

BEIJING HUADE HYDRAULIC INDUSTRIAL GROUP CO.,LTD.	Meter-in pressure compensator, direct operated, Type ZDC			RC29223/9.2006
	Size 10.16.32	up to 35 MPa	up to 325 L/min	Replaces: RC29223/08.2000

Features:

- Load compensation in port P to A or P to B via a built-in shuttle valve
- 2-way version "P"
- 3-way version "P T" (NS10-25)
- Flow control when working together with a proportional directional valve



Function, section

The ZDC... valves are direct operated meter-in pressure compensators of 2 or 3-way design.

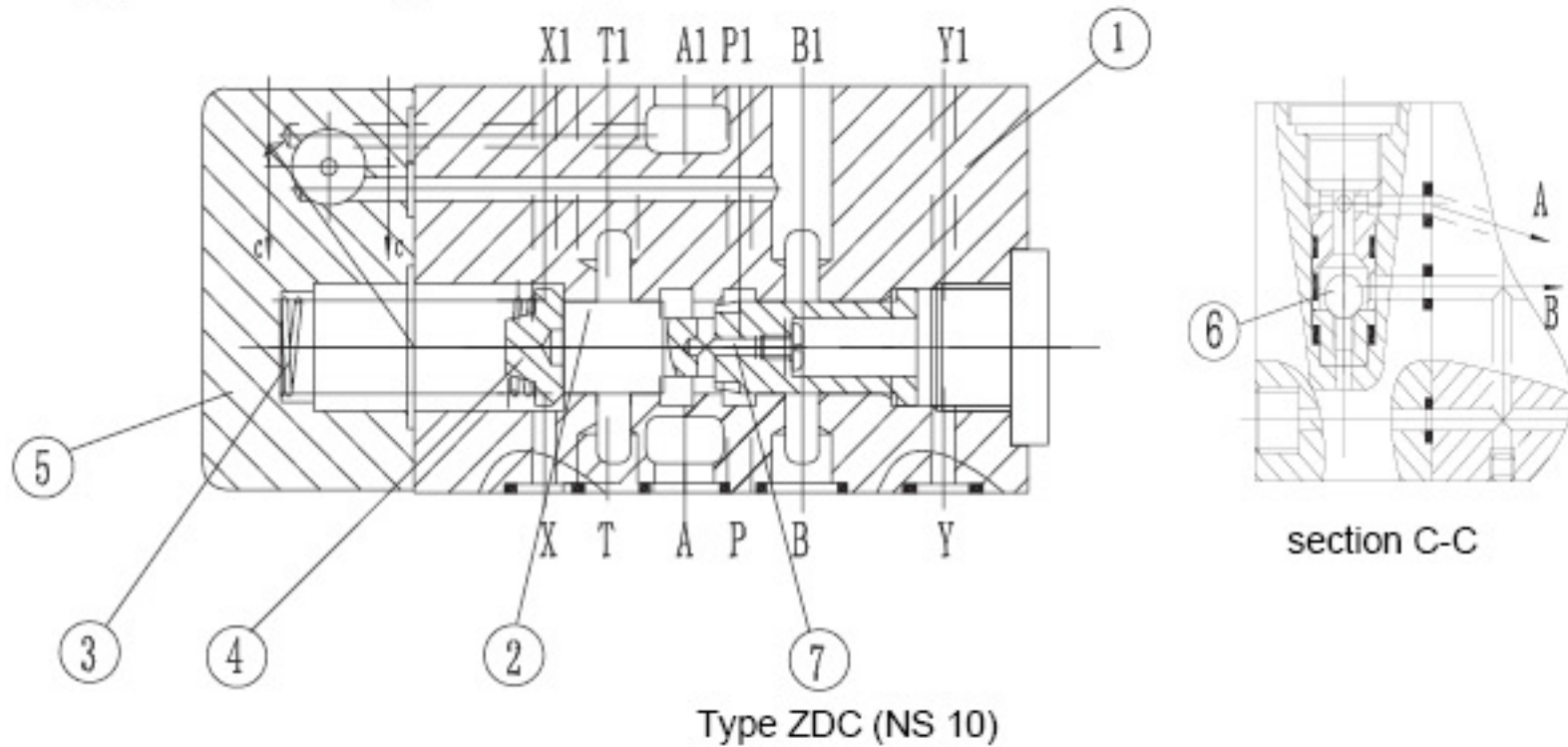
They are used for the load compensation as a meter-in pressure compensator in channel P.

These valves basically consist of the housing (1), the control spool (2), compression spring (3) with spring washer (4) and the cover (5) with integrated shuttle

valve (6).

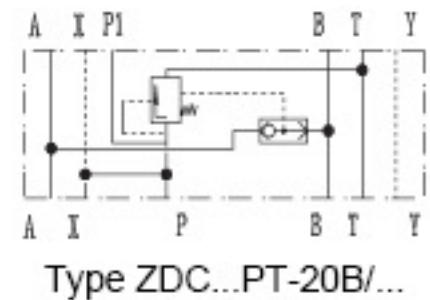
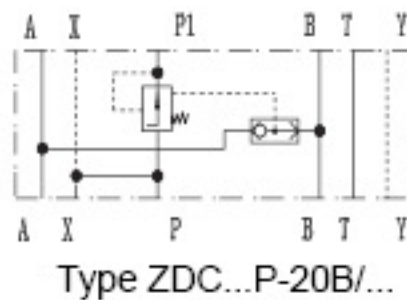
The compression spring (3) holds the control spool (2) in the open position from P1 to P, when the pressure differential P1 to A1 or P1 to B1 is less than 1.0 MPa

If the pressure differential exceeds 1.0 MPa, then the control spool (2) is moved to the left until the pressure differential is restored.

