

HIDROSIB

S.A.



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240 l/min	Pressure control valves NG10,20,32	FC -9
315 bar		

GENERALITIES

Pilot operated pressure control valves, available with/without by-pass check valve.

Different control functions, conform to table 2.

Local manual setting by hand wheel or micrometer scaled rotary knob with/without lock device.

Subplate mounting surface conforms to -ISO 5781, size 06, 08 and 10.

PERFORMANCE DATA

GENERAL

Mounting position: unrestricted

**Flow direction: B-A for pressure reducing valves
 A-B for other valves**

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

HYDRAULIC

Nominal pressure : 315 bar

Pressure adjustment range: 3...160; 7....315 bar

Maximal flow: Ng 10 60l/min , Ng 20 ... 120l/min , Ng 32 240l/min

Fluid :

Fluid type: additived mineral oil.

Viscosity range : 10 ..500cSt

Temperature range : -25°C.....+80°C

Filtration: > 25 μm

ELECTRICAL

Type of current :	direct current (DC)	Alternating current (AC)
Voltage :	12V 24V	220V/50Hz
Voltage admissible deviation :	±10%	
Relative duty cycle : Da	100%	
Maximum switch frequency per hour :	3600	
Power input at 20 °C :		
	cut-in :	35 W
	holding :	35 W
		120VA
		40 VA

Type of connection: Plug-in connector, conforms to ISO 4400

Type of protection : IP65 ; conforms to STAS 5325 (DIN 40050)

Directional control valve response time:

shift in: 20... 60 ms

shift out: 10 ... 60ms

Table 2

Code	Symbol	Designation	NG		
04		Relief valve	●	●	●
04U		Relief valve with integral check	●	●	●
05		Unloading valve	●	●	●
06		Sequence valve	●	●	●
06U		Sequence valve with integral check	●	●	●
06 ED		Solenoid operated sequence valve, solenoid energized to close	●	●	●
06 EI		Solenoid operated sequence valve, solenoid energized to open	●	●	●
07		Remotely operated sequence valve	●	●	●
07 U		Remotely operated sequence valve with integral check	●	●	●
16		Pressure reducing valve	●	●	●
16 U		Pressure reducing valve with integral check	●	●	●

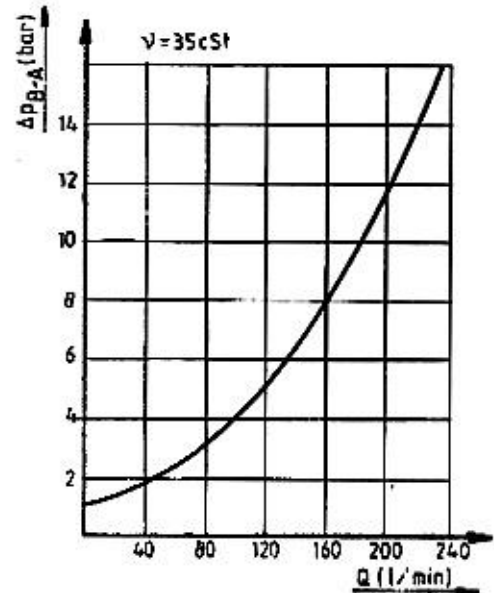
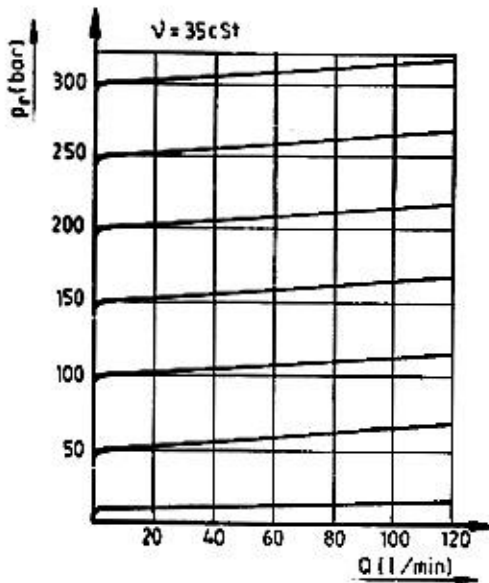
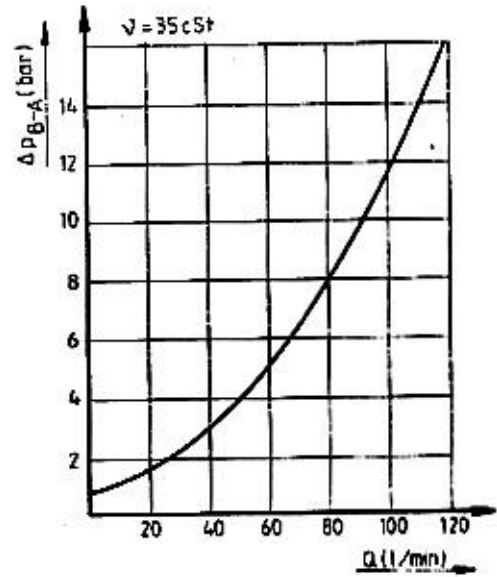
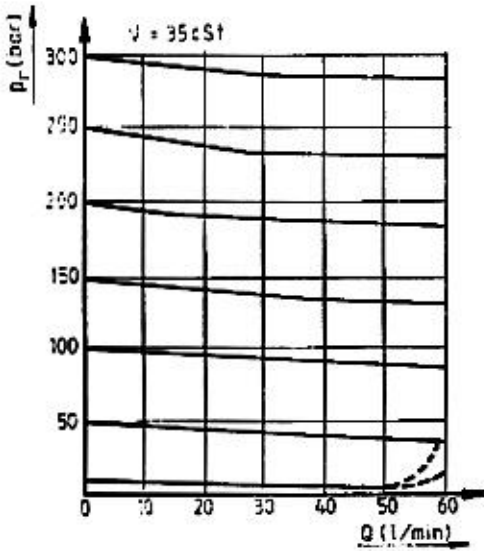
CHARACTERISTIC CURVES

