standard configuration, with mineral oil at 36 cSt and at 50°C.



5 INSTALLATION DIMENSIONS (mm)



6 HYDRAULIC FLUIDS

Seals and materials used on standard valves AM2-* 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 AM2-MO-* conform with ISO and CETOP specifications for mounting surface dimensions (see also front page). Valves height 35 mm. Leakage between valve and mounting surface is prevented by the positive compression on their seats of 4 seals of OR type. All valves have on their "mounting" surface a ϕ 4 mm cylindrical hole and have on their "seals" surface a ϕ 3 mm cylindrical hole, conform with ISO and CETOP norms.