Part number:

HYDROMA
HYDRAULICKÉ SYSTÉMY

HIDROMA SISTEMS
UKŁADY HYDRAULICZNE

HYDROMA
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



PRM5

PILOT OPERATED PRESSURE RELIEF VALVE

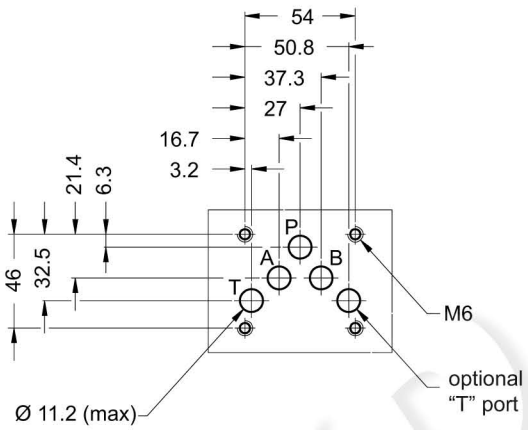
SERIES 10

MODULAR VERSION
ISO 4401-05

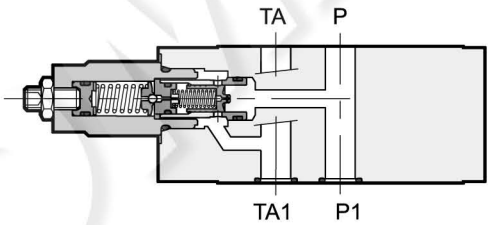
p max **350** bar
Q max **120** l/min

MOUNTING SURFACE

ISO 4401-05-04-0-05
CETOP 4.2-4-05-350



OPERATING PRINCIPLE



— The PRM5 valve is a pilot operated pressure relief valve made as a modular version, with mounting surface according to ISO 4401 standards.

— It can be assembled with all ISO 4401-05 modular valves without the use of pipes, using suitable tie-rods or bolts.

— Versions are available for single adjustment on one control line, or dual on two control lines and with four different pressure adjustment ranges.

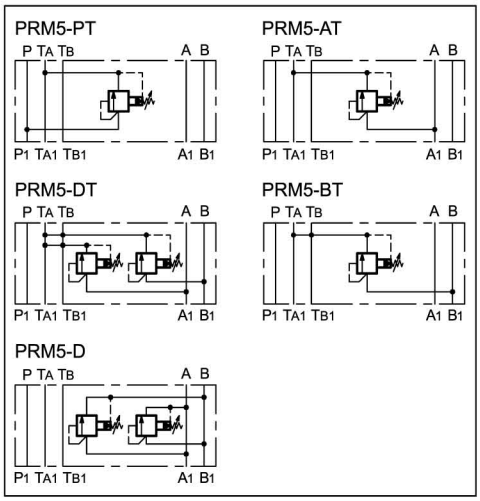
— This valve is used as a hydraulic circuit pressure limiting device.

— It is supplied with an hexagonal head adjustment screw and locking nut. It is also available with knob.

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

Maximum operating pressure	bar	350
Minimum controlled pressure	bar	see Δp - Q diagram
Max flow	l/min	120
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: PRM5-PT, -AT, -BT PRM5-DT, -D	kg	2,8 3

HYDRAULIC SYMBOLS



PRM5
SERIES 10

1 - IDENTIFICATION CODE

P	R	M	5	-			/	10		/		

Pilot operated pressure relief valve

Modular version

ISO 4401-05 size

Versions:
PT: single on line P with discharge in TA
AT: single on line A with discharge in TA
BT: single on line B with discharge in TA and TB
DT: double on lines A-B with discharge in TA and TB
D: double on lines A-B with cross discharge

Pressure adjustment range:
070 = 14 ÷ 70 bar (17 bar/turn)
140 = 14 ÷ 140 bar (32 bar/turn)
210 = 14 ÷ 210 bar (47 bar/turn)
350 = 14 ÷ 350 bar (78 bar/turn)

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

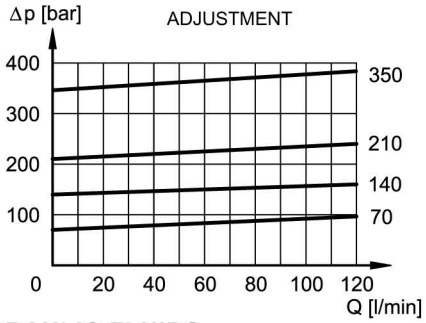
Seals:
N = NBR seals for mineral oils (**standard**)
V = FPM seals for special fluids

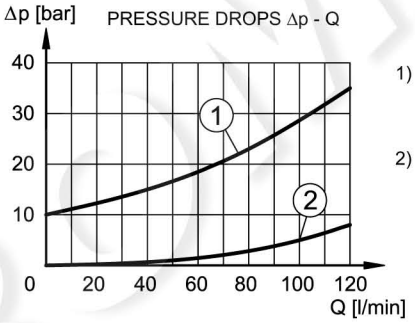
Option:
K = Adjustment knob. Omit for adjustment with hex socket screw (**standard**)

Option: W7 surface treatment. Omit if not required (**NOTE**)

NOTE: Upon request we can supply these valves completely with zinc-nickel surface treatment on the body. Add the suffix **/W7** at the end of the identification code.

2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)





1) pressure drop on controlled lines PT, AT, BT, DT

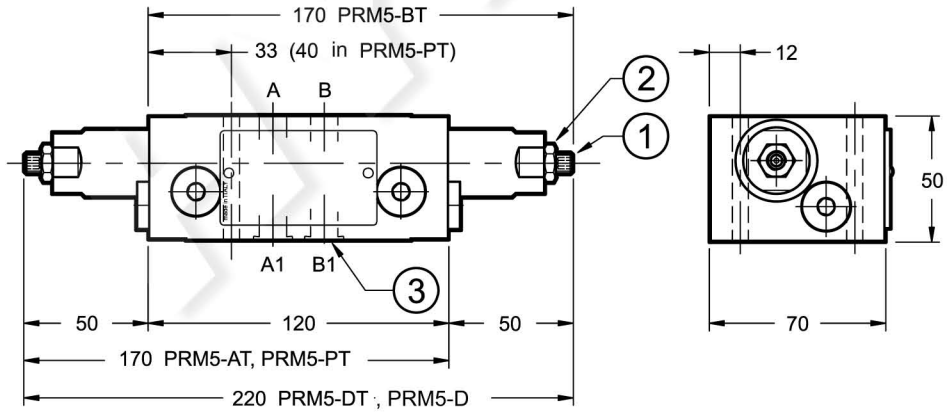
2) pressure drop on free lines

3 - HYDRAULIC FLUIDS

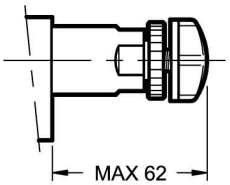
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N). For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at 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



K VERSION



1	Socket hex adjustment screw: Hex key 4. Rotate clockwise to increase pressure
2	Locking nut: spanner 13
3	Mounting surface with sealing rings: 5 OR type 2050 (12.42 x 1.78) 90 Shore