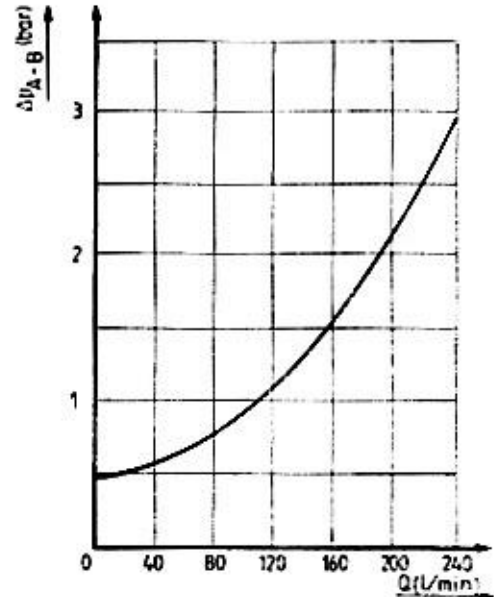
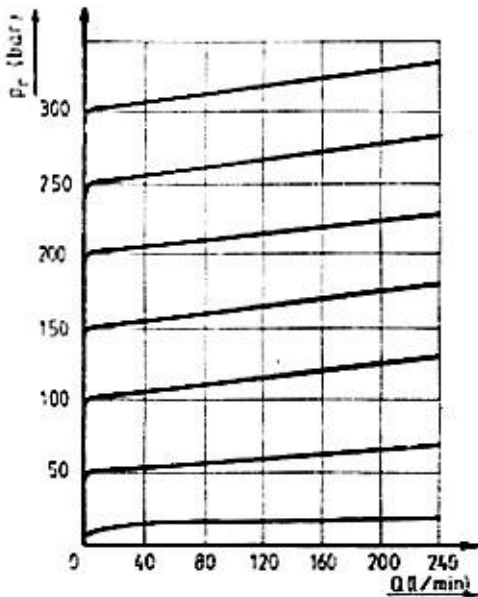
Pressure relief and sequence valves

1.1 Pressure/flow characteristic, $P_r = f(Q)$

1.2 Pressure drop through by-pass valve $\Delta P_{B-A} = f(Q)$

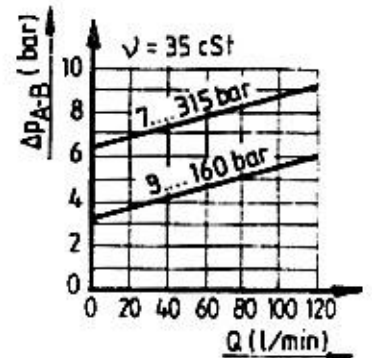
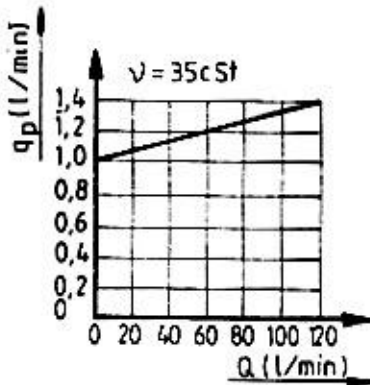
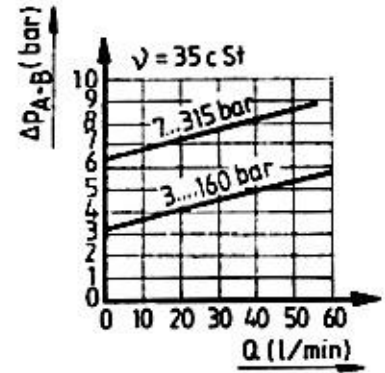
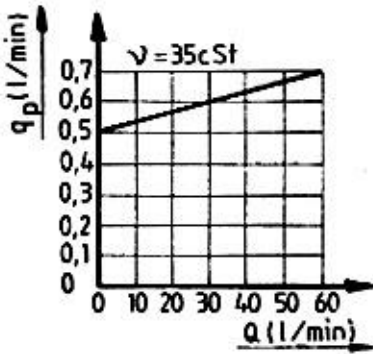
$$\Delta P_{B-A} = f(Q)$$

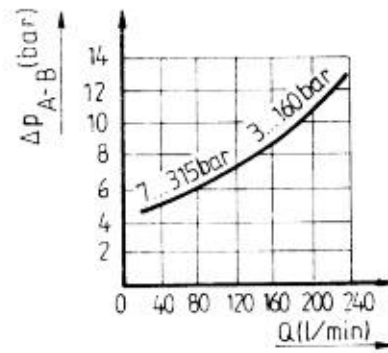
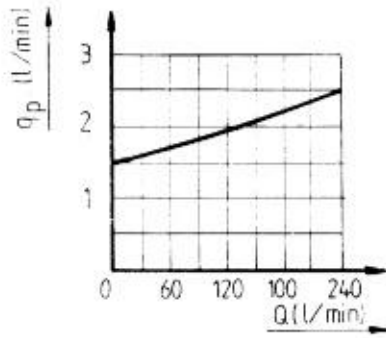




1.3 Pilot flow vs. total flow, $q_p = f(Q)$

1.4 Pressure drop vs. flow, $\Delta p_{a-b} = f(Q)$, over 06ED and 06EI valves, on open position of directional control valve

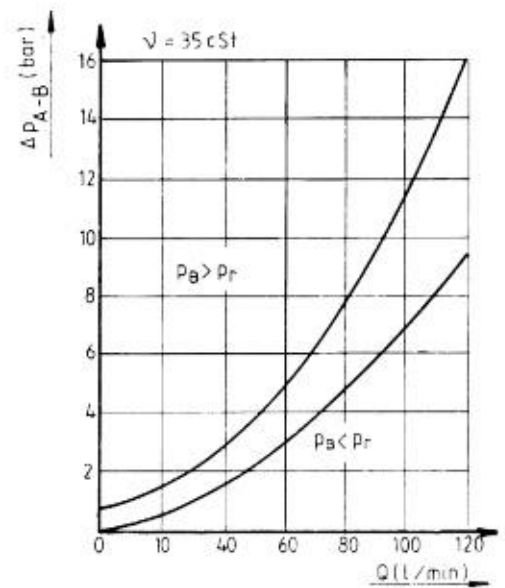
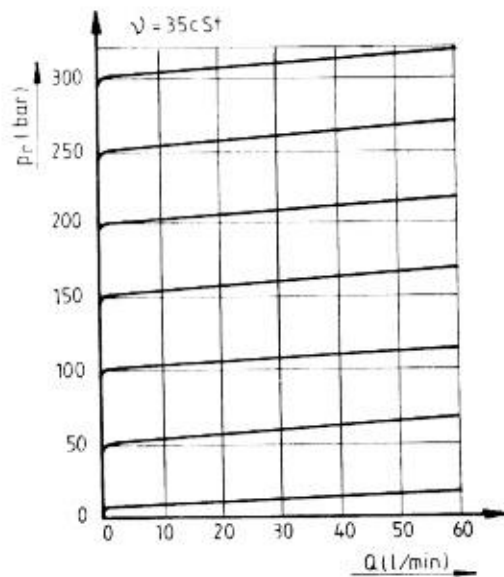


