

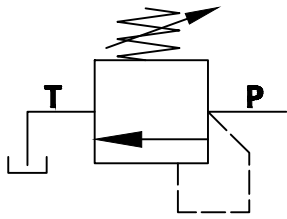
**Description**

Direct acting pressure relief valve, model DPR are guided poppet design, seat type valves. They are used for limiting a system pressure. The valve basically consist of sleeve, seat, poppet, spring and adjusting set screw or rotary hand knob.

The spring pushes the poppet onto the seat. P is connected to the system. The pressure existing in the system acts on the poppet surface area. If the pressure in chamber P exceeds the value set at the spring, the poppet opens against the spring.

Now hydraulic fluid flows from P to T.

**Hydraulic Symbol**



**Unit Dimension**

**Screw - in cartridge valve**

Dimensions in mm

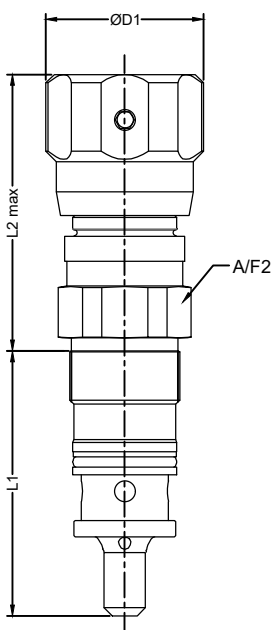
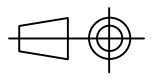


