

## PRESSURE REDUCING MODULAR VALVES

### AM3-RP-\*

60 l/min - 32 MPa (320 bar)

#### 1 DESCRIPTION

Stackable pressure reducing valve pilot operated. The valve is made with a steel body combined with a pressure relief 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)  |
|-----|------|-----|-----|-----|------|
| AM3 | - RP | -   | /   | -   | / 10 |

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

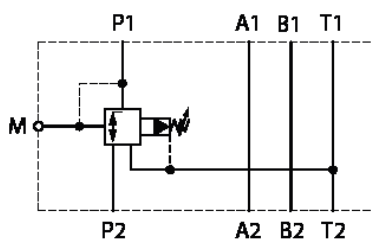
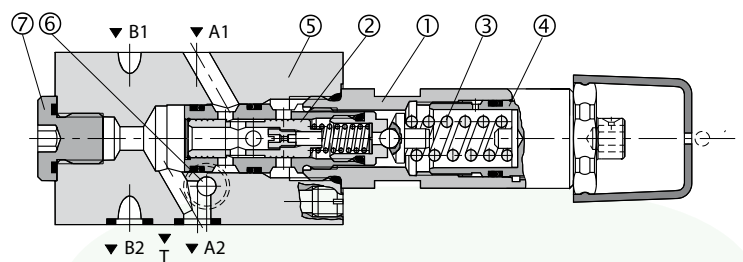
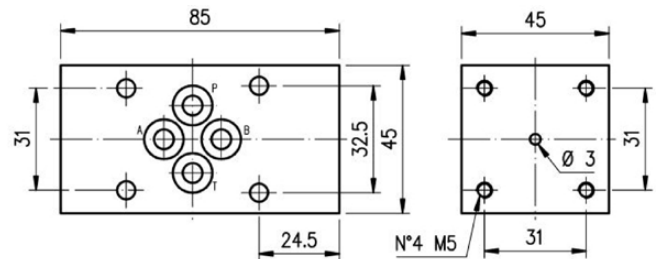
(2) RP: pressure reducing, pilot operated- 3 way valve

(3) Service lines where the controls operate:  
 P: control on P with 3<sup>a</sup> way and drain to T line  
 AC: control on A with check valve

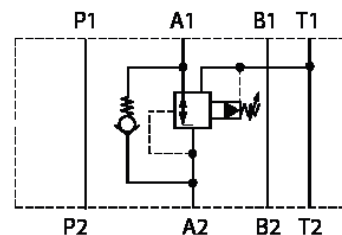
(4) Pressure adjustment ranges:  
 6,3: from 0,5 to 7MPa (from 5 to 70 bar)  
 14: from 1 to 14MPa (from 30 to 140 bar)  
 20: from 1 to 21 MPa (from 10 to 210 bar)