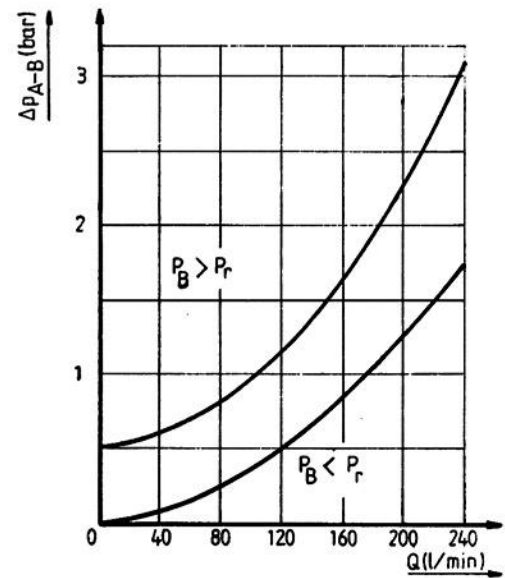
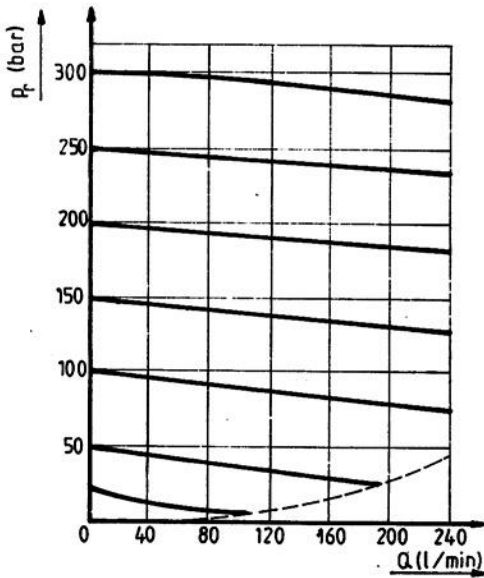
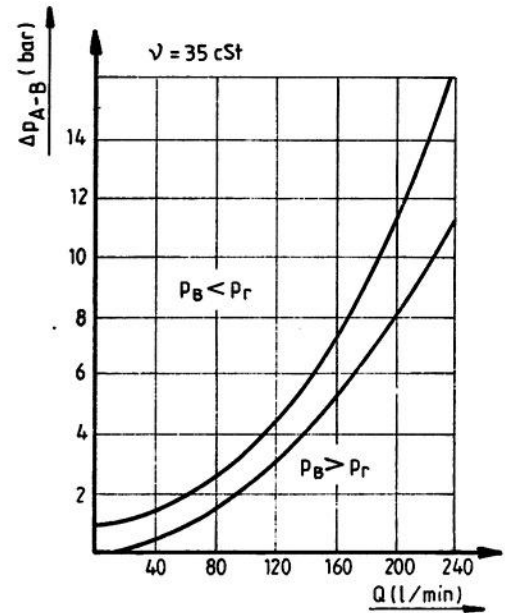
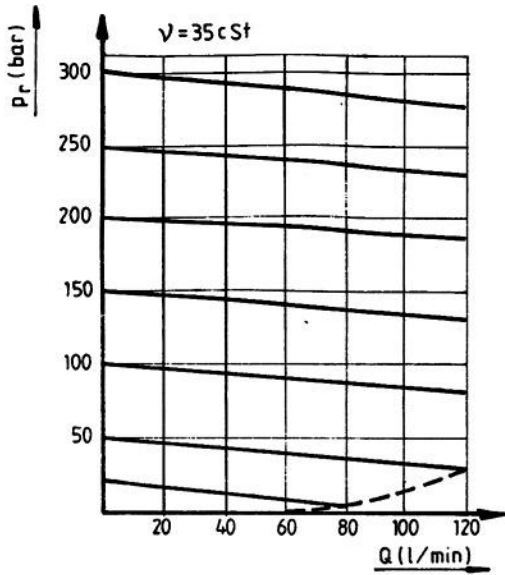


PRESSURE REDUCING VALVES

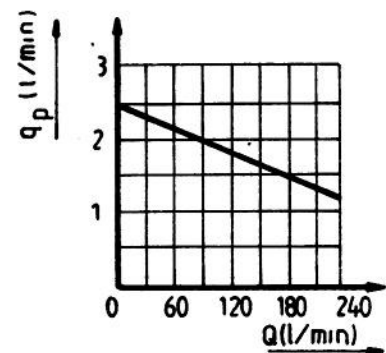
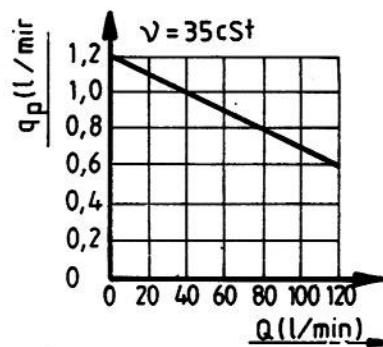
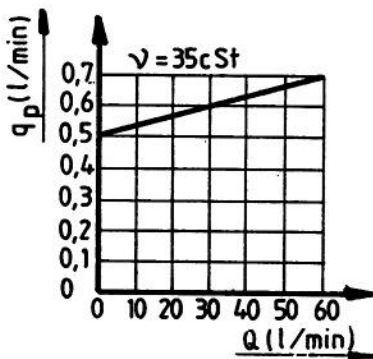
2.1 Pressure/flow characteristic, $P_r = f(Q)$

