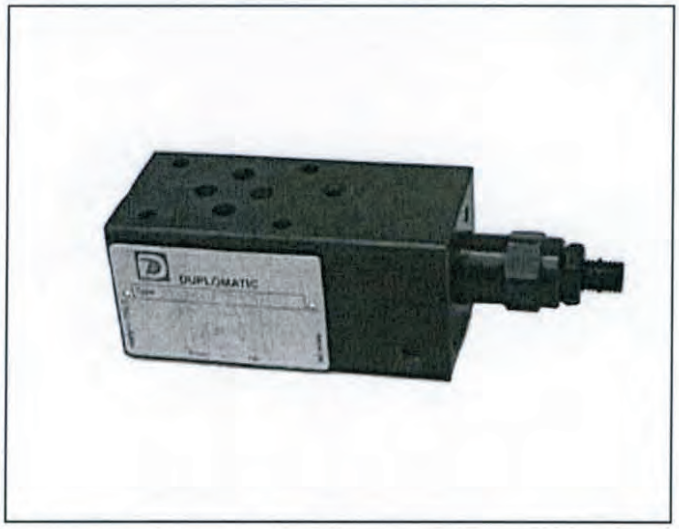
Part number:

096-10182

HYDROMA
HYDRAULICKÉ SYSTÉMY

HIDROMA SISTEMS
UKŁADY HYDRAULICZNE

HYDROMA
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



PCDM3

DIRECT OPERATED THREE-WAY PRESSURE COMPENSATOR

SERIES 10

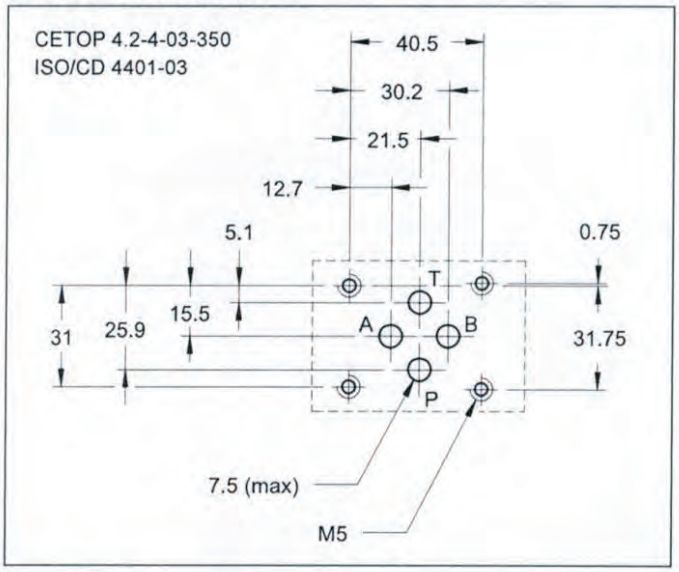
MODULAR VERSION

CETOP 03

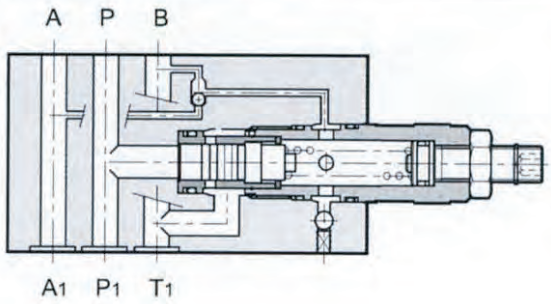
p max **350** bar

Q max **40** l/min

MOUNTING INTERFACE



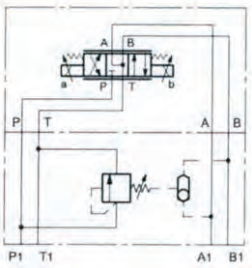
OPERATING PRINCIPLE



- The valve PCDM3 is a direct operated three-way pressure regulator, developed as a modular version with mounting surface according to the CETOP and ISO standards.
- Its aim is to keep at a constant level the pressure drop setting between the line P and alternatively the lines A and B.
- 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 pilot pressure on the lines A and B is carried out automatically via a shuttle check valve built into the compensator.
- The setting of the compensator can be varied from 5 to 40 bar via a countersunk hex adjustment screw or via an adjustment knob.