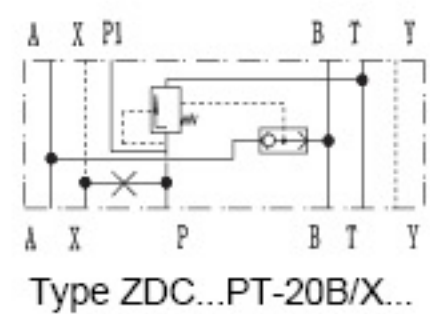
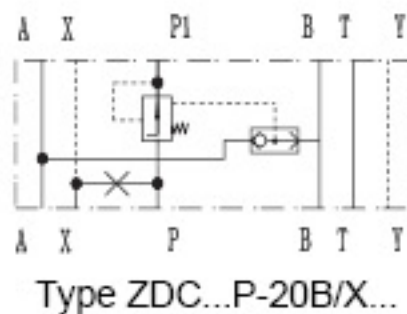


Symbols

Pilot oil supply
"internal"

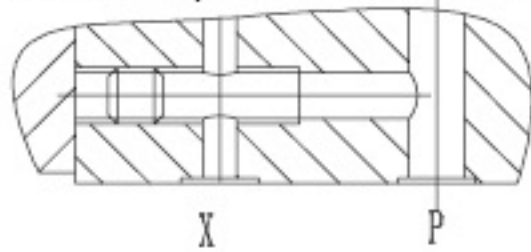


Pilot oil supply "external", port X
is closed on the valve side(only
NS10)



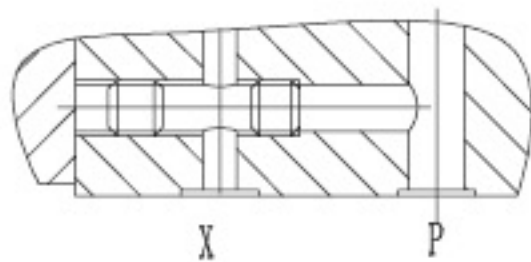
Pilot oil supply

For internal pilot oil supply for the proportional valve and the meter-in compensator, the oil is taken from the throttling point in the compensator. Port X is then plugged.

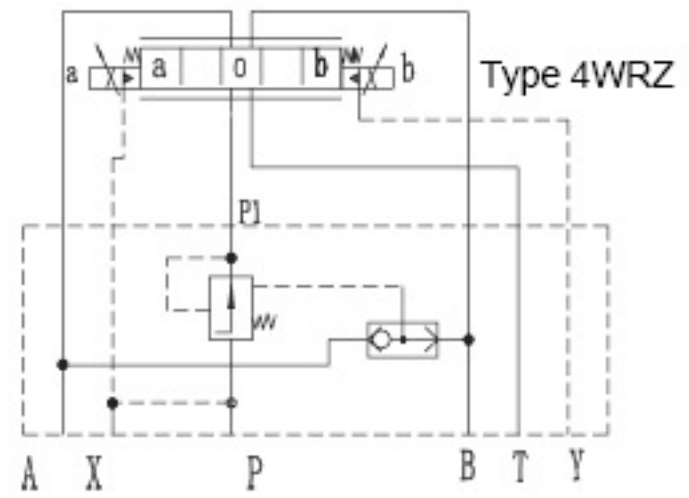


Pilot oil supply internal

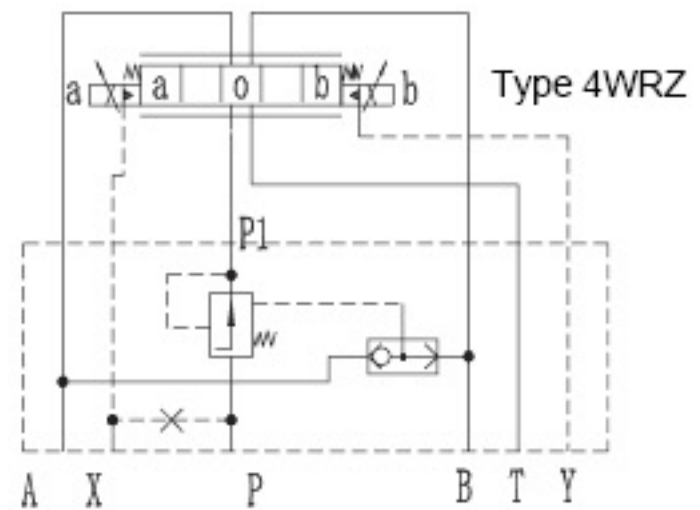
With external pilot oil supply, the connection in port p is closed. The pilot oil is supplied by a separate control circuit.



Pilot oil supply external



Type ZDC . . . P . . . 20B/ . . .



Type ZDC . . . P . . . 20B/X . . .