2.2 Pressure drop through by-pass valve, $\Delta p_{A-B} = f(Q)$





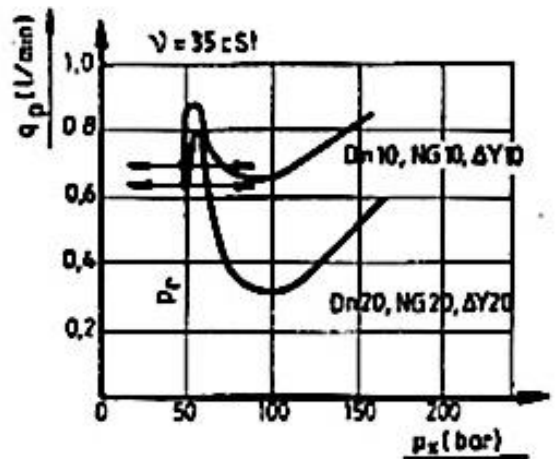
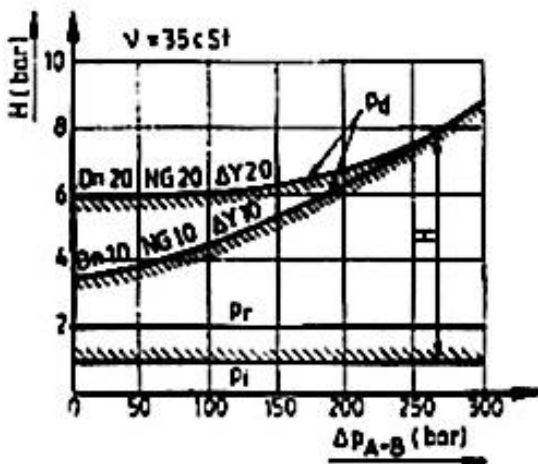
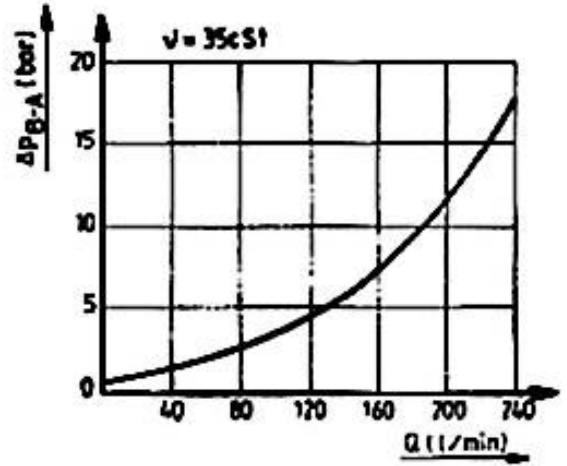
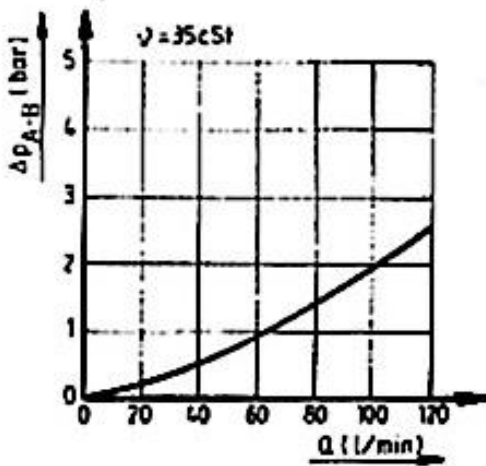
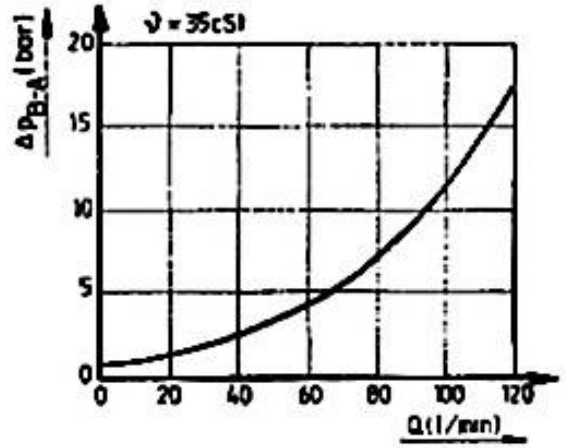
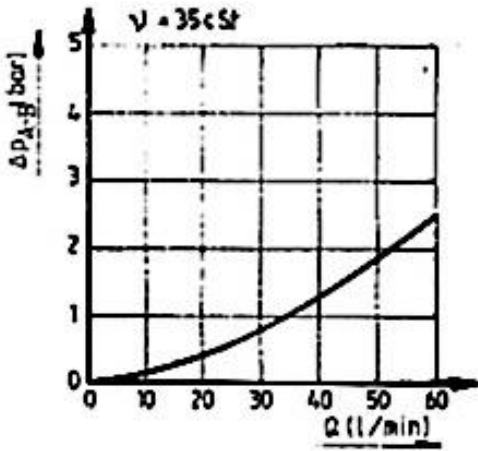
2.3 Pilot flow vs. total flow, $q_p = (fQ)$



