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80 ... 300 l/min

# Modular mounting one-way restrictors NB 10, 16, 20

FC - 31

315 bar

### **GENERALITIES**

Modular mounting (between plates)

Manual regulation with non-adjustable wrench.

Mounting surfaces conforming to ISO 4401.

#### PERFORMANCE DATA

#### **GENERAL**

Mounting position: unrestricted Fixing: modular

Fluid flow direction: A1->A, B1->B throttled;

A -> A1, B -> B1 free

Temperature range of ambient medium: -20°c.....+50°c

## **HYDRAULIC**

Nominal pressure : 315 bar

Maximal flow rate: NB 10: 120 I/min; NB 16: 160 I/min; NB 20: 240 I/min

Fluid:

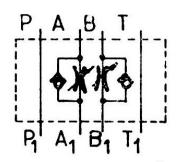
Fluid type: additived mineral oil. Viscosity range: 10 ...500 cSt

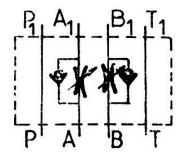
Temperature range :  $-20^{\circ}$ C.....+ $80^{\circ}$ C Filtration: < 25  $\mu$ m

# **VALVE FUNCTIONS**

Throttling on outlet (DR 1 M 16, 20)

Throttling on inlet (DR 1 M 10)





Note: For DR 1 M 10 H-0 throttling valve, the "b" symbol is derived from the "a", symbol, by rotating the unit to 180° around the x-x axis (see fig. 8)

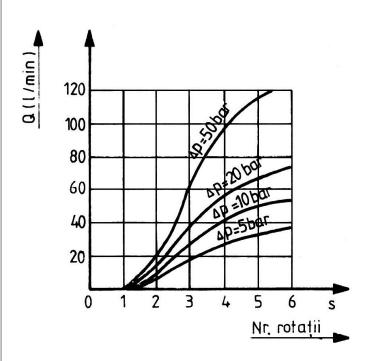
# **CHARACTERISTIC CURVES**

Flow rate vs. throttle regulating stroke, Q=f(s)

**NB 10** 

NB 16

ν == 35 cSt



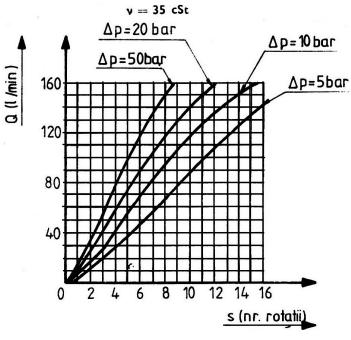


Fig. 1

Fig. 2

**NB 20** 

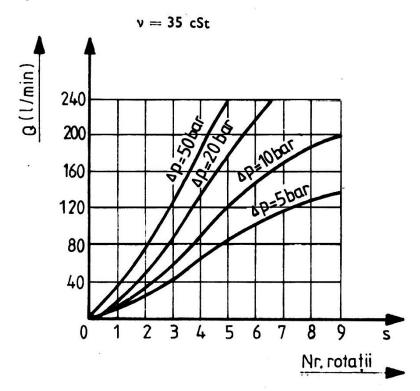
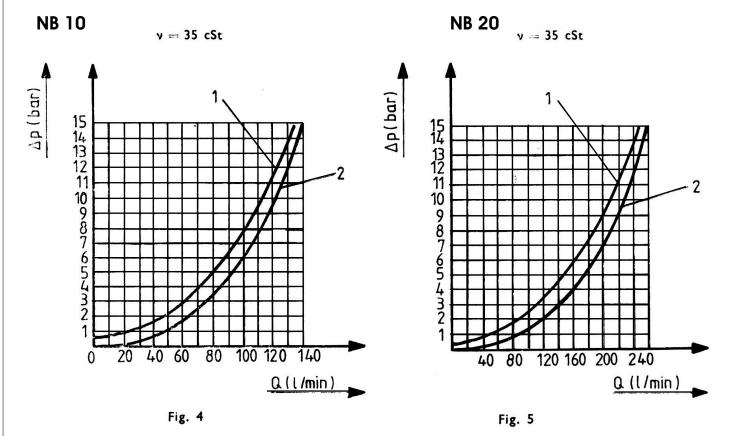