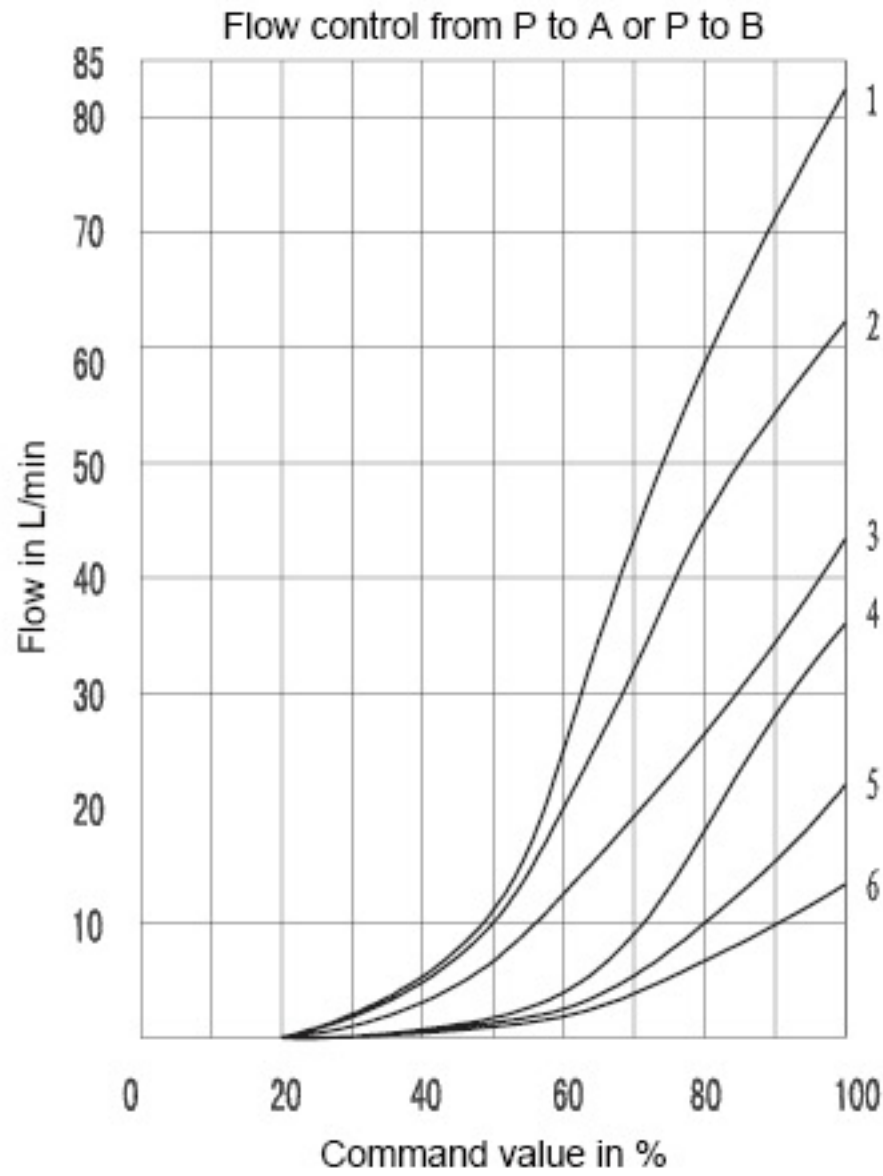
Ordering code

ZDC									*
NS 10 = 10	NS 16 = 16	NS 25 = 25	Further details in clear text						
2-way version (pressure reduction function) =P 3-way version (pressure limitation function) =PT			M= Mineral oils V= phosphate ester						
Series 20 to 29 (20 to 29 unchanged installation and connection dimension)			=20 No code= Without special protection J= Sea water resistant						
Technology of Beijing Huade Hydraulic			= B						
No code=			Pilot oil feed "internal"						
X=			Pilot oil feed "external"						

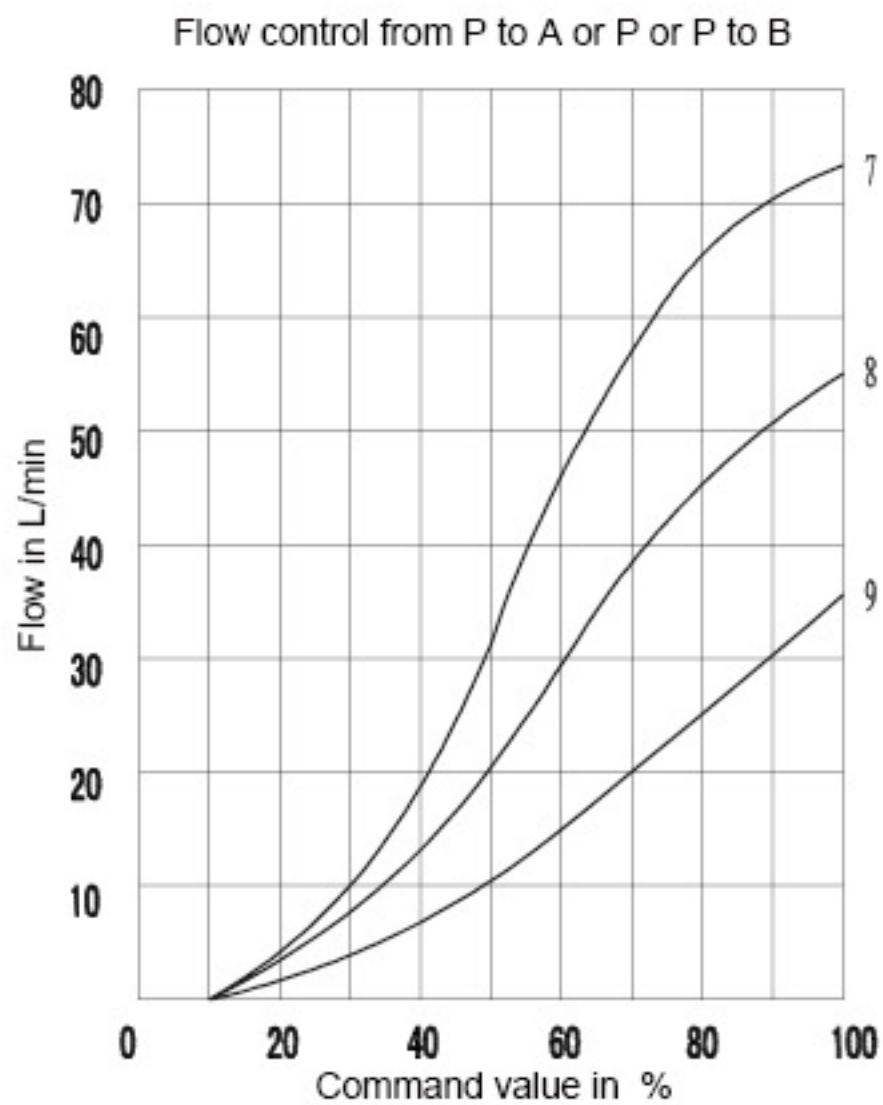
size		10	16	25	others is the same as the valves having same dimension
flow (L/min)		85	150	325	
weight (Kg)		3	3.5	8.9	
Operating pressure (MPa) P _{max}	A, B, P	35			
	T	25			
	X	3 to 10			
	Y	up to 3, (Only when be used with the port operated proportional direction valve, otherwise 15)			
Degree of containsnation (μm)		≤ 20 (recommend 10)			

