



# PCM7

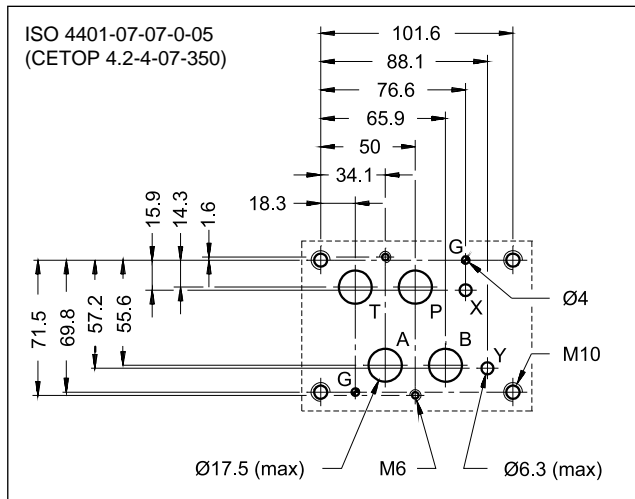
## 2- AND 3-WAY PRESSURE COMPENSATOR, FIXED ADJUSTMENT

### SERIES 10

#### MODULAR VERSION ISO 4401-07

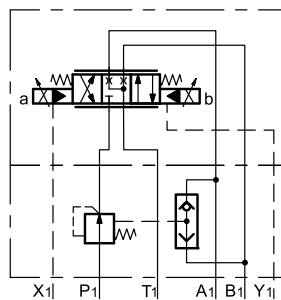
**p** max 350 bar  
**Q** max 280 l/min

#### MOUNTING INTERFACE



#### APPLICATION EXAMPLES

2-way compensator with fixed adjustment and external pilot, mounted under directional proportional valve type DSPE7-A\*.



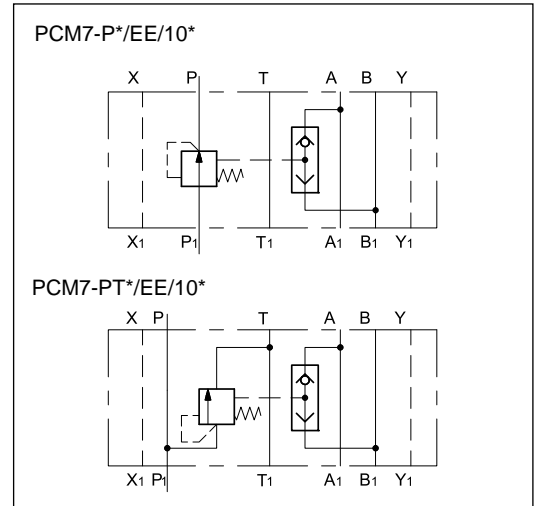
#### PERFORMANCES (with mineral oil of viscosity of 36 cSt a 50°C)

Max operating pressure	bar	350
Characteristic $\Delta p$	bar	4 - 8
Max flow rate	l/min	280
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	7,3

#### OPERATING PRINCIPLE

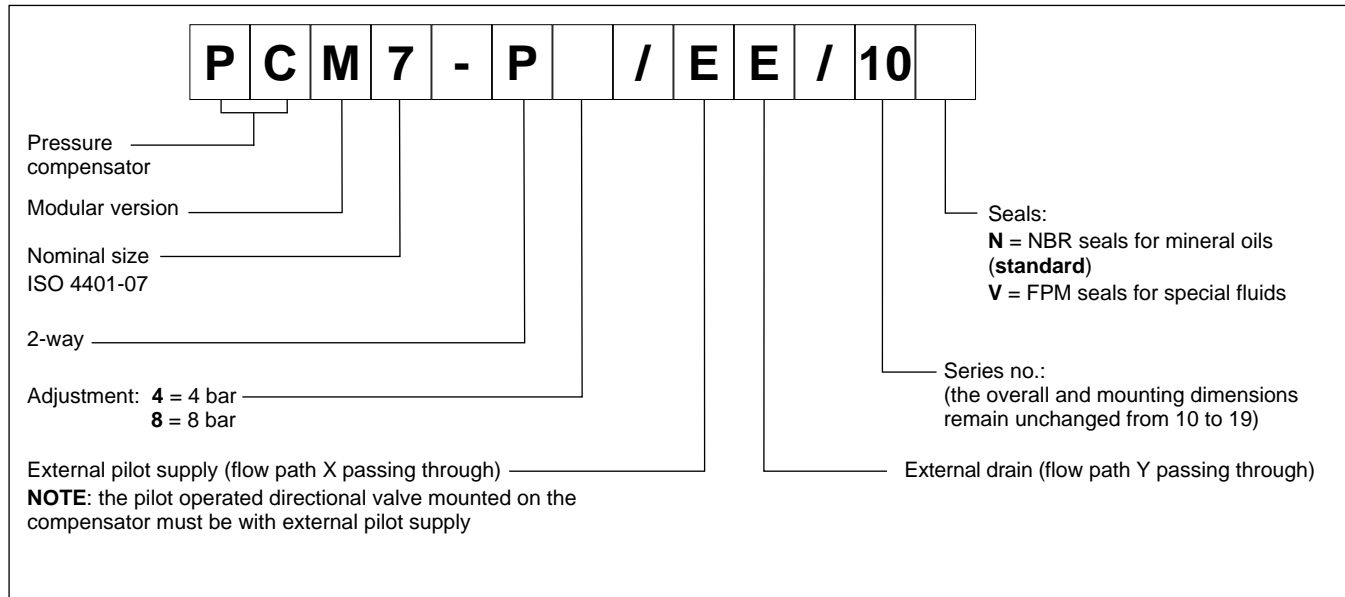
- The PCM7 valve is a pressure compensator for modular mounting, available in 2- or 3-way version, with mounting surface according to ISO 4401-07.
- The compensator keeps the differential pressure (characteristic  $\Delta p$ ) constant between P and A or B ports, alternately.
- It is placed under the proportional directional valves, in order to achieve flow rate controls independent of pressure variations.
- The selection of the pilot pressure from A and B paths takes place automatically, by means of a shuttle check valve incorporated in the compensator.
- The PCM7 compensators are available in fixed adjustment (characteristic  $\Delta p$ ) of 4 and 8 bar.