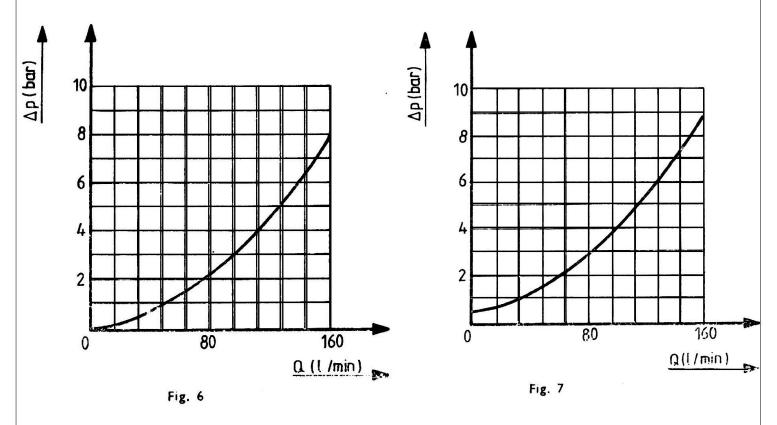
Fig. 3

Pressure drop acrossby-pass valve vs. flow rate,  $\triangle p = f(Q)$ , fro fully closed throttle valve (curve 1) and for fully open throttle valve (curve 2).



Pressure drop vs. flow rate,  $\triangle p = f(Q)$  for fully openthrottle valve (fig. 6) and fully closed throttle valve, across the by-pass valve (fig. 7)