(5) Code reserved for more options and variants  
 M= adjustment hand knob

(6) Design number (progressive) of the valves



**AM3-RP-P**



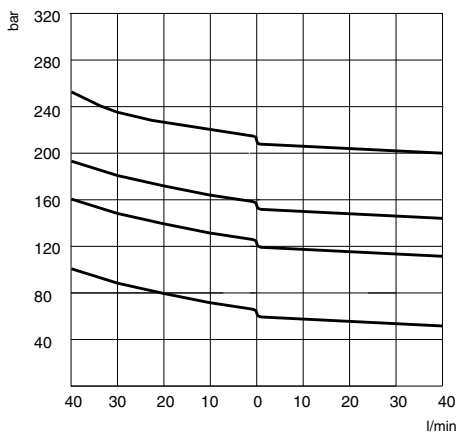
**AM3-RP-AC**

### 3 TECHNICAL DATA

|                                      |                                    |  |
|--------------------------------------|------------------------------------|--|
| Maximum rec. flow rate on free lines | 1 dm <sup>3</sup> /s (60 l/min)    | Adjustment of the pressure:<br>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 positioning spring and by the pilot pressure. Pilot pressure is established by the action on spring 3 on the pilot valve 7. The value of the reduced pressure is changed by changing the compression of spring 3. To increase the value of the reduced pressure, turn clockwise the handknob or screw by acting on ex. CH10mm, after having unlocked ist nut 8 (CH 26 mm). When the required level of pressure is reached, lock the nut 8. |
| on controlled lines                  | 0,66 dm <sup>3</sup> /s (40 l/min) |  |
| Maximum nominal pressure             | 32 MPa (320 bar)                   |  |
| Maximum pressure on T                | 10 MPa (100 bar)                   |  |
| Pilot flow rate                      | 4 cm <sup>3</sup> /s (0,24 l/min)  |  |
| Pressure curves                      | see 4                              |  |
| Installation and dimensions          | see 5                              |  |
| Masses                               |                                    |  |
| AM3-RP-P                             | approx 1,1 kg                      |  |
| AM3-RP-AC                            | approx 1,45 kg                     |  |

### 4 TYPICAL DIAGRAMS

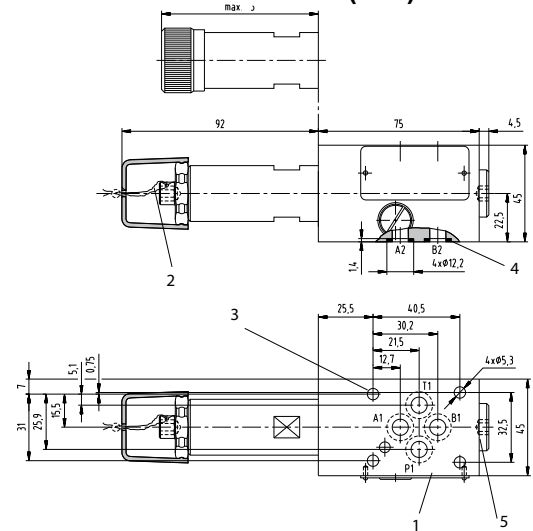
Typical curves for valves AM3-RP in standard configuration, with mineral oil at 36 cSt and at 50°C



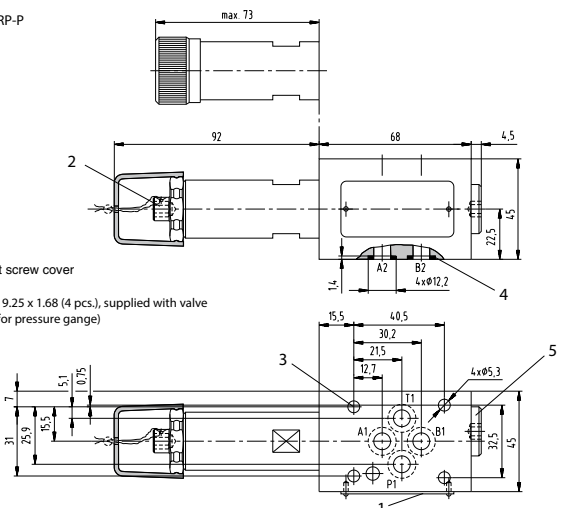
All valves AM3-RP-\* are 3 way, direct operated:

If the pressure in the regulated chamber overcomes the value of the adjusted, reduced pressure, the valve discharges to T (at pressure value higher then the reduced pressure- see diagrams) thus acting as safety or relief valve. Valves reducing pressure anA or B lines are with integral check valve 9 (types AM3-RP-AC or BC) and they allow reverse flow to port A or B of the solenoid valve.

### 5 INSTALLATION DIMENSIONS (mm)



Model AM3-RP-P



- 1 Label
- 2 Adjustment screw cover
- 3
- 4 Square ring 9.25 x 1.68 (4 pcs.), supplied with valve
- 5 Plug G1/4 (for pressure gauge)

All stackable valves AM3-RP-\* conform with ISO and CETOP specifications for mounting surface dimensions and for valves height 45 mm. Leakage between valve and mounting surface is prevented by the positive compression on their seats of 4 seals type OR 2037.