

MODULAR VALVES PRESSURE REDUCING

AM2-RO-*

30 l/min - 32 MPa (320 bar)

1 DESCRIPTION

Stackable pressure reducing valve direct operated. The valve is made with a steel body combined with a pressure relief cartridge valve. 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)
AM2	- RO	-	/	-	/ 20

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

(2) RO : pressure reducing, direct operated- 3 way valve

(3) Service lines where the controls operate:

P : control on P with 3rd way and drain to T line

AC: control on A with check valve

B : control on P with pressure reduced on B

(4) Controlled pressure adjustment ranges:

2,5: from 1 MPa to 2,5 MPa (from 10 to 25 bar)

6,3: from 2 MPa to 6,3 MPa (from 20 to 63 bar)

16: from 3 MPa to 16 MPa (from 30 to 160 bar)

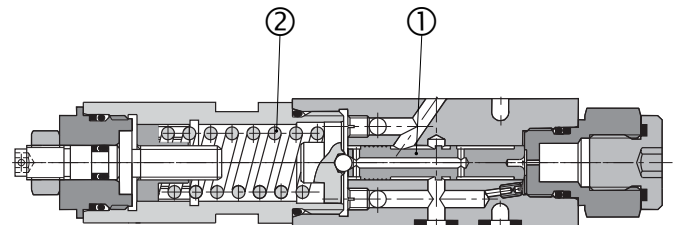
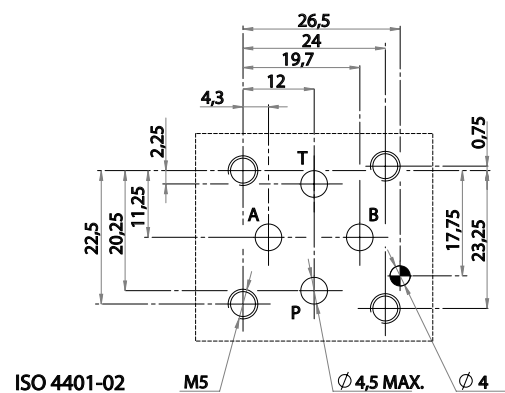
20: from 5 MPa to 21 MPa (from 50 to 210 bar)

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

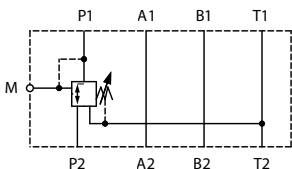
M= adjustment hand knob

V= viton seals

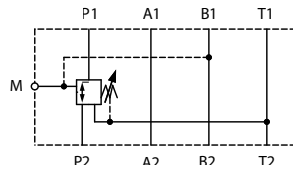
(6) Design number (progressive) of the valves.



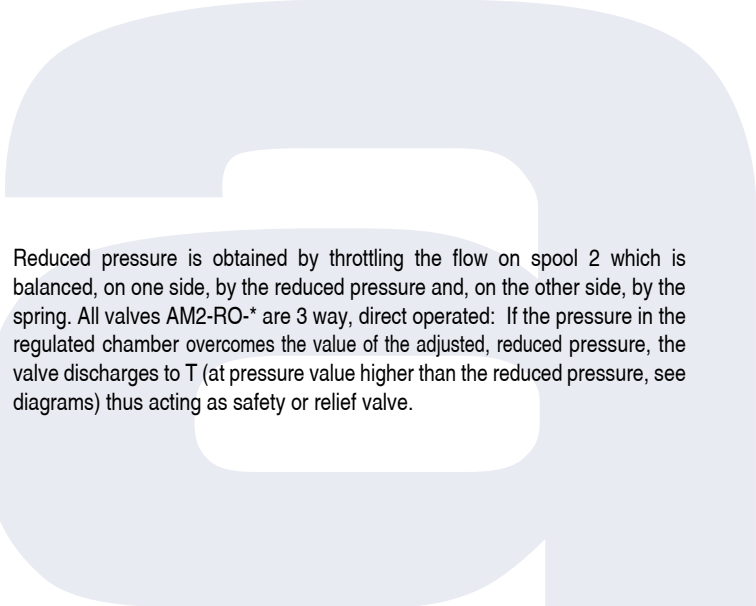
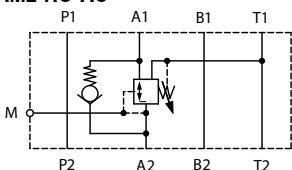
AM2-RO-P



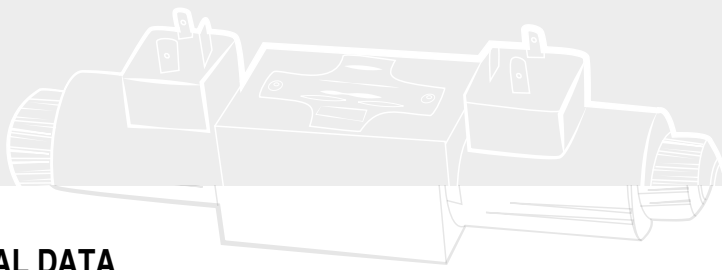
AM2-RO-B



AM2-RO-AC

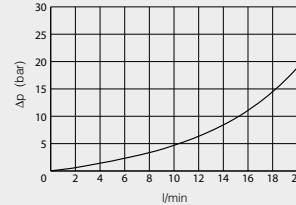


Reduced pressure is obtained by throttling the flow on spool 2 which is balanced, on one side, by the reduced pressure and, on the other side, by the spring. All valves AM2-RO-* are 3 way, direct operated: If the pressure in the regulated chamber overcomes the value of the adjusted, reduced pressure, the valve discharges to T (at pressure value higher than the reduced pressure, see diagrams) thus acting as safety or relief valve.



