



PCM3

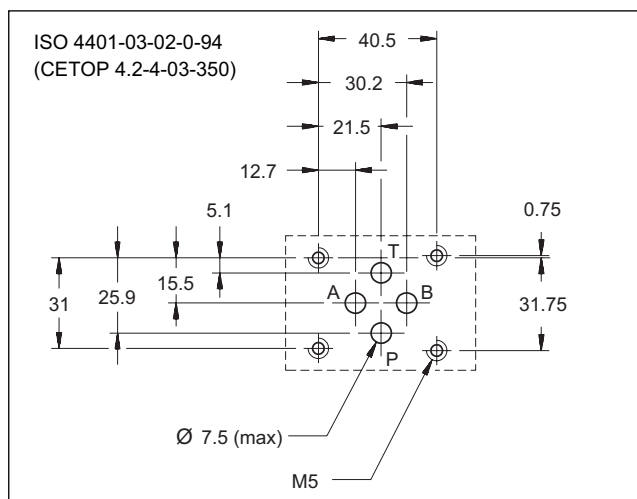
TWO AND THREE-WAY PRESSURE COMPENSATOR WITH FIXED OR VARIABLE ADJUSTMENT

SERIES 10

MODULAR VERSION
ISO 4401-03 (CETOP 03)

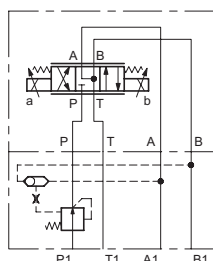
p max **350 bar**
Q max **40 l/min**

MOUNTING INTERFACE

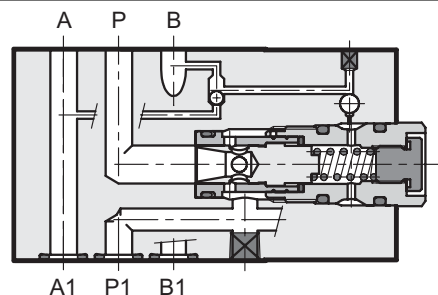


APPLICATION EXAMPLES

Two-way compensator with fixed adjustment, combined with a proportional valve type DSE3-A*



OPERATING PRINCIPLE

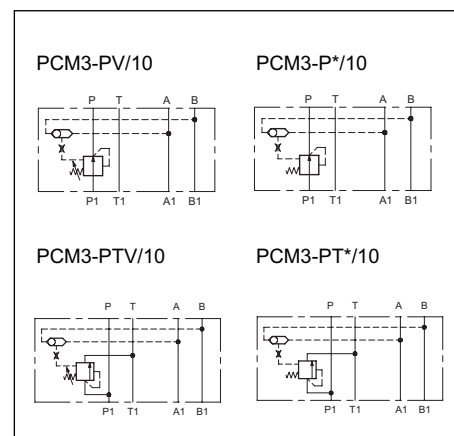


- The PCM3 valve is a two or three-way pressure compensator, developed as a modular version with mounting surface according to the ISO 4401 (CETOP RP121H).
- Its aim is to keep the pressure drop setting (characteristic Δp) between the line P and alternatively the lines A and B, at a constant level.
- It is normally used together with proportional directional valves, in order to control the flow rate independently of the pressure variations.
- The selection of the piloting pressure on the lines A and B is carried out automatically via a shuttle check valve built into the compensator.
- The setting of the variable adjustment compensator (characteristic Δp) can be varied from 7 to 33 bar, via a countersunk hex adjustment screw or via an adjustment knob.
- The fixed adjustment compensator is available with setting (characteristic Δp) of 4 and 8 bar.

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

Max operating pressure	bar	350
Characteristic Δp : fixed adjustment variable adjustment	bar	4 - 8 7 ÷ 33
Max flow rate	l/min	40
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	1,5