#### HYDRAULIC SYMBOLS

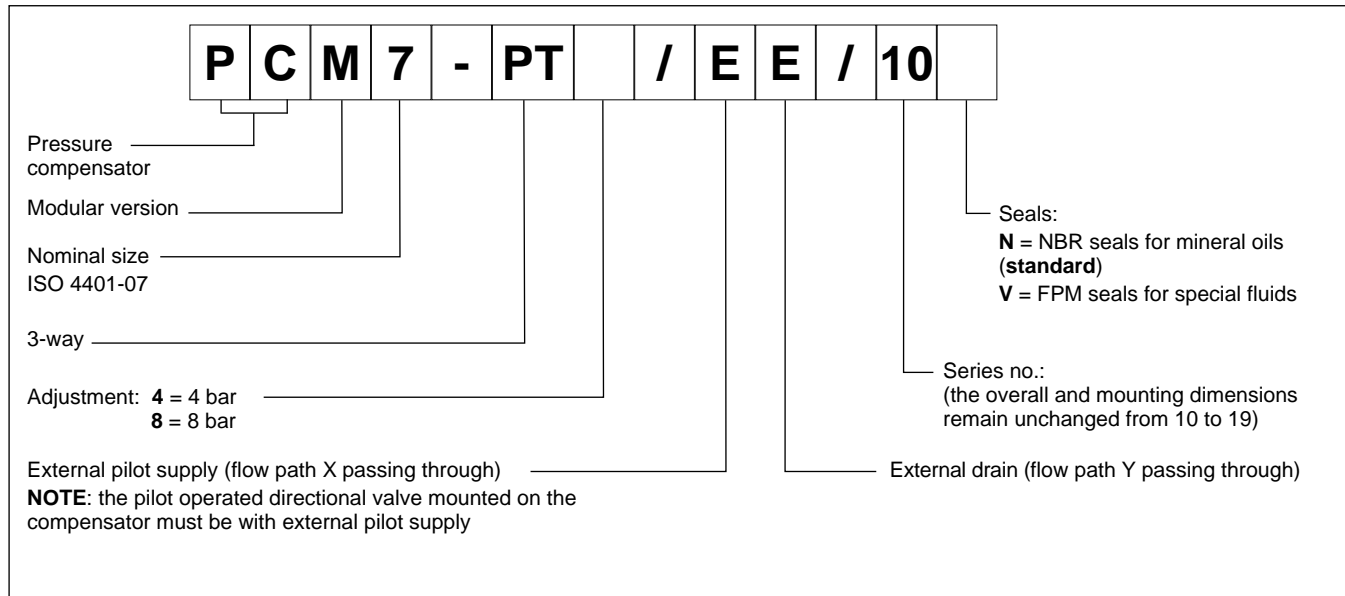


## 1 - IDENTIFICATION CODE

### 1.1 - 2-way compensator



### 1.2 - 3-way compensator



## 2 - 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.

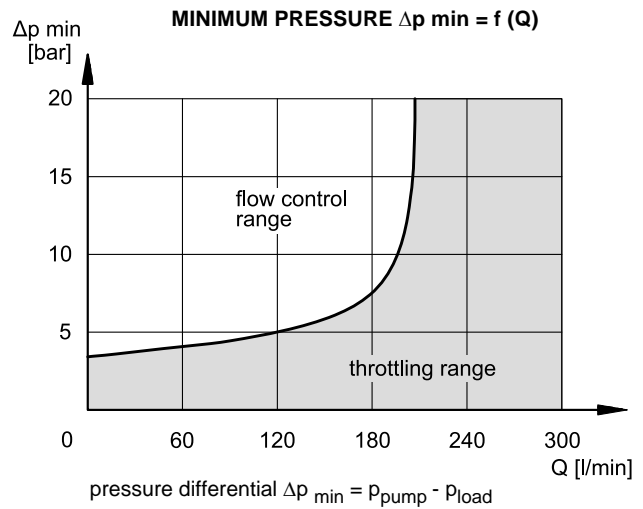
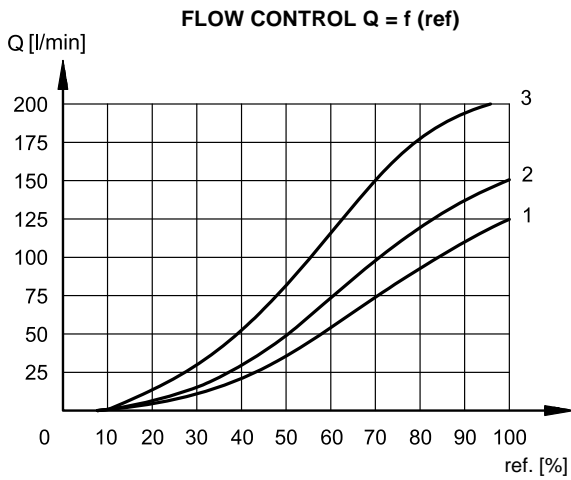
### 3 - CHARACTERISTIC CURVES

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

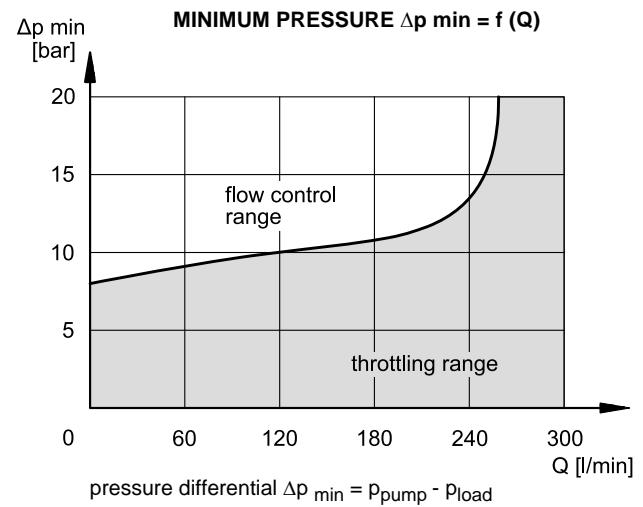