Characteristic curves (measured at $V = 41 \text{ mm}^2/\text{s}$ and $t = 50^\circ\text{C}$)

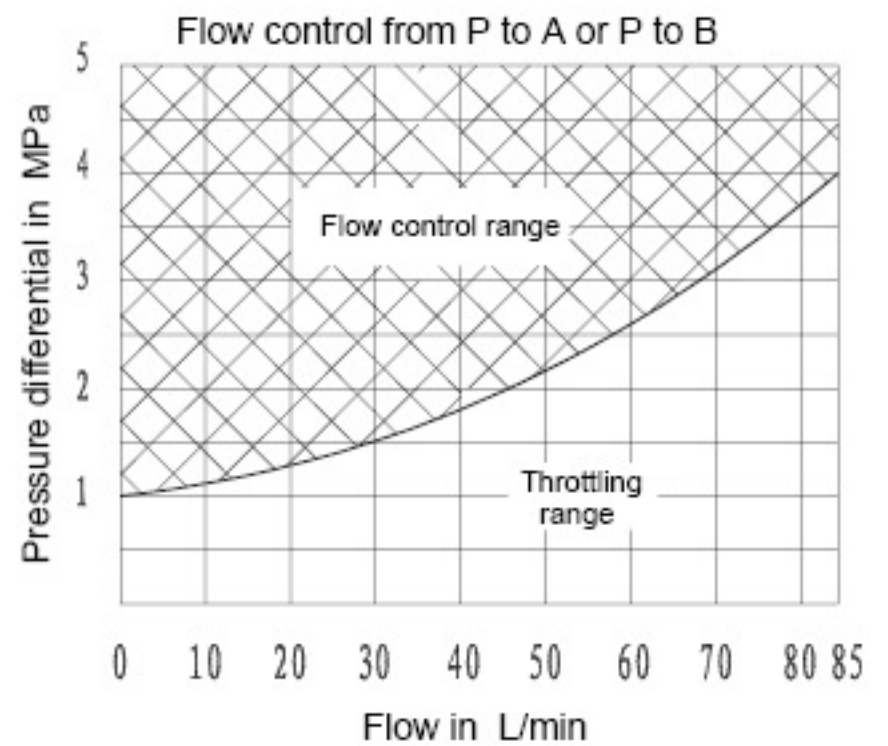
ZDC10:



- 1= With valve type 4WRZ10...50-30B/6A.../...
- 2= With valve type 4WRZ10...50-30B/6A.../...
- 3= With valve type 4WRZ10...25-30B/6A.../...
- 4= With valve type 4WRA10...40-10B/...Z4/...
- 5= With valve type 4WRA10...20-10B/...Z4/...
- 6= With valve type 4WRA10...10-10B/...Z4/...