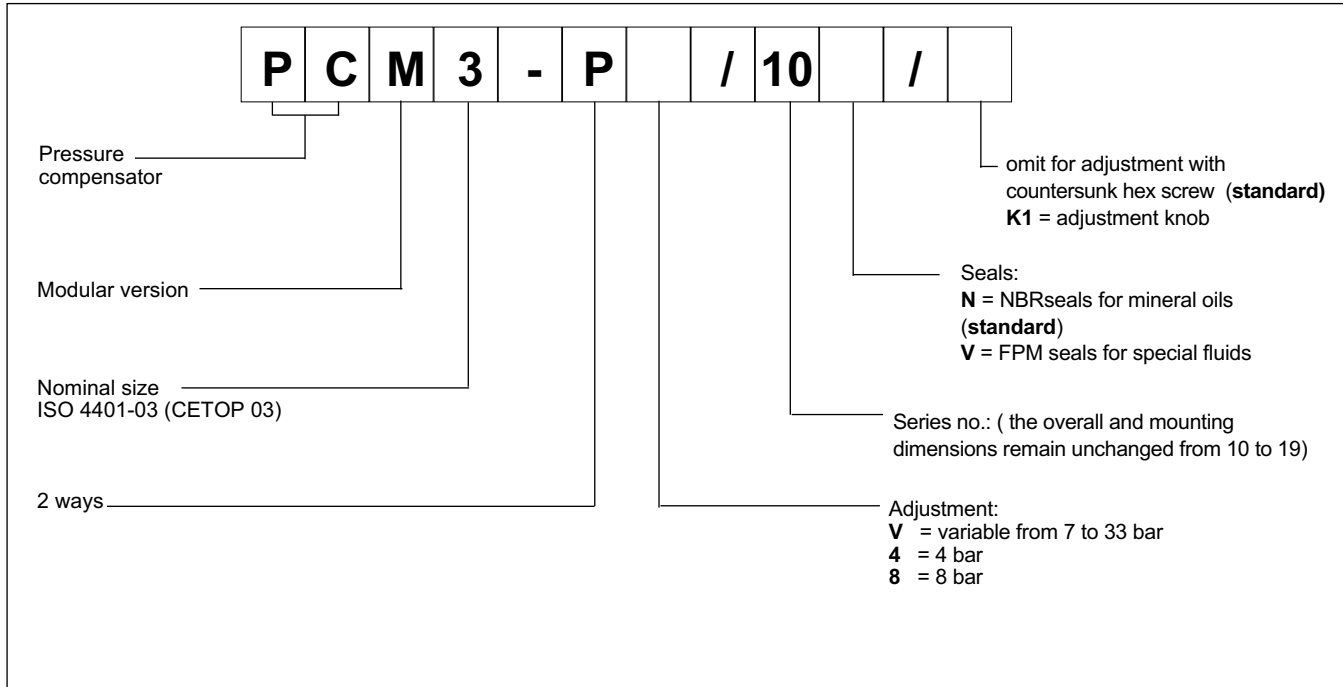
HYDRAULIC SYMBOLS



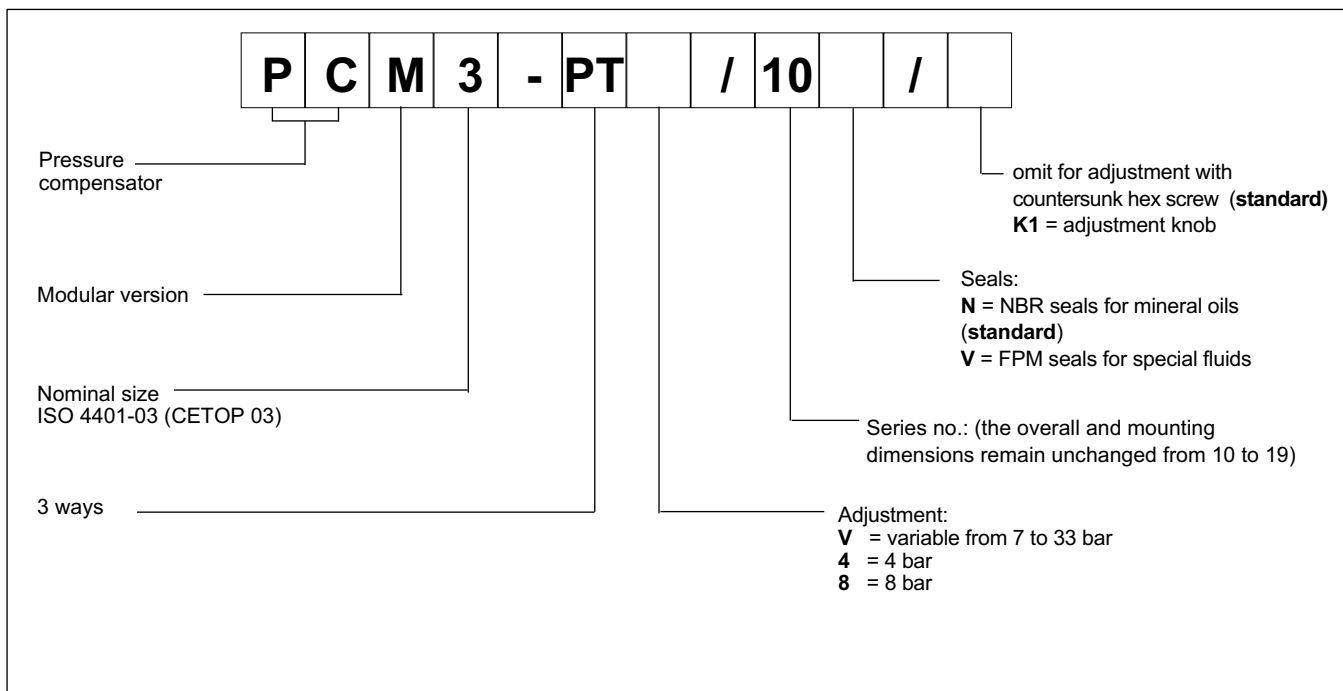


1 - IDENTIFICATION CODE

1.1 - Two-way compensator identification code



