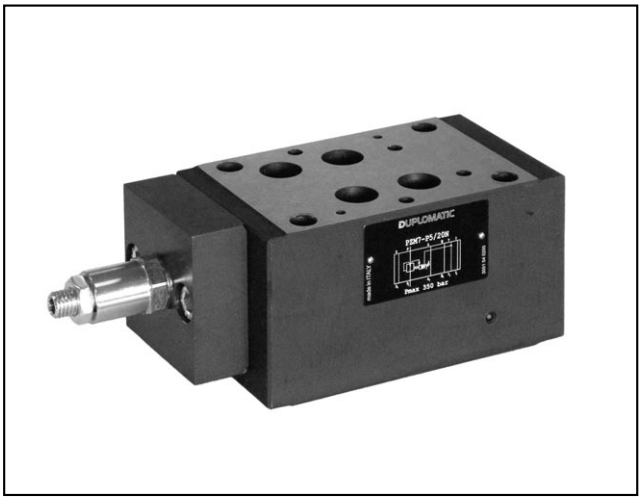


PRM7

PRESSURE RELIEF VALVE, PILOT OPERATED

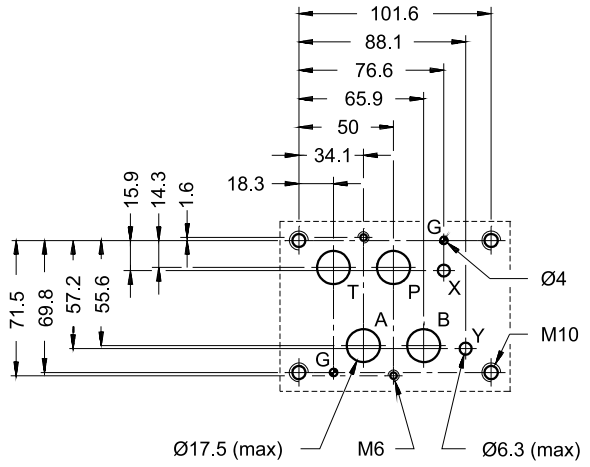
SERIES 20

MODULAR VERSION
ISO 4401-07

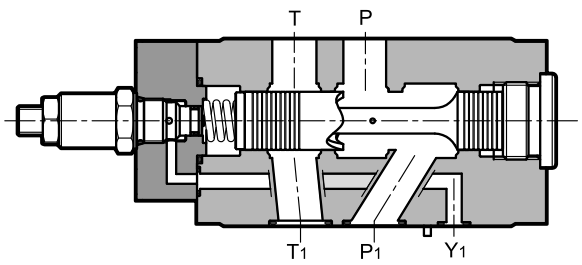
p max **350** bar
Q max **300** l/min

MOUNTING INTERFACE

ISO 4401-07-07-0-05
(CETOP 4.2-4-07)



OPERATING PRINCIPLE



— The PMR7 valve is a pilot operated pressure relief valve made as a modular version with a mounting surface according to ISO 4401-07 standards.

— It can be assembled with all ISO 4401-07 modular valves without the use of pipes, using suitable tie-rods or bolts.

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

— It is available with pressure adjustment on port P and relief in T, and five pressure adjustment ranges.

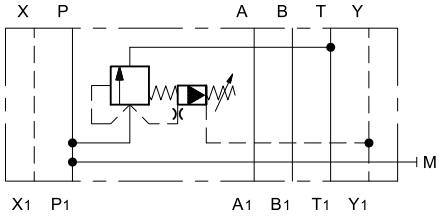
— It is supplied with an adjustment screw. The knob is available as option.

PERFORMANCES

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

Maximum operating pressure	bar	350
Maximum flow rate	l/min	300
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	kg	7,5

HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE

P	R	M	7	-	PT		/	20		/	

Pressure relief valve

Modular version

ISO 4401-07 size

Pressure adjustment on line P with discharge in T

Pressure adjustment range:
035 = 6 ÷ 35 bar
070 = 6 ÷ 70 bar
150 = 8 ÷ 150 bar
250 = 10 ÷ 250 bar
350 = 10 ÷ 350 bar

Series No.
(the overall and mounting dimensions remain unchanged from 20 to 29)

Seals:
N = standard seals in NBR (standard)
V = in viton for special fluids

Omit for adjustment with hex socket set screw (**standard**)
K = adjustment knob

3 - HYDRAULIC FLUIDS

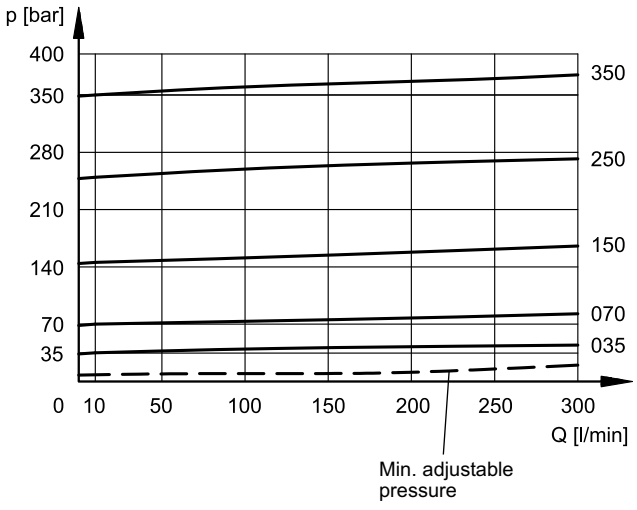
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures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