3. UNLOADING AND SEQUENCE REMOTELY OPERATED VALVES

3.1 Pressure drop vs. flow, $\Delta p_{A-B} = f(Q)$ at open position (fig. 22, 23)

3.2 Pressure drop through by-pass valve, $\Delta p_{B-a} = F(Q)$ (fig. 24, 25)



DIMENSIONS

NG 10 Pressure valves
Functions 04 ,05, 06, 07 si 16

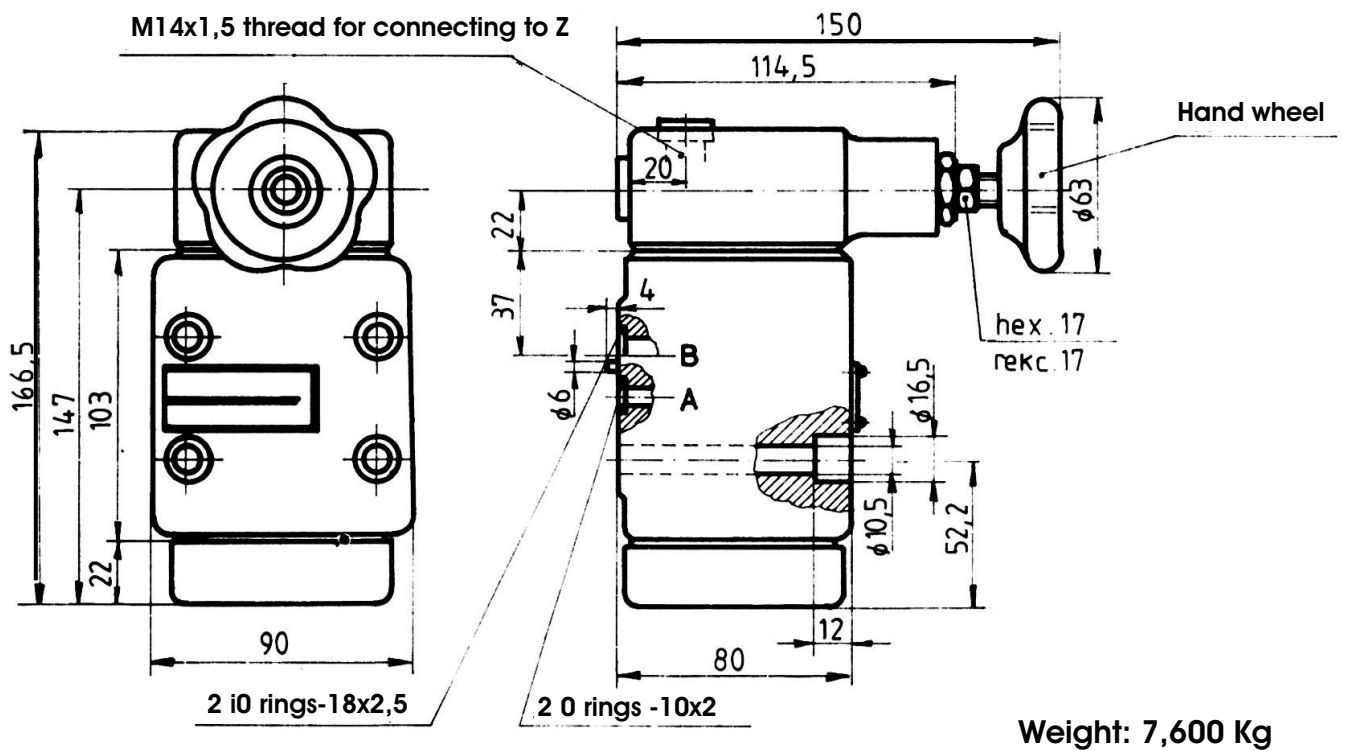


Fig. 28

Functions 04U , 06U ,07U si 16 U

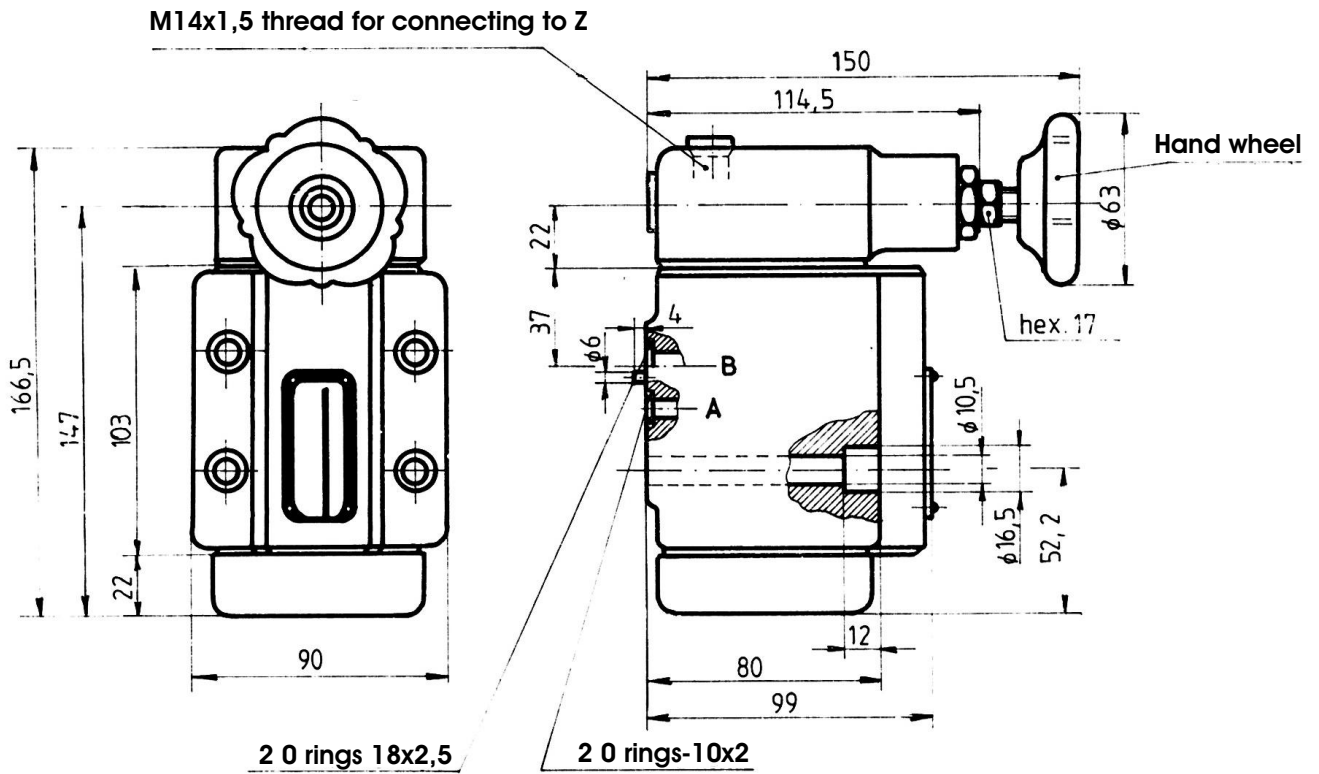


Fig. 29

Weight : 8.000 kg

Functions 06 ED si 06 EL

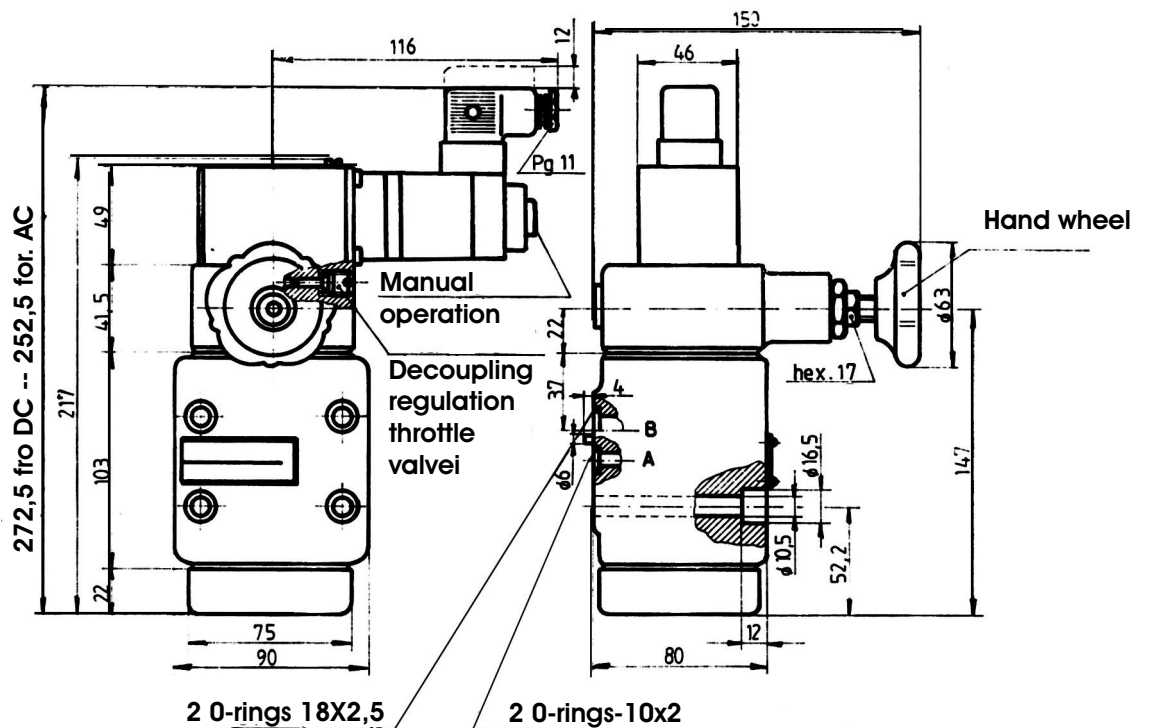


Fig. 30