1.2 - Three-way compensator identification code

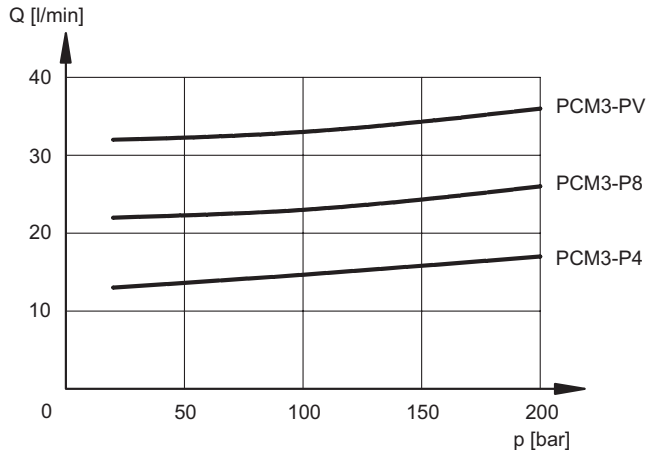




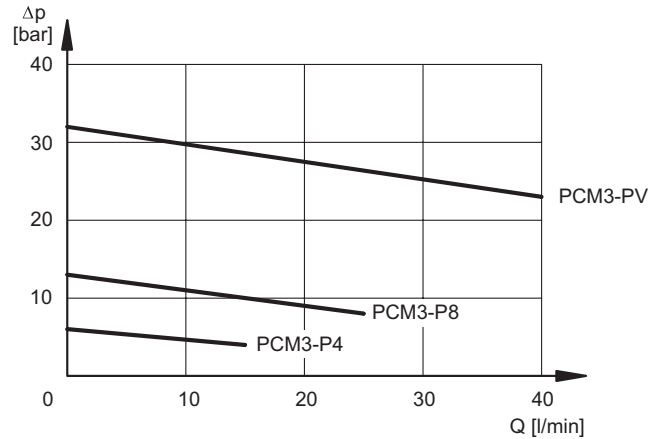
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)

