# PRM2

## DIRECT OPERATED PRESSURE RELIEF VALVE

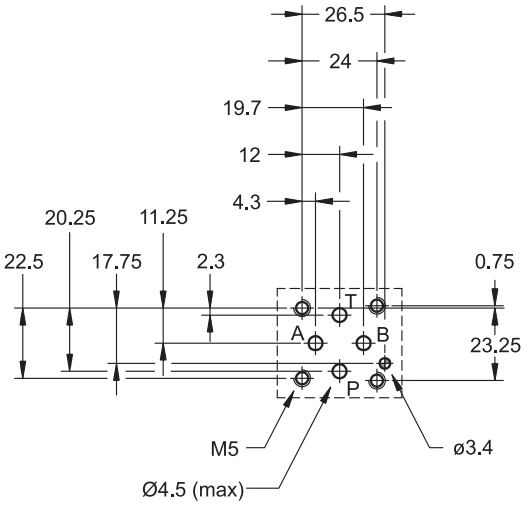
### SERIES 10

## MODULAR VERSION ISO 4401-02

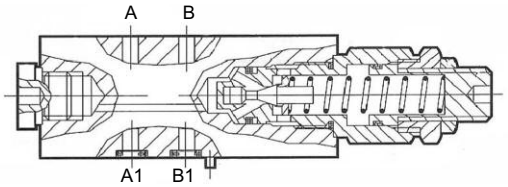
**p** max **320** bar
**Q** max **20** l/min

### MOUNTING SURFACE

ISO 4401-02-01-0-05
(CETOP 4.2-4-R02-320)




### OPERATING PRINCIPLE




— The PRM2 valve is a direct operated pressure relief valve made as a modular version with mounting surface according to the ISO 4401 standards.

— It can be assembled with all ISO 4401-02 modular valves without use of pipes, using suitable tie-rods or bolts.

— It is available in versions for single relief on P or B with discharge in T, or two independent relief on A and B with discharge in T, all with three different pressure adjustment ranges.

— This valve is normally used as a hydraulic circuit pressure limiting device or as a limiting device of the pressure peaks generated during the movement of hydraulic actuators.

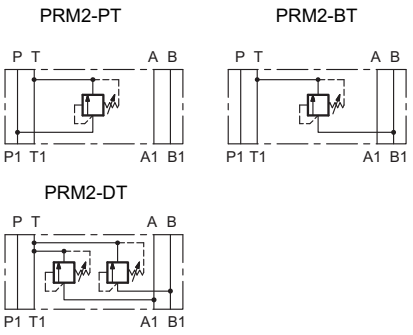
— It is supplied with a countersunk hex adjustment screw and locking nut.

### PERFORMANCES

(measured with mineral oil of viscosity 36cSt at 50°C)

| | | |
|---|---|---|
| Maximum operating pressure | bar | 320 |
| Minimum controlled pressure | see Δp diagram. | |
| Maximum flow rate | l/min | 20 |
| Ambient temperature range | °C | -20 / +60 |
| Fluid temperature range | °C | -20 / +80 |
| Fluid viscosity range | cSt | 10 ÷ 400 |
| Fluid contamination degree | According to ISO 4406:1999 class 20/18/15 | |
| Recommended viscosity | cSt | 25 |
| Mass: PRM2-PT and PRM2-BT<br>PRM2-DT | kg | 0.85<br>1 |

### HYDRAULIC SYMBOLS



## 1 - IDENTIFICATION CODE

| P | R | M | 2 | - | | | / | 10 | |
|---|---|---|---|---|---|---|---|---|---|

Direct operated pressure relief valve

Modular version

Size: ISO 4401-02

Versions:
**PT**: single relief on line P with discharge in T
**BT**: single relief on line B with discharge in T
**DT**: double relief on lines A - B with discharge in T

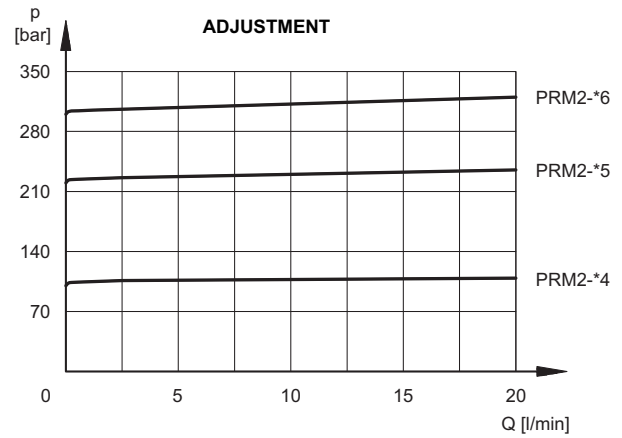
Pressure adjustment range
**4** = from 63 to 125 bar (16 bar / turn)
**5** = from 80 to 210 bar (26 bar / turn)
**6** = from 125 to 320 bar (50 bar / turn)

Series No. (the overall and mounting dimensions remain unchanged from 10 to 19)

Seals:
**N** = NBR seals for mineral oils (**standard**)
**V** = FPM seals for special fluids

## 2 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)




## 3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V).

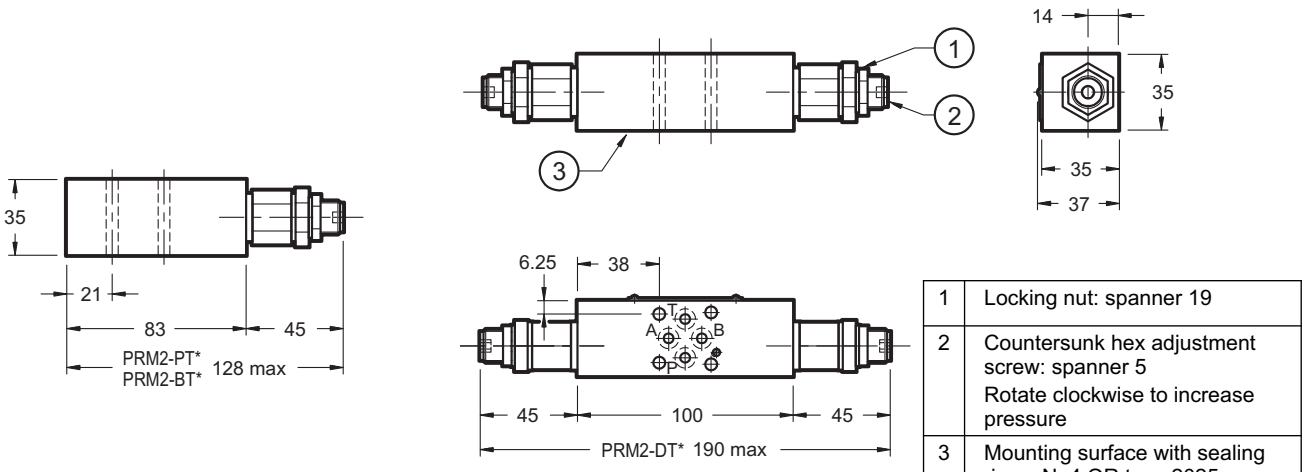
For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

## 4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm




| | |
|---|---|
| 1 | Locking nut: spanner 19 |
| 2 | Countersunk hex adjustment screw: spanner 5<br>Rotate clockwise to increase pressure |
| 3 | Mounting surface with sealing rings: N. 4 OR type 2025 (6.07x1.78) 90 Shore |

DUPLOMATIC MOTION SOLUTIONS

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