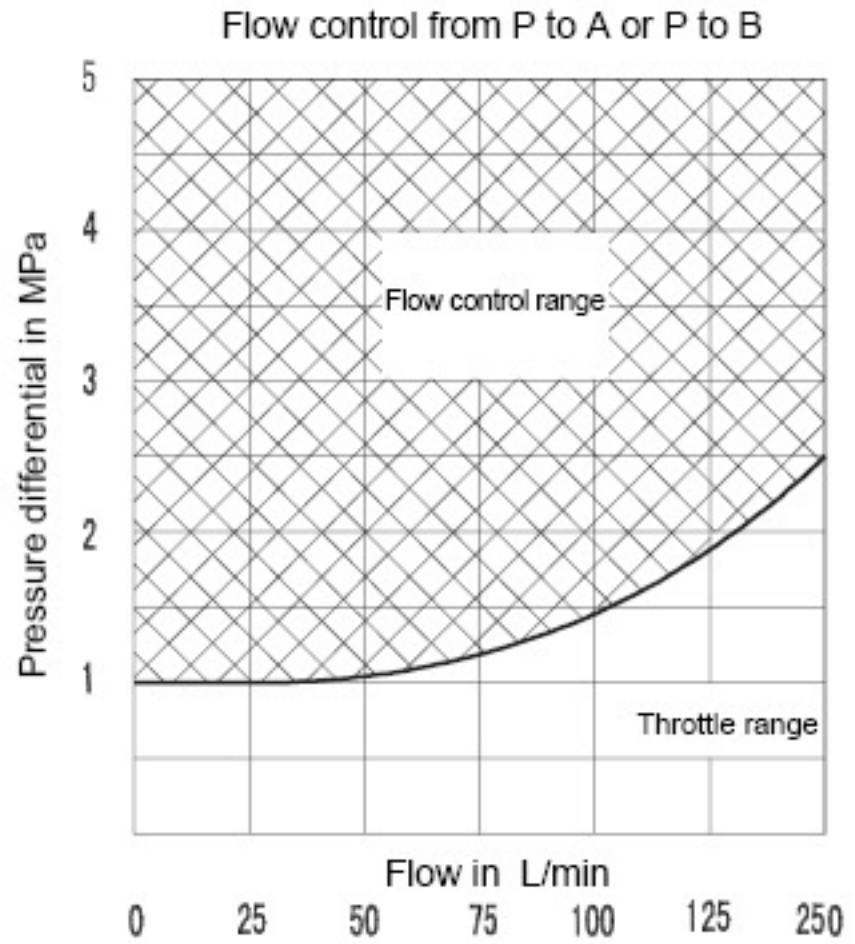
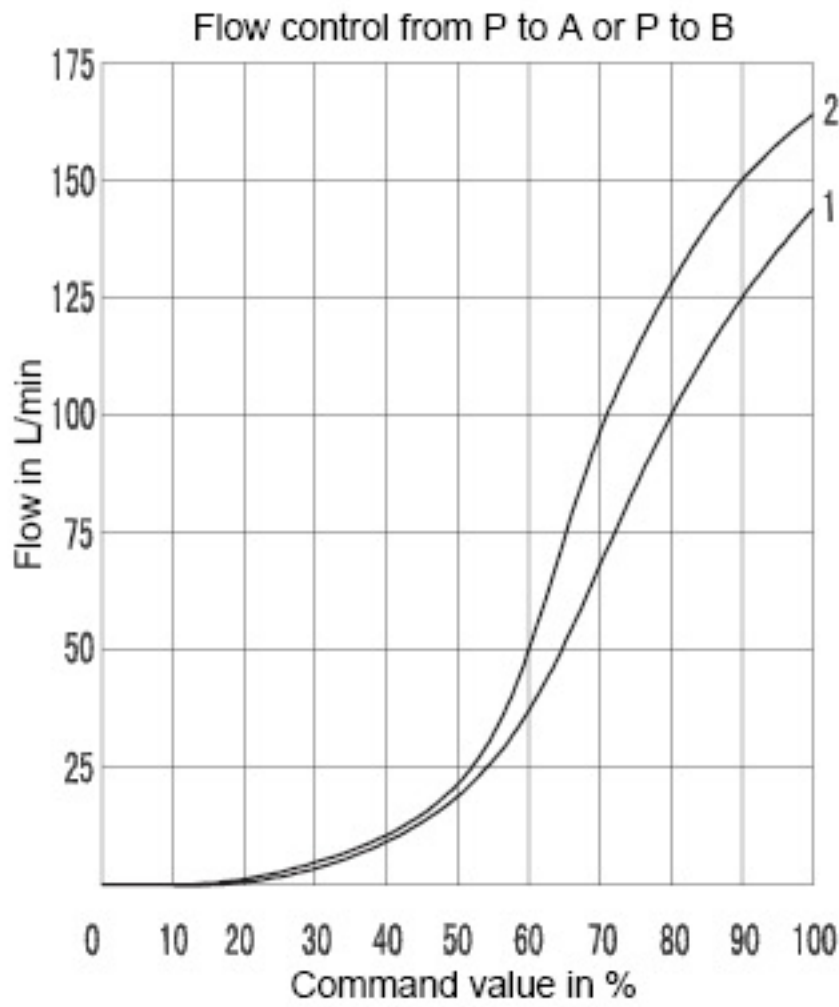


- 7= With valve type 4WRE10...64-10B/24Z4/...
- 8= With valve type 4WRE10...32-10B/24Z4/...
- 9= With valve type 4WRA10...16-10B/24Z4/...