2.1 - Two-way compensator characteristic curves

FLOW RATE - PRESSURE $Q = f(p)$

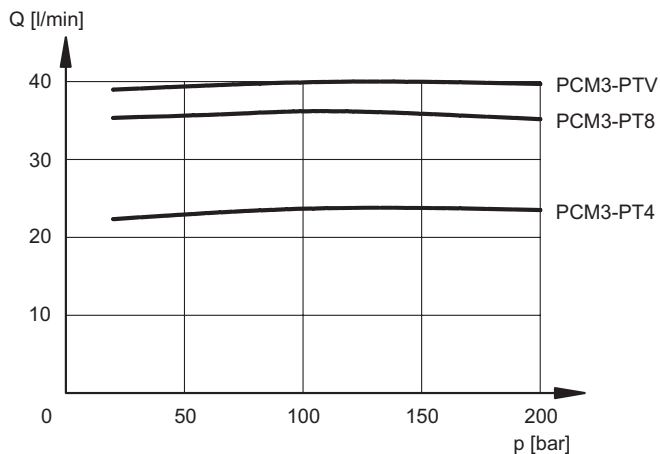


PRESSURE DROPS $\Delta p = f(Q)$

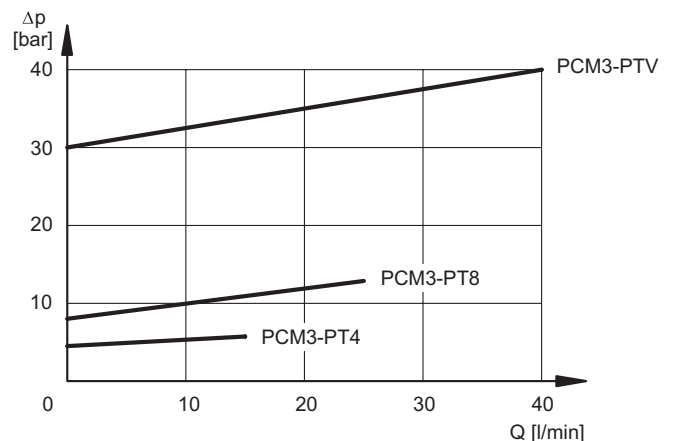


2.2 - Three-way compensator characteristic curves

FLOW RATE - PRESSURE $Q = f(p)$



PRESSURE DROPS $\Delta p = f(Q)$



3 - HYDRAULIC FLUIDS

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

Using other fluid types such as HFA, HFB, HFC, please consult our technical department.

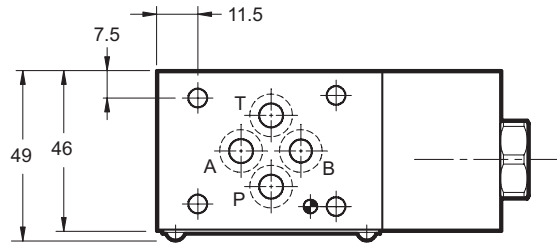
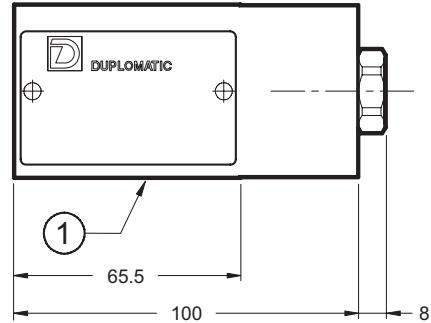
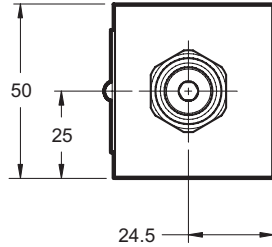
Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid itself and of the seals characteristics.

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

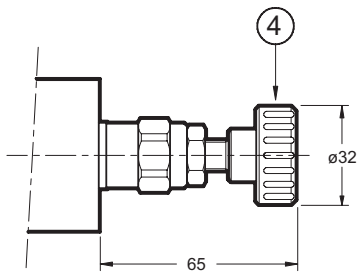


4 - OVERALL AND MOUNTING DIMENSIONS

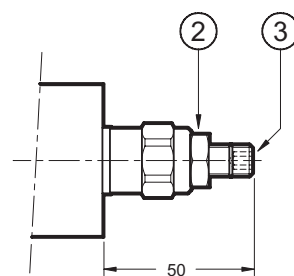
PCM3-P*/10
PCM3-PT*/10



PCM3-PV/10*/K1
PCM3-PTV/10*/K1



PCM3-PV/10
PCM3-PTV/10



dimensions in mm

1	Mounting surface with sealing rings: 4 OR type 2037 - (9.25x1.78) 90 shore
2	Locking nut: spanner 17
3	Countersunk hex adjustment screw: spanner 5 Clockwise rotation to increase pressure
4	Adjustment knob: K1



DIPLOMATIC
HYDRAULICS

DIPLOMATIC OLEODINAMICA SpA
20025 LEGNANO (MI) - P.le Bozzi, 1 / Via Edison
Tel. 0331/472111 - Fax 0331/548328