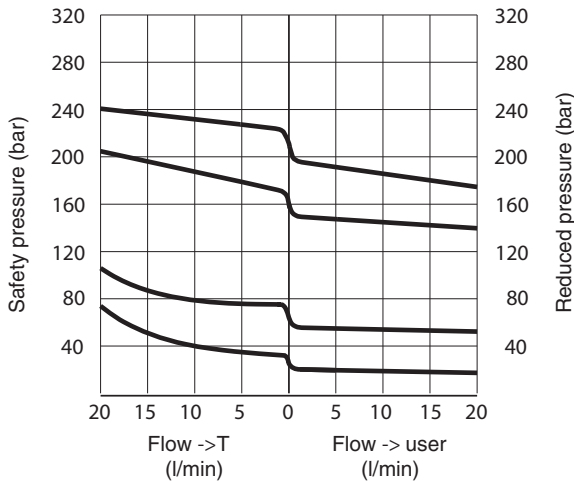
3 TECHNICAL DATA

Maximum rec. flow rate on free lines	30 l/min	Adjustment of the pressure: The value of the reduced pressure, is changing the compression of spring. To increase the value of the reduced pressure, unlock nut ch. 13 and turn clockwise the screw with outside hex 4.
on controlled lines	20 l/min	
Maximum nominal pressure	32 MPa (320 bar)	Valve reducing pressure on A or B lines can be: - indirect (type AM2-RO-B) they act on P line, receive reduced pressure pilot signal from B line that is controlled; (eventual pressurized reverse flow is directed to T by 3 ^a way). - with integral check valve (type AM2-RO-AC) they act on A line and they allow free reverse flow to port A of the solenoid valve. (see P).
Maximum pressure on T	21 MPa (210 bar)	
Pressure curves	see 4	
Installation and dimensions	see 5	
Masses:		
AM2-RO-P or -B	approx 0,6 kg	
AM2-RO-AC	approx 0,8 kg	



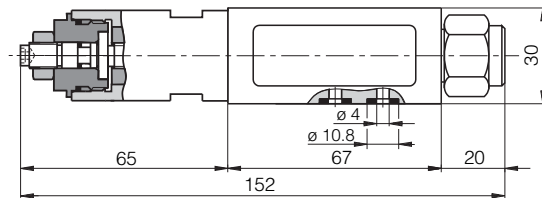
4 TYPICAL DIAGRAMS

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

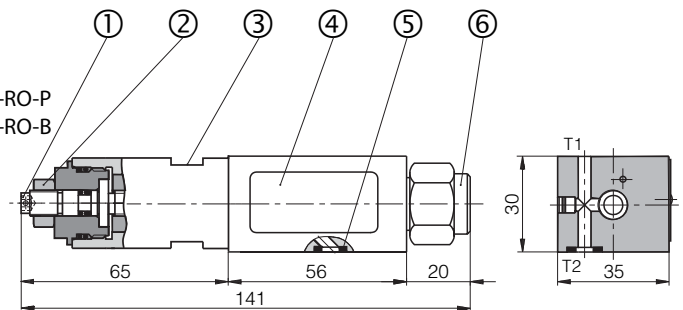


5 INSTALLATION DIMENSIONS (mm)

AM2-RO-AC

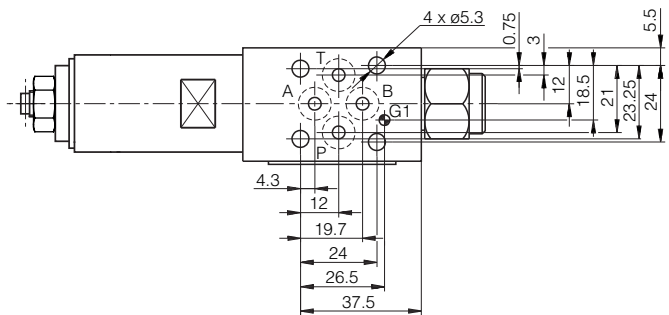


AM2-RO-P
AM2-RO-B



6 HYDRAULIC FLUIDS

Seals and materials used on standard valves AM2-RO* 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.



- ① Pressure adjustment element, screw with outside ch. 4
- ② Locknut ch. 13
- ③ Wrench flats ch. 24
- ④ Name plate
- ⑤ N°4 square ring 7.65x1.68 supplied with each valve
- ⑥ Plug for pressure gauge connection, thread G1/4"

All stackable valves AM2-* conform with ISO and CETOP specifications for mounting surface dimensions. Valves height 30 mm. Leakage between valve and mounting surface is prevented by the positive compression on their seats of 4 seals of OR type.