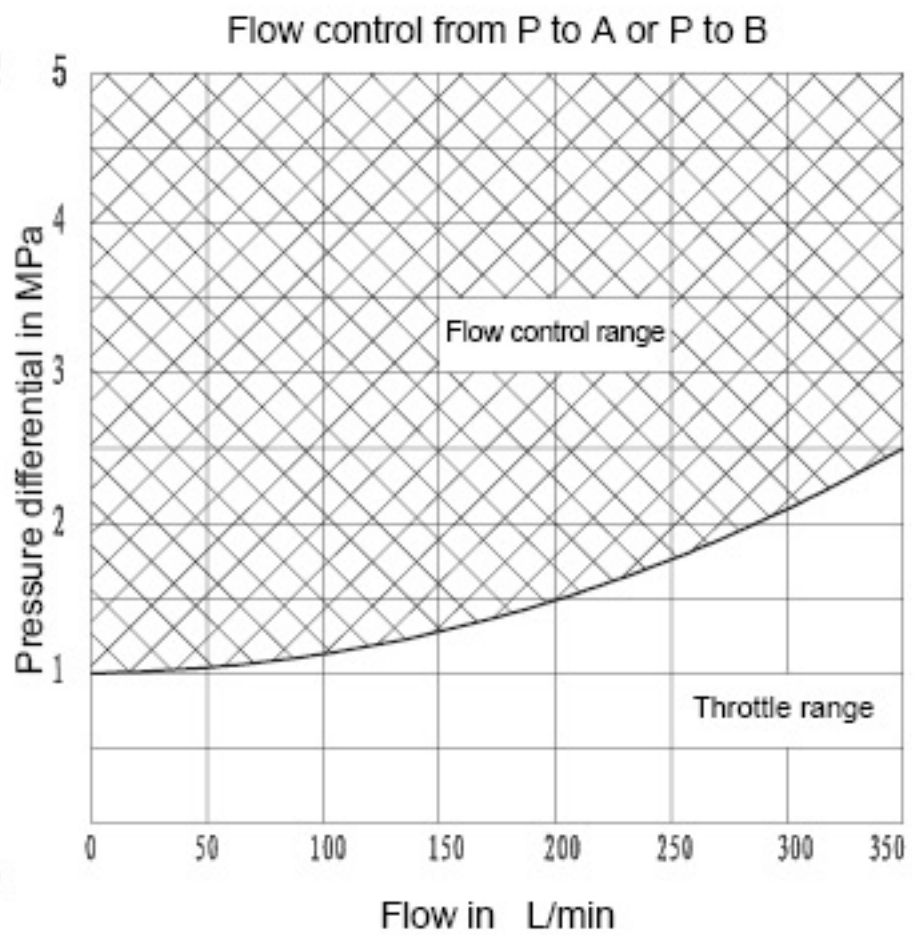
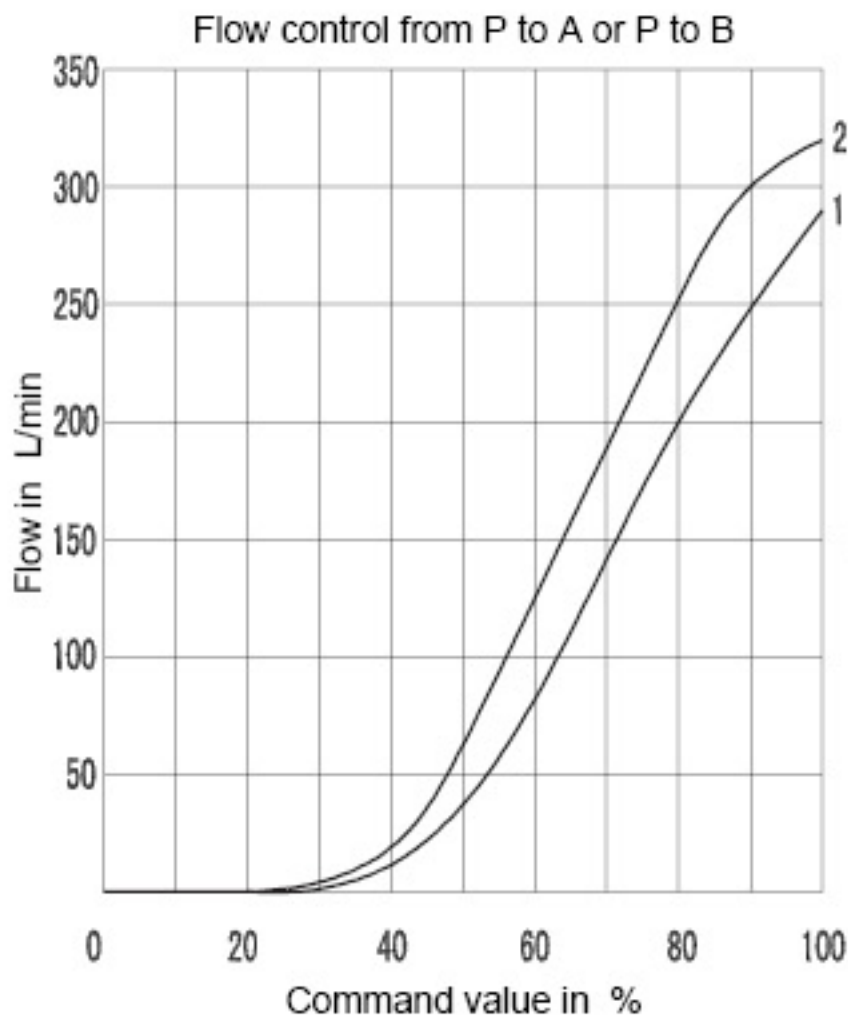


Characteristic curves (measured at $V = 41 \text{ mm}^2/\text{s}$ and $t = 50^\circ\text{C}$)