Weight 9300 kg

NG 20 Pressure valves
Functions 04, 05, 06, 07 si 16

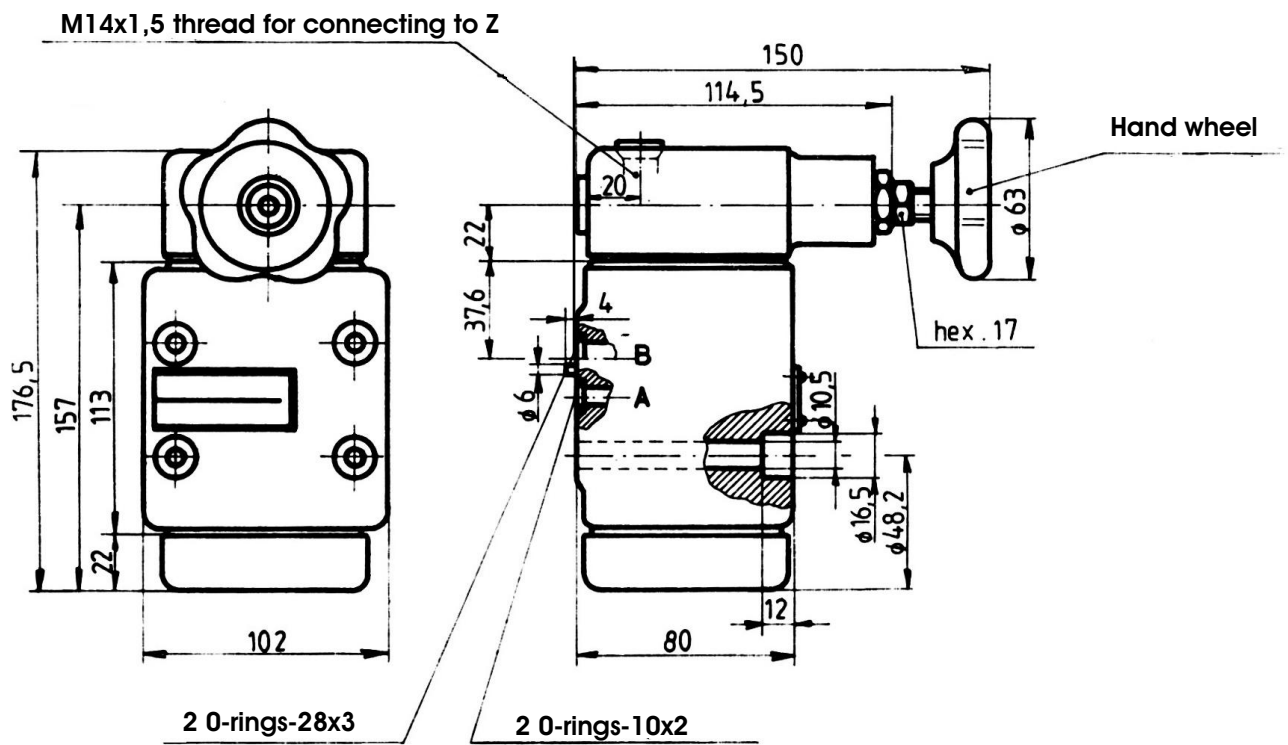


Fig. 31

Weight 8500kg

Functions 04U, 06U, 07U SI 16U

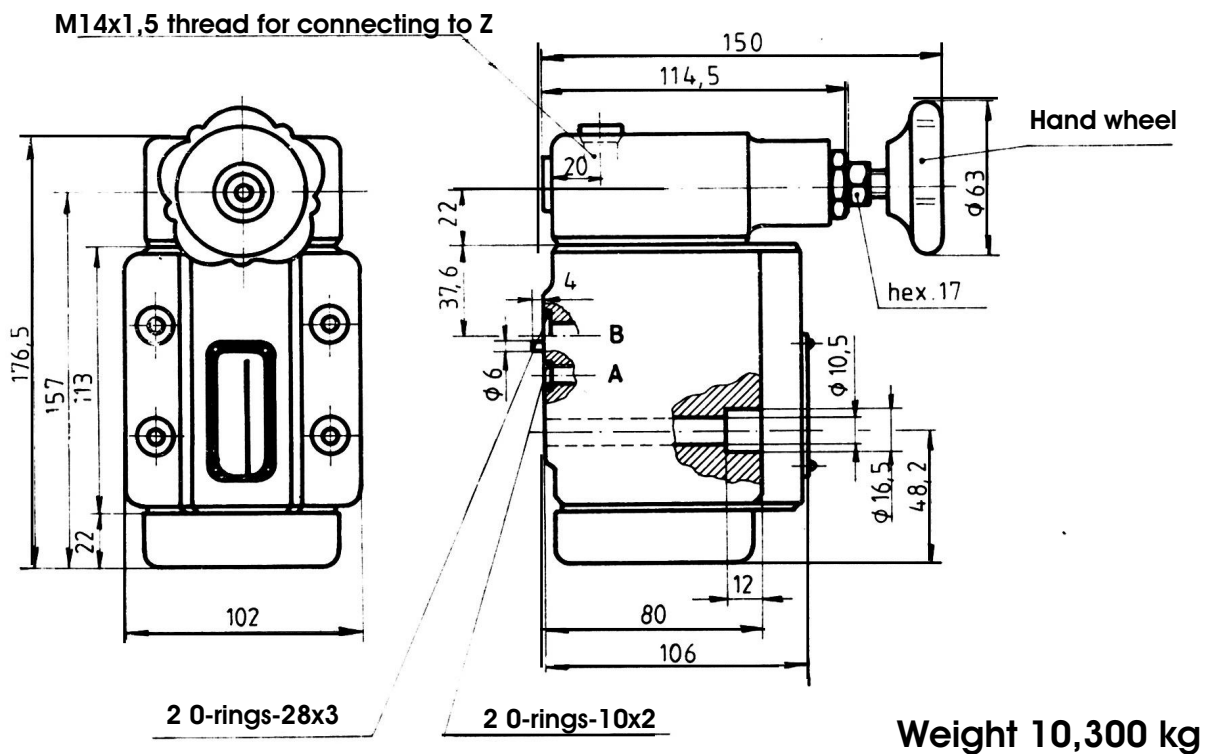
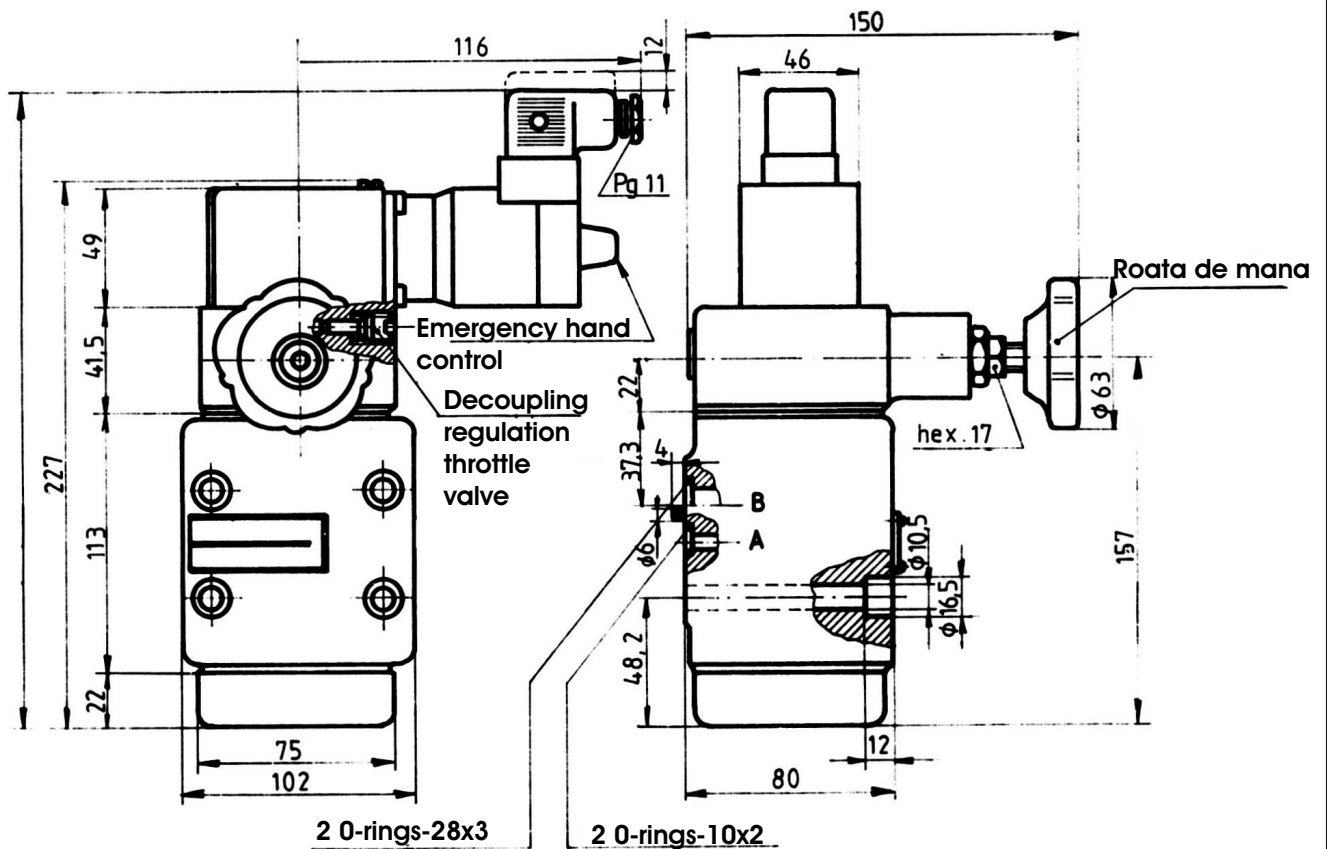