Figure 1

Screw - in cartridge valve with hand knob

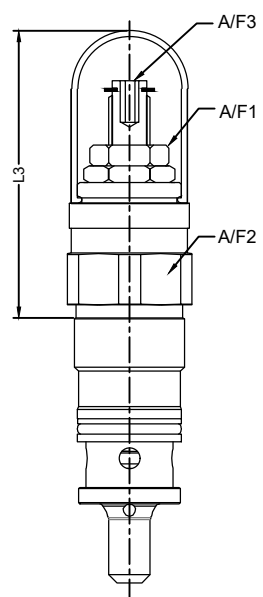


Figure 2

Screw - in cartridge valve with set screw

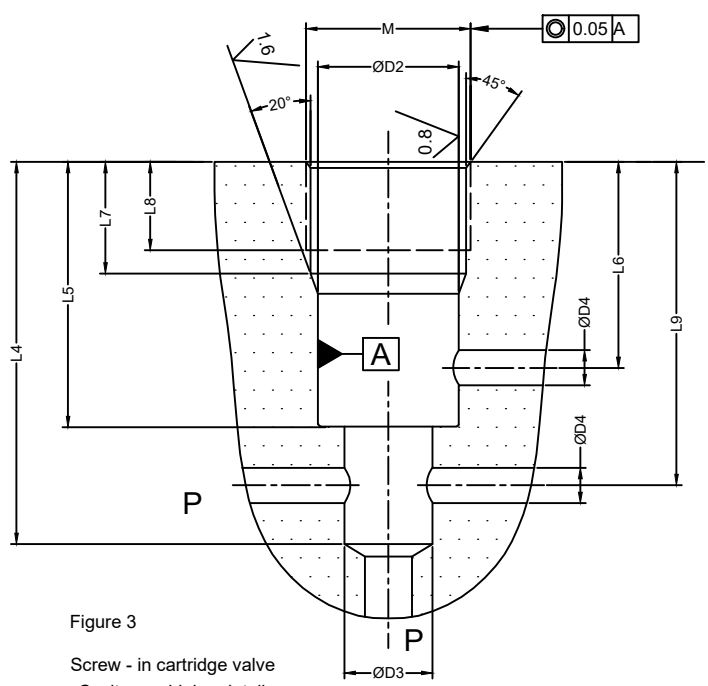


Figure 3

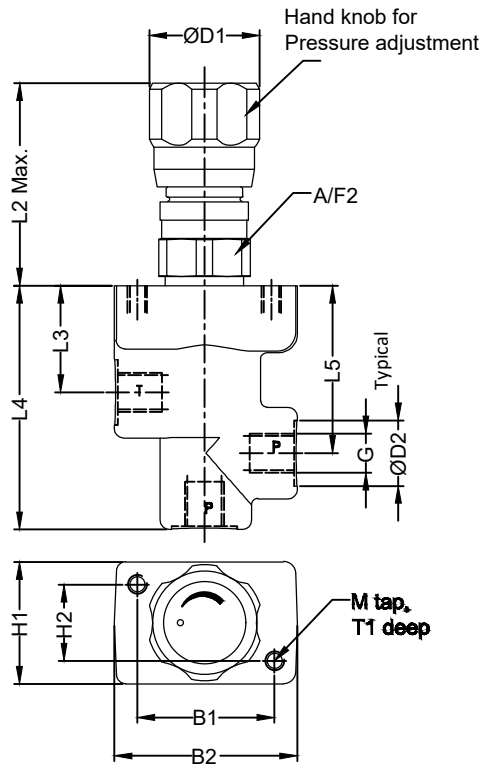
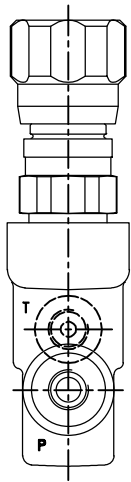
Screw - in cartridge valve Cavity machining details

Table 1

| Size | A/F 1 | A/F 2 | A/F 3 | M 6H      | ØD1 | ØD2 <sup>H9</sup> | ØD3 | ØD4 | L1  | L2 | L3 | ±0.5 L4 | ±0.2 L5 | L6 | ±0.2 L7 | ±0.2 L8 | L9 | Mass | Tightening torque Nm |
|------|-------|-------|-------|-----------|-----|-------------------|-----|-----|-----|----|----|---------|---------|----|---------|---------|----|------|----------------------|
| 06   | 19    | 30    | 4     | M28 x 1.5 | 43  | 25                | 15  | 6   | 64  | 64 | 65 | 65      | 45      | 35 | 19      | 15      | 55 | 0.4  | 120                  |
| 10   | 19    | 36    | 5     | M35 x 1.5 | 48  | 32                | 19  | 10  | 77  | 82 | 80 | 80      | 52      | 41 | 23      | 18      | 69 | 0.9  | 140                  |
| 20   | 19    | 46    | 5     | M45 x 1.5 | 60  | 40                | 24  | 20  | 103 | 85 | 79 | 110     | 70      | 54 | 27      | 21      | 92 | 1.6  | 170                  |

**Dimensions**

**Threaded port type**



Set screw for Pressure adjustment

**Dimensions in mm**

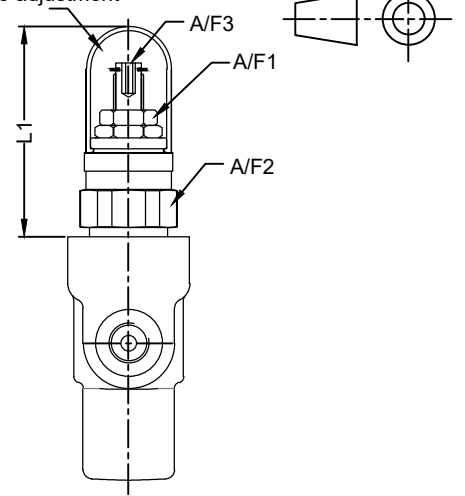


Table 1

| Size | A/F 1 | A/F 2 | A/F 3 | G    | ØD1 | ØD2 <sup>H9</sup> | M  | L1   | L2 | L3 | L4  | L5 | B1 | B2 | H1 | H2 | T1 | Mass |
|------|-------|-------|-------|------|-----|-------------------|----|------|----|----|-----|----|----|----|----|----|----|------|
| 06   | 19    | 30    | 4     | G1/4 | 43  | 22                | M6 | 65   | 64 | 35 | 80  | 55 | 45 | 60 | 40 | 25 | 11 | 1.2  |
| 10   | 19    | 36    | 5     | G1/2 | 48  | 30                | M8 | 80   | 82 | 42 | 100 | 45 | 60 | 80 | 60 | 40 | 15 | 2.8  |
| 20   | 19    | 46    | 5     | G1   | 60  | 44                | M8 | 78.5 | 85 | 54 | 135 | 45 | 70 | 95 | 70 | 50 | 15 | 6.2  |