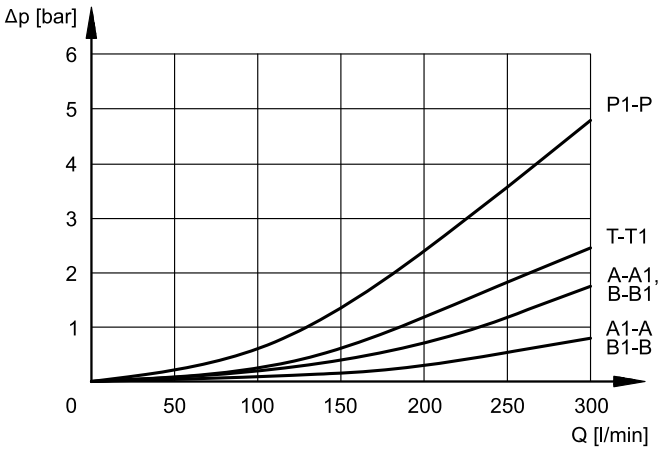
2 - CHARACTERISTIC CURVES

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

ADJUSTMENT

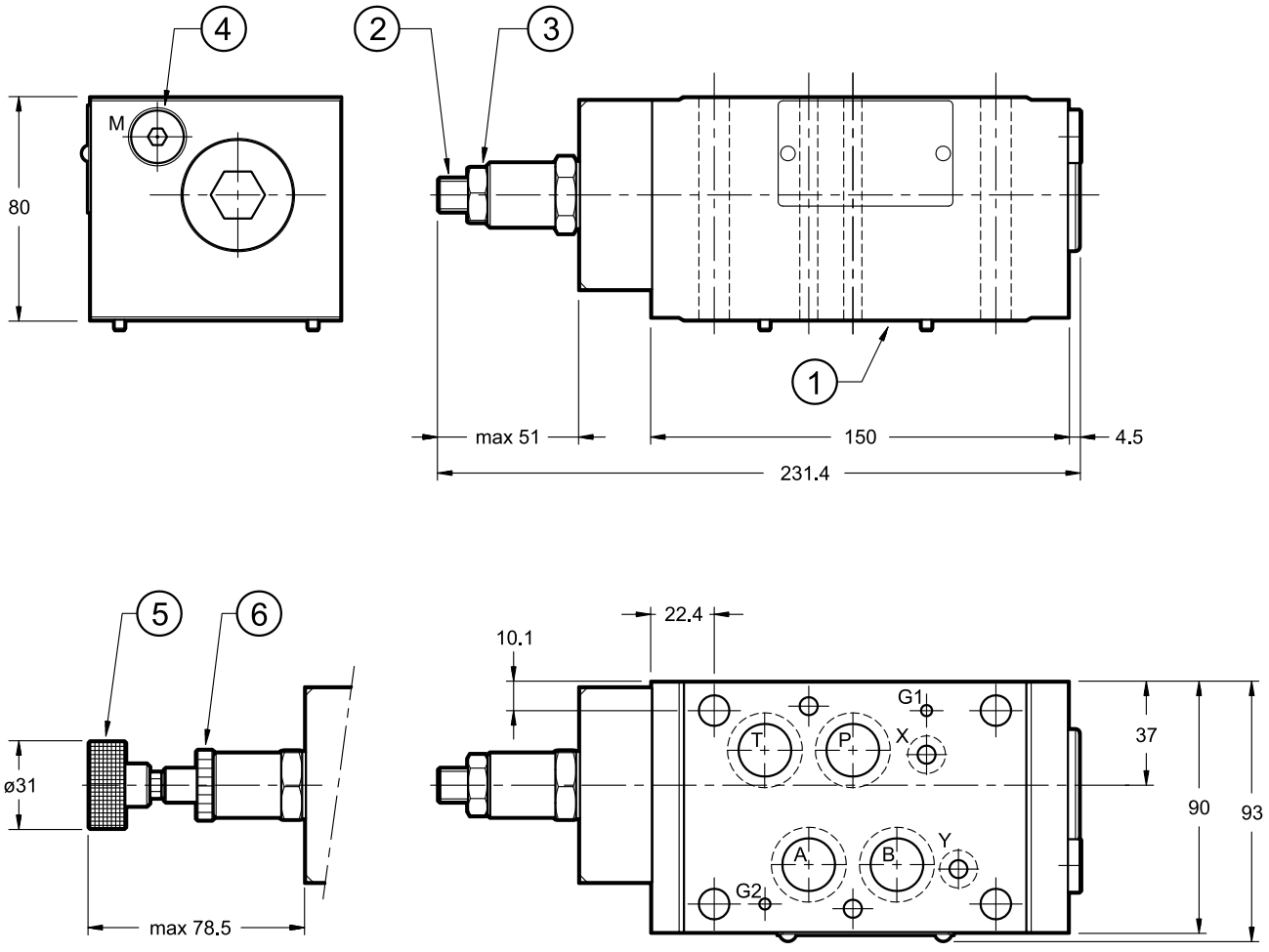


PRESSURE DROPS Δp - Q



4 - OVERALL AND MOUNTING DIMENSIONS

dimensioni in mm



1	Mounting surface with sealing rings: N. 4 OR type 130 (40x95x2.62) N. 2 OR type 2043 (10.82x1.78)
2	Standard adjustment screw (**standard**). Hex key 6 Rotate clockwise to increase pressure
3	Locking nut: spanner 19
4	Pressure gauge port: 1/4” BSP
5	Adjustment knob: K
6	Locking ring

DUPLOMATIC MOTION SOLUTIONS

DUPLOMATIC MS S.p.A.
via M. Re Depaolini 24 ▪ 20015 PARABIAGO (MI) ▪ ITALY
tel. +39 0331.895.111 ▪ www.duplomatic.com ▪ e-mail: sales.exp@duplomatic.com