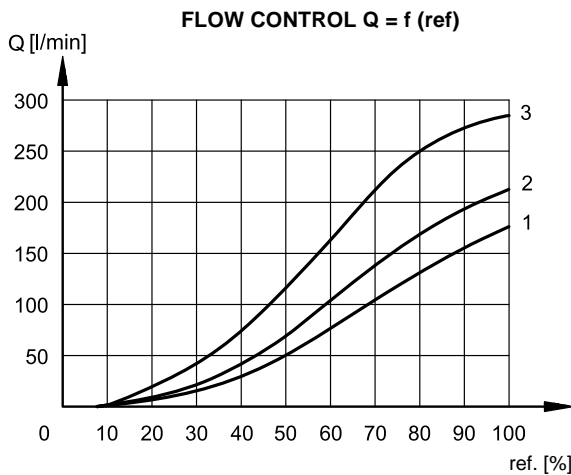
The flow rate characteristic varies according to the proportional directional valve mounted above the compensator:

- curve 1 = with type DSPE7J-A100
- curve 2 = with type DSPE7J-A150
- curve 3 = with type DDPE7J-A220

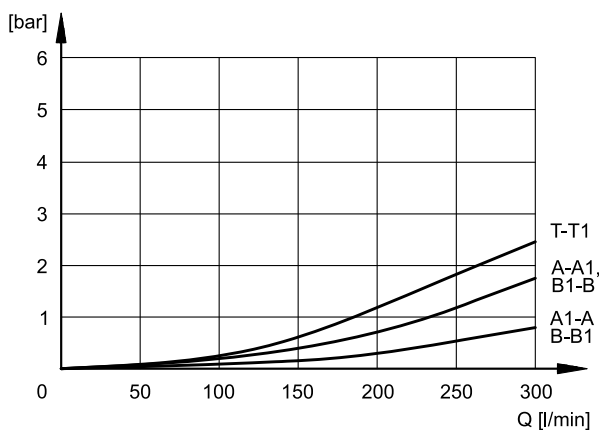
#### 3.1 - 2-way compensator PCM7-P4



#### 3.2 - 2-way compensator PCM7-P8



#### 3.3 - Pressure drops $\Delta p - Q$



## 4 - OVERALL AND MOUNTING DIMENSIONS