**Subplate type**

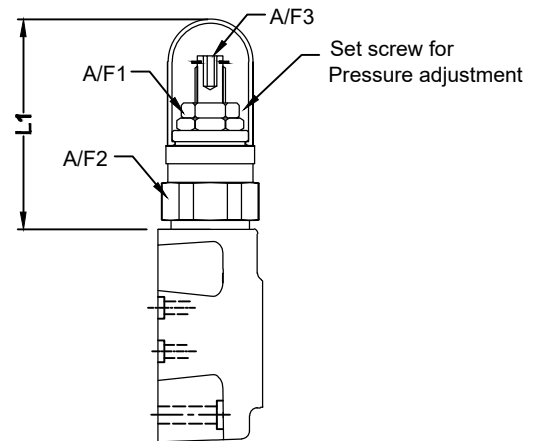
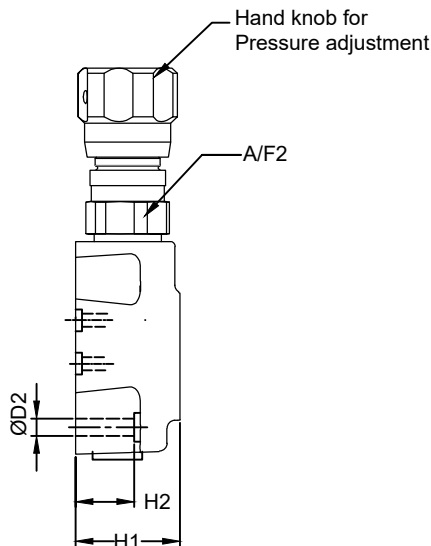
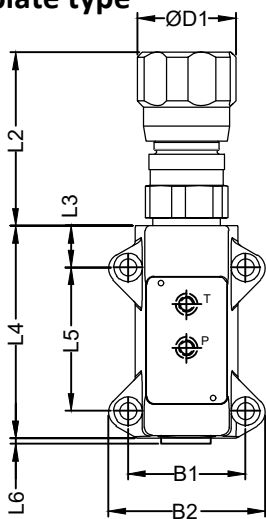


Table 1

| Size | A/F 1 | A/F 2 | A/F 3 | B1 | B2  | ØD1 | ØD2 | L1   | L2 | L3 | L4  | L5  | L6 | H1 | H2 | Mass |
|------|-------|-------|-------|----|-----|-----|-----|------|----|----|-----|-----|----|----|----|------|
| 06   | 19    | 30    | 4     | 45 | 60  | 43  | 6.6 | 65   | 64 | 15 | 80  | 55  | 4  | 40 | 21 | 1.1  |
| 06   | 19    | 36    | 4     | 60 | 80  | 48  | 9   | 80   | 82 | 20 | 100 | 70  | 5  | 55 | 28 | 2.4  |
| 06   | 19    | 46    | 4     | 70 | 100 | 60  | 9   | 78.5 | 85 | 20 | 135 | 100 | 5  | 70 | 70 | 8    |

**Technical Specification**

- Design : Direct acting, Poppet type.
- Mounting interface : Threaded Cartridge, Threaded body & Subplate body.  
Note : Subplate mounting valve interface as per ISO 6264-03-04 and 6264-06-09
- Mounting position : Optional
- Flow direction : From P to T
- Opp Pressure for Port : Port P - 700 bar & Port T - 315 bar.
- Pressure setting range : Upto 25,50,100,200,315,400 and 700 bar
- Hydraulic medium : Mineral oil
- Viscosity range : 10 cSt to 100 cSt
- Temperature range : -20°C to +80°C
- Fluid cleanliness req. : ISO 4406 20/18/15 or better

**Ordering Code**