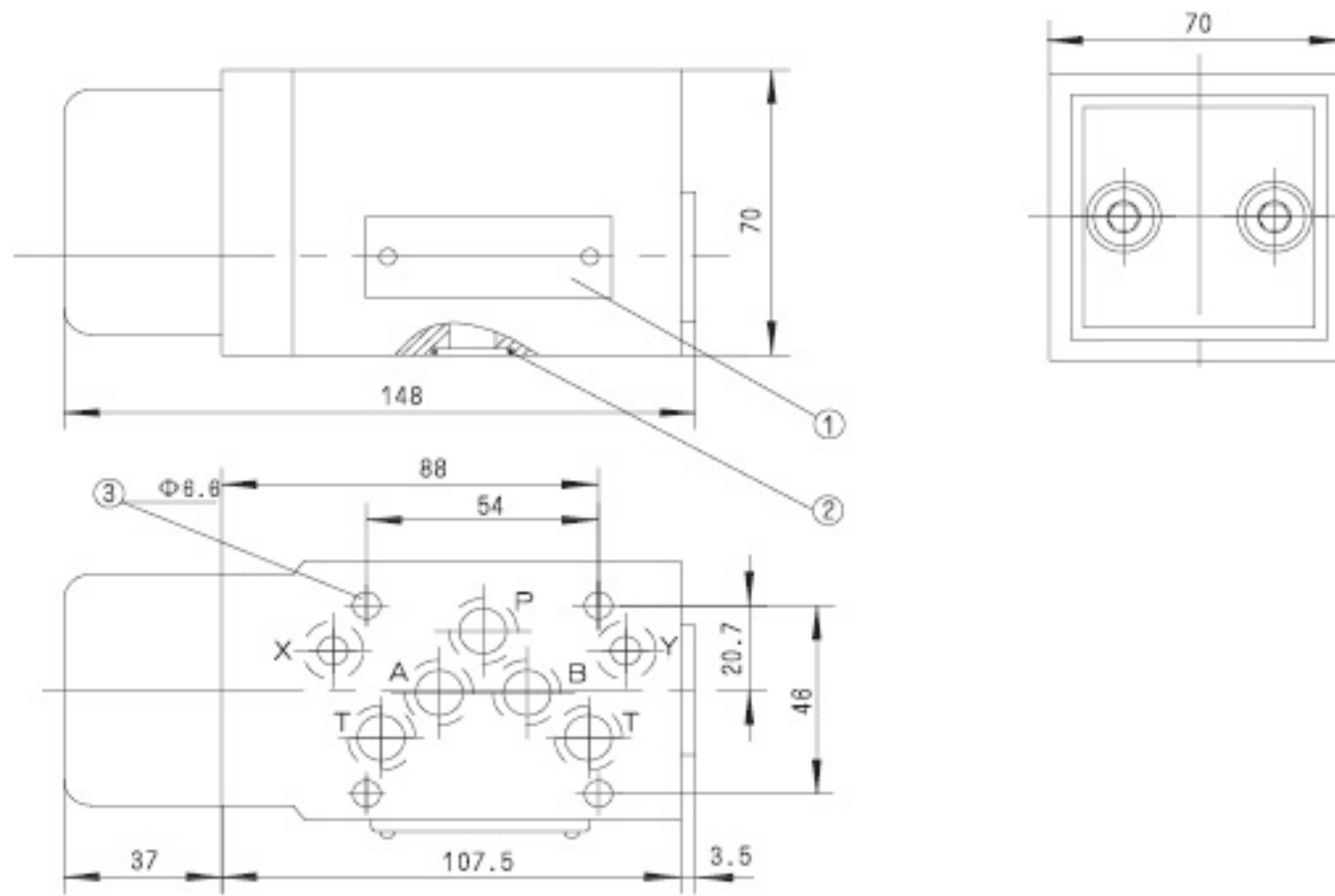
ZDC16: 1= with valve type 4WRZ16...100-30B/6A.../...
 2= with valve type 4WRZ16...150-30B/6A.../...



ZDC25: 1= with valve type 4WRZ25...270-30B/6A.../...
 2= with valve type 4WRZ25...325-30B/6A.../...