APPLICATION EXAMPLES

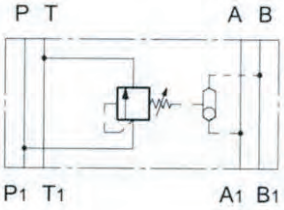
Compensator combined with a proportional valve type MD1E-S9*



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

Maximum operating pressure	bar	350
Differential pressure regulation range	bar	5 ÷ 40
Maximum flow rate	l/min	40
Ambient temperature range	°C	–10 ÷ +50
Fluid temperature range	°C	–20 ÷ +70
Fluid viscosity range	cSt	2,8 ÷ 380
Recommended viscosity	cSt	25
Degree of fluid contamination	according to NAS 1638 class 10	
Mass	kg	1.4

HYDRAULIC SYMBOLS



PCDM3
SERIES 10

1 - IDENTIFICATION CODE

P	C	D	M	3	-	P	T	2	/	10		/	

Pressure compensator

Modular version

CETOP 03 size

Configurations:
regulation on the line P and discharge on the line T
with a double piloting on the lines A and B

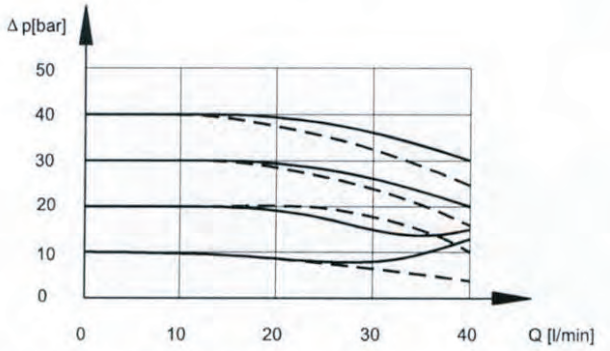
Pressure regulation range 5 ÷ 40 bar

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

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

S = adjustment screw
K1 = adjustment knob

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



The control curves of the diagram are stated according to the compensator flow rate change and to different Δp setting values between the lines P-A and P-B

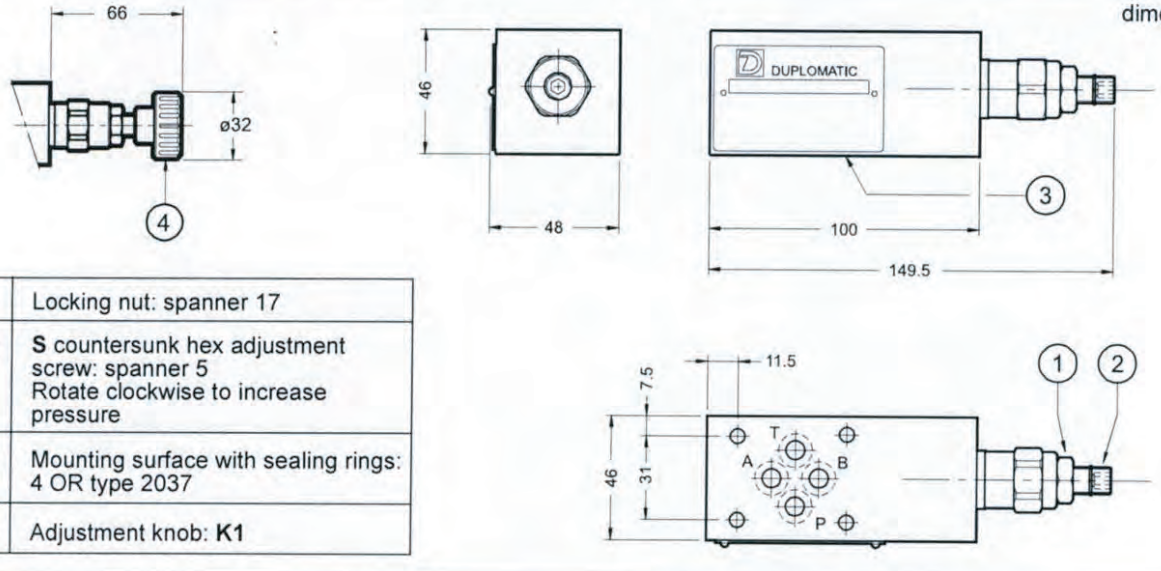
——— user pressure = 30 bar
---------- user pressure = 140 bar

3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids, with addition of suitable anti-frothing and anti-oxidizing agents.
For the use of other types (water glycol, phosphate esters and others), please consult our technical department.

4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm



1	Locking nut: spanner 17
2	**S** countersunk hex adjustment screw: spanner 5 Rotate clockwise to increase pressure
3	Mounting surface with sealing rings: 4 OR type 2037
4	Adjustment knob: **K1**