Fig. 32

Weight 10,300 kg

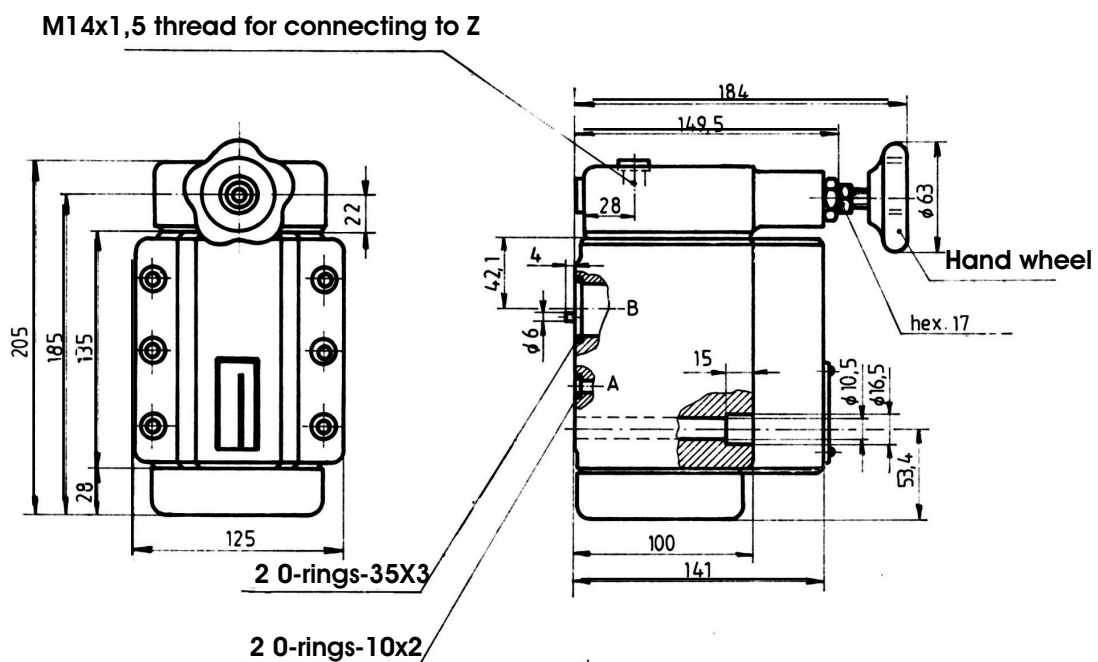
Functions 06 ED si 06 EL



Weight 10,300 kg

Fig. 33

NG 32 Pressure control valves
Functions 04 ,04U, 06, 16 si 16 U



Weight: 17,400kg

Fig. 34

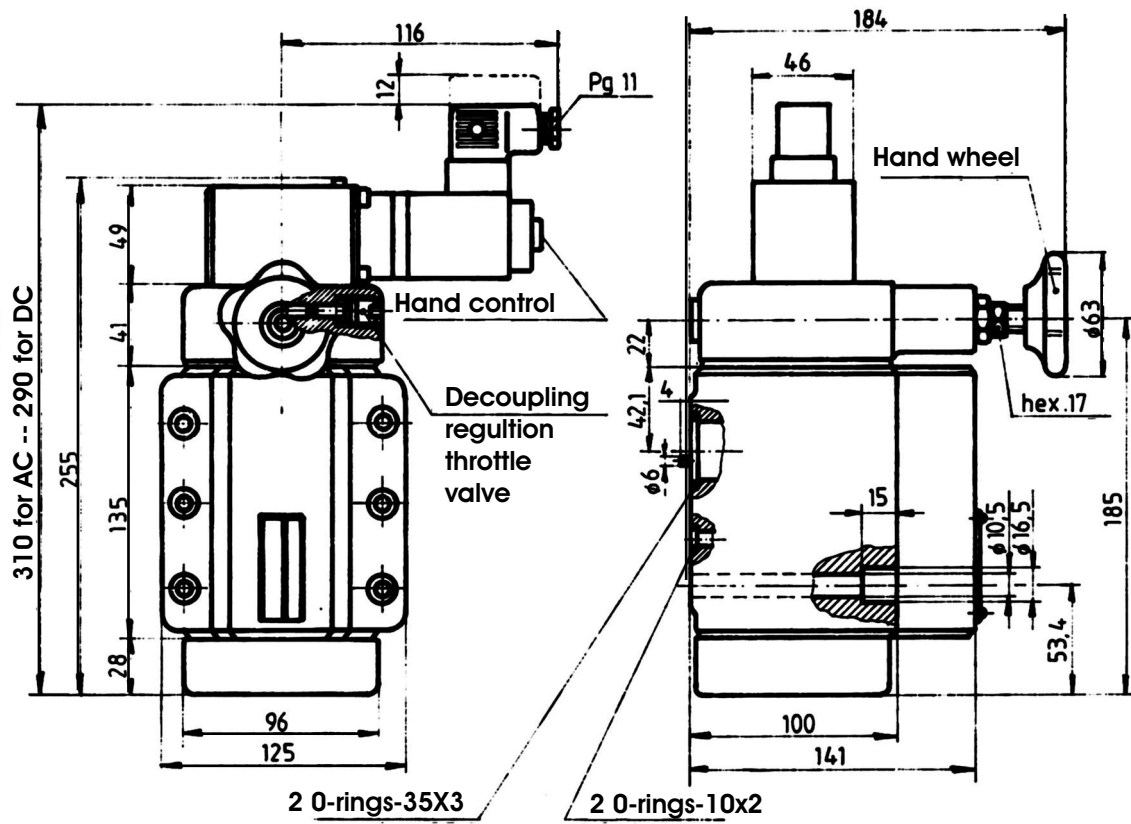


Fig. 35

Weight: 19,400kg

NG 32 Pressure valves

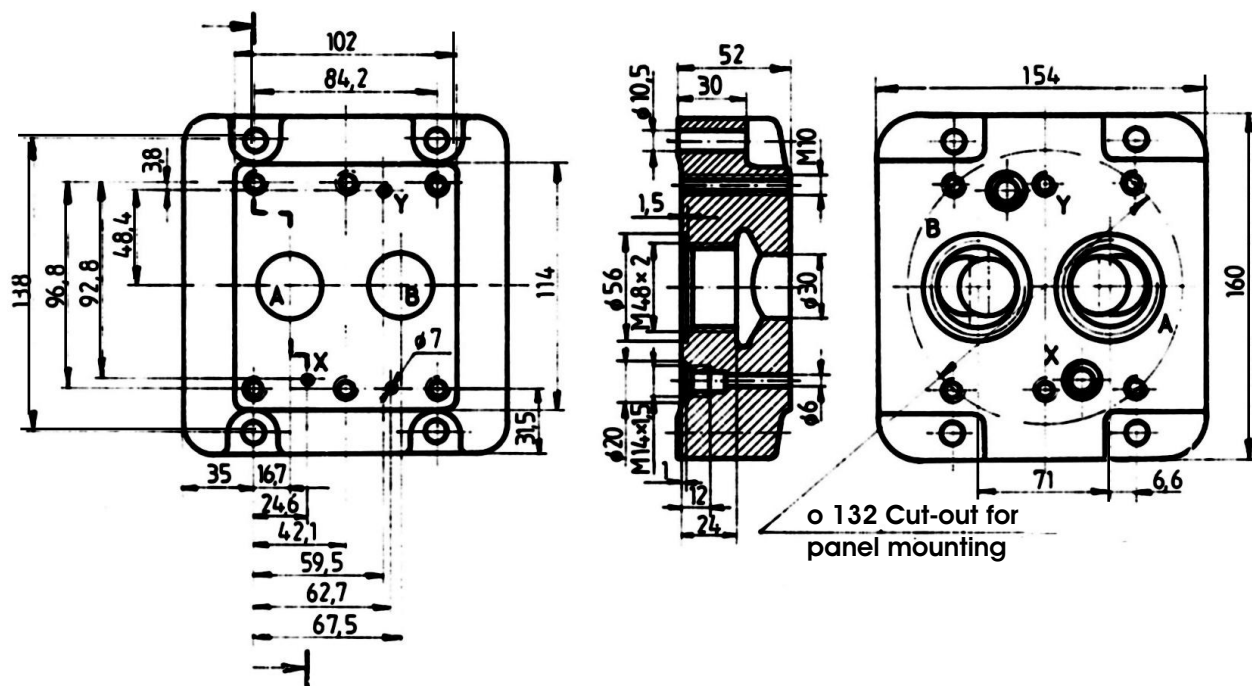


Fig. 38

NG	Model code	Fixing screws	Tightening torque (daNm)	Weight
10	pbs 10-1	M10X80 SR ISO 4762:1993	5+1,3	1300
20	pbs20-1	M10X80 SR ISO 4762:1993	5+1,3	3400
32	PBS32-1	M10x800 SR ISO 4762:1993	5+1,3	5,000

Screws supplied with valve.

MODEL CODE

1234-5 67-8*/9*-10

*Only for functions 06 ED si 06 EI

**Preferred

1. S - Pressure control valve
 2. P - Pilot control
 3. P - Face mounting
 4. Nominal Bore
 5. Function conforming to Table 2.
 6. Adjusting range
 - 1-7315 bar
 - 2-3160 bar
 7. Adjusting device:
 - M - hand wheel;
 - G - micrometer scaled rotary knob, without lock
 - C - micrometer scaled rotary knob, with lock
- 8/9 Solenoid voltage
012/00-12V
024/00**-24V
220/50 -220 V/50 Hz
10 O - Series.