# **DIMENSIONS**

# **NB 10**

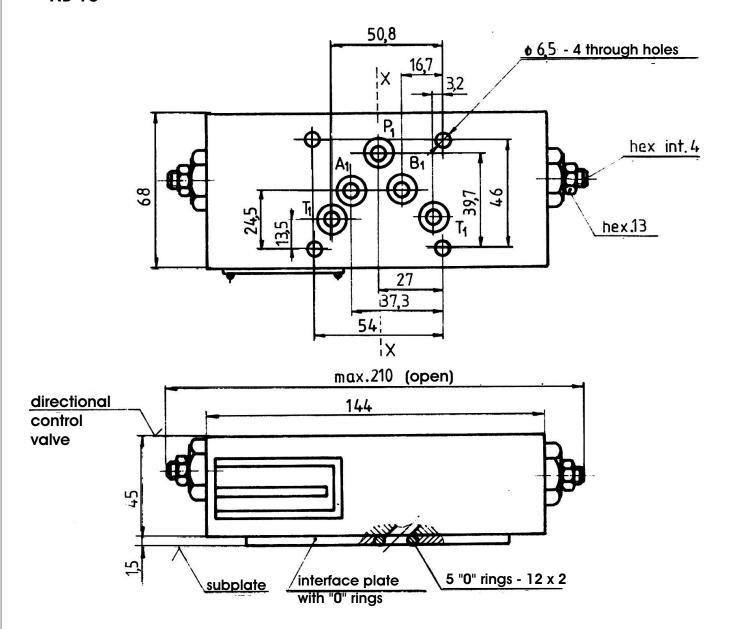
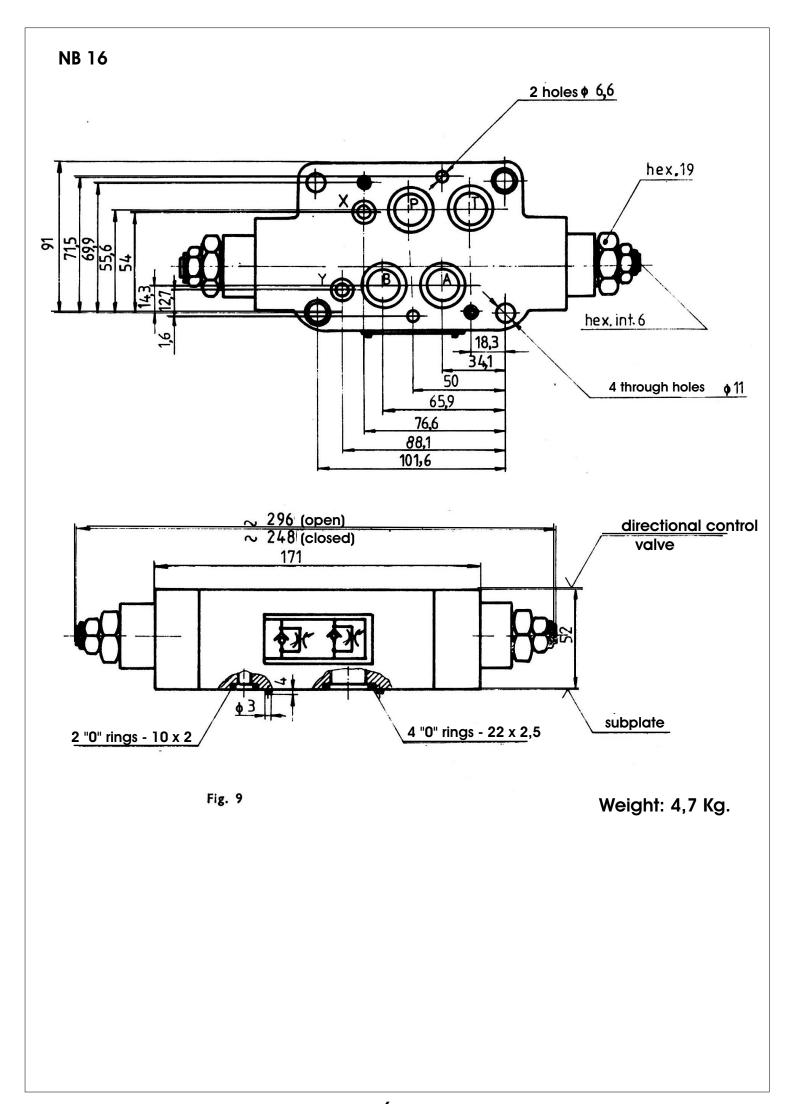
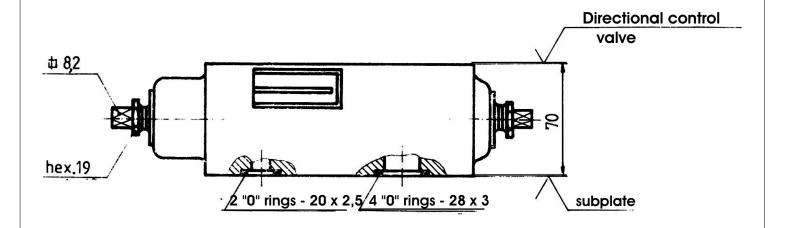
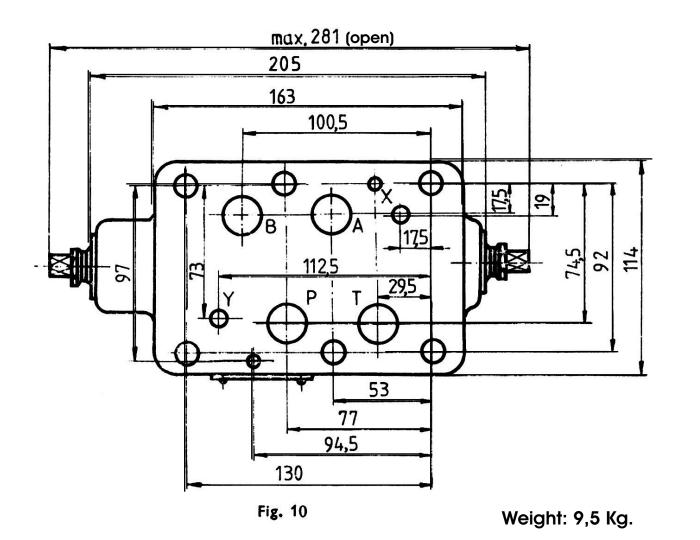


Fig. 8

Weight: 5,000 Kg.







