61 260/107 ED

PBM3

BACKPRESSURE VALVE

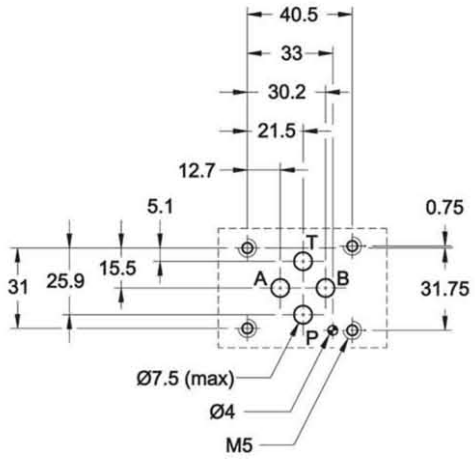
SERIES 10

MODULAR VERSION
ISO 4401-03 (CETOP 03)

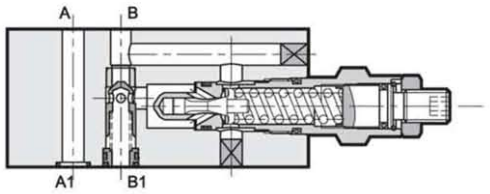
p max **350** bar
Q max (see table of performances)

MOUNTING INTERFACE

ISO 4401-03-02-0-94
CETOP 4.2-4-03-350



OPERATING PRINCIPLE



— The valve PBM3 is a direct operated three-way pressure regulator, developed as a modular version with mounting surface according to the ISO 4401 (CETOP RP121H) standards.

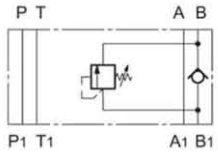
— Its aim is to adjust the output backpressure coming from the actuator, so as to allow the input free flow .

— It is normally used on vertically mounted cylinders where the cancellation of a load weighting on the road of the same cilinder is needed.

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

Maximum operating pressure	bar	350
Check valve cracking pressure	bar	3,5
Max. flow on check valve B→B1 (Δp 8 bar)	bar	50
Maximum flow rate in controlled line B1→B Maximum flow rate in the free lines P, A, T	l/min	50 75
Ambient temperature range	°C	-20 / +50
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	1,6

HYDRAULIC SYMBOL



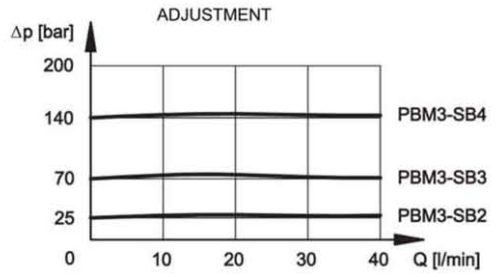
PBM3
SERIES 10

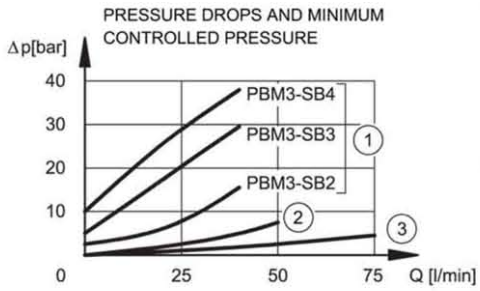
1 - IDENTIFICATION CODE

P	B	M	3	-	S	B		/	10		/	

- Backpressure valve
- Modular version
- ISO 4401-03 (CETOP 03) size
- Adjustment on line B
- Backpressure valve adjustment range:
  2 = up to 25 bar
  3 = up to 70 bar
  4 = up to 140 bar
- Series No. (the overall and mounting dimensions remain unchanged from 10 to 19)
- Seals:
  N = standard seals in NBR
  V = in viton for special fluids
- **S** = adjustment screw
  K = adjustment knob

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





① pressure drops on line B1→B with calibrated screw at the beginning of the adjustment (min. controlled pressure)

② pressure drops on line B→B1 to which the cracking pressure of the check valve is to be added

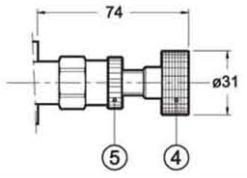
③ pressure drops on free lines

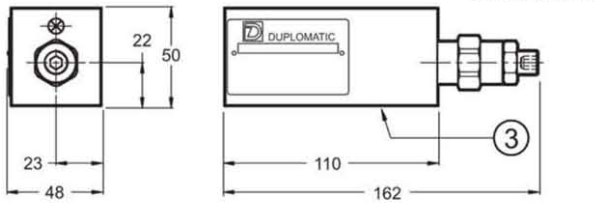
3 - HYDRAULIC FLUIDS

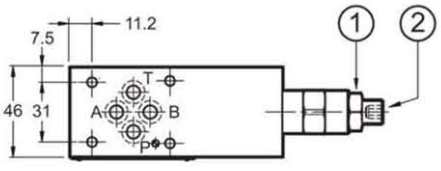
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures 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	**S** countersunk hex adjustment screw: spanner 6 Rotate clockwise to increase pressure
3	Mounting surface with sealing rings: 4 OR tipo 2037 - 90 shore (9.25 x 1.78)
4	Adjustment knob: **K**
5	Locking ring