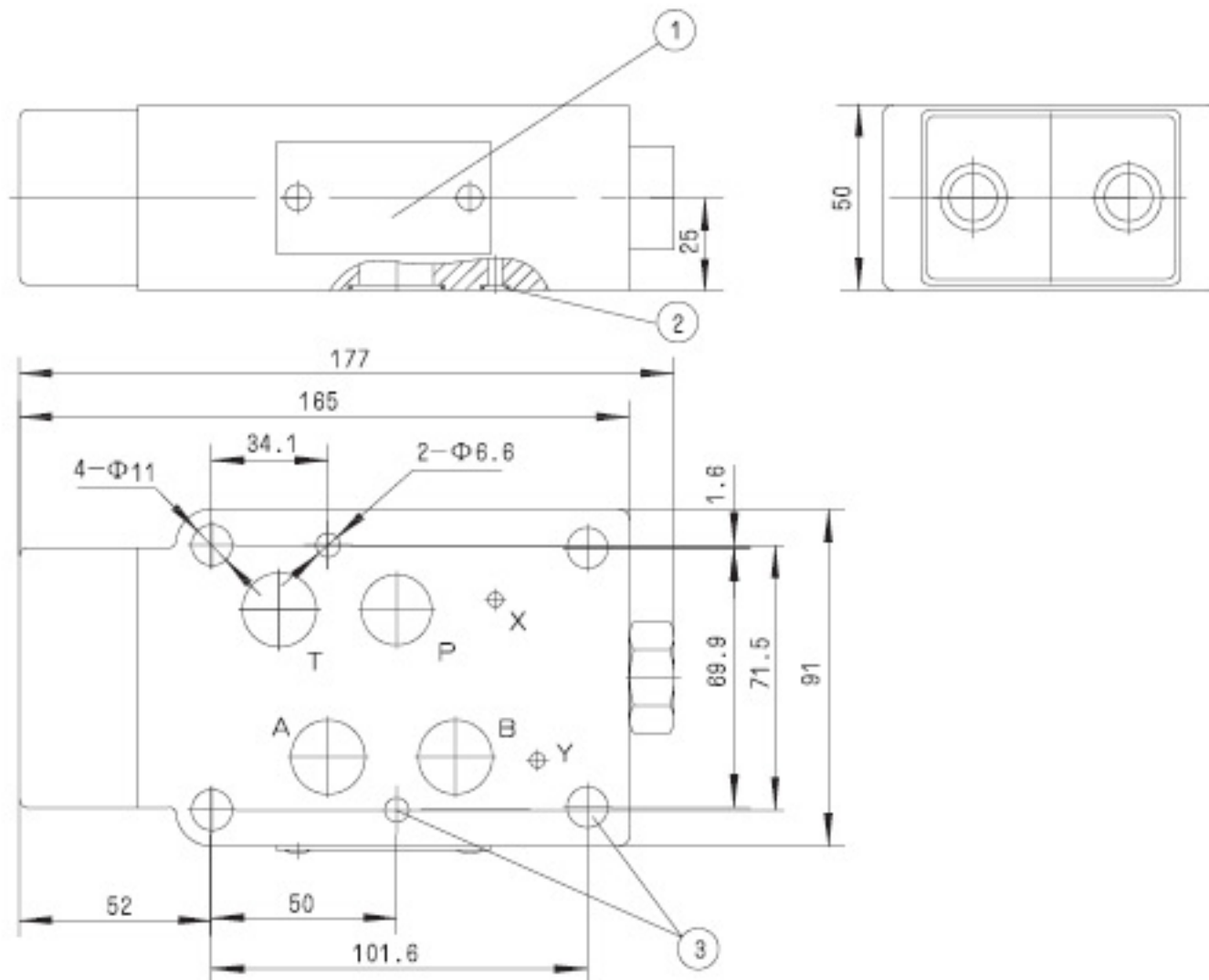


ZDC10:



1. Nameplate
2. O-ring 12x2 for ports A,B,P,T
3. Valve fixing screw holes

ZDC16:

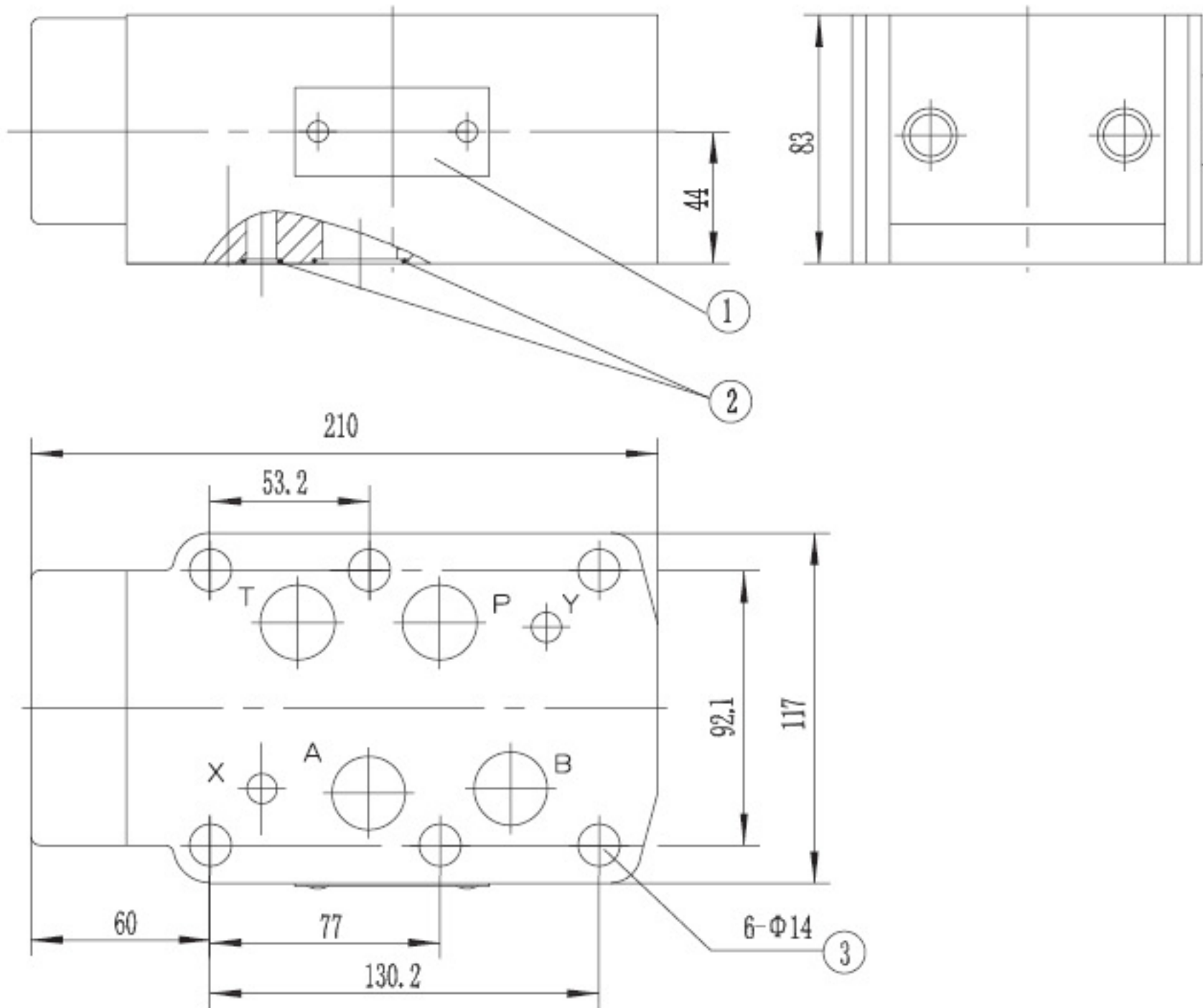


Unit