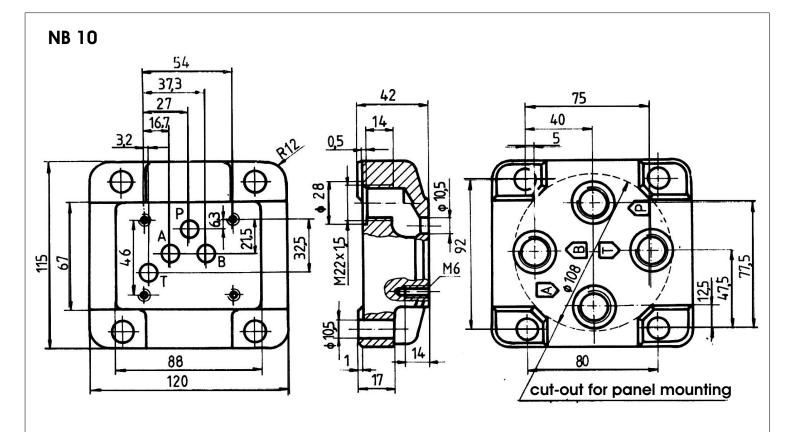


Fig. 11

Model code: PBD 10-1

- 4 fixing screws M6x80 STAS 5144-80 gr. 10.9 Tightening torque:  $1,1^{+0,3}$  daNm

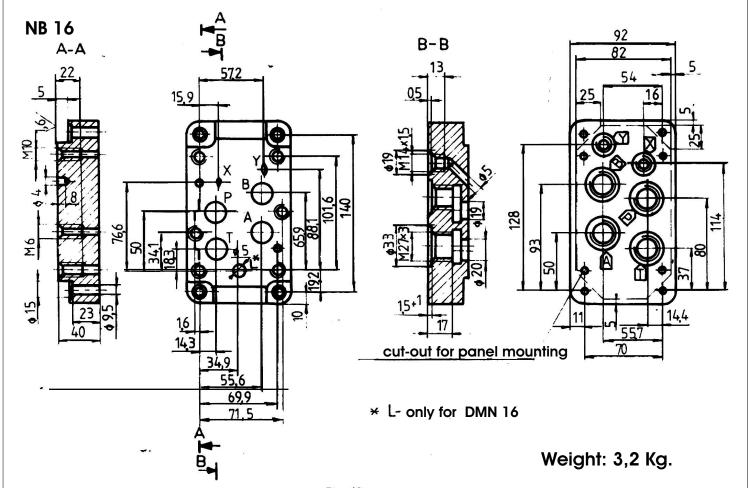


Fig. 12

MOdel code: PBD 16-1

-fixing screws M 10x100 STAS 5144-80 gr. 10.9 Tightening stroke:  $50^{+10}$  daNm -fixing screws M 6x100 STAS 5144-80 gr. 10.9 Tightening torue  $11^{+3}$  daNm

# **NB 20**

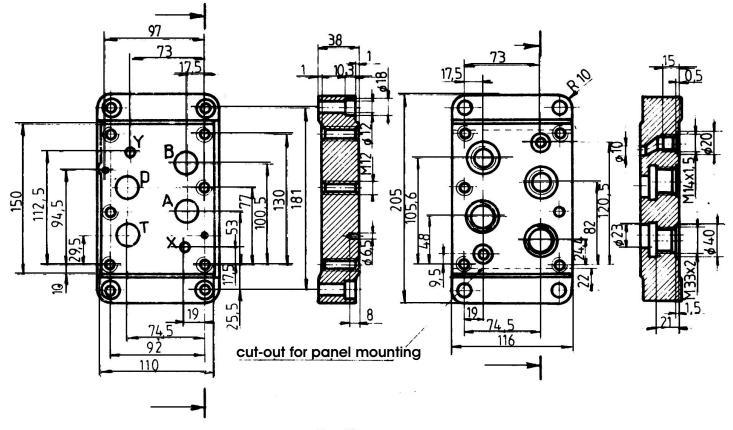


Fig. 13

Model code: PBD 20-1

Weight: 5,100 Kg.

-6 fixing screws M 12x130 SR ISO 4762:1993 gr. 10.9 Tightening torque: 9+3 daNm

# **MODEL CODE**

1 2 3 4 - 5 - 6/\*

 $^{\star}$  For climatic protected model, add at the end of the model code /T1 or T2

- 1. DR Hydraulic restrictor
- 2. 1- one-way throttling (one-way restrictor)
- 3. M Modular mounting
- 4. Nominal bore 10, 16, 20
- 5. H Manual adjusting, by non-adjustable wrench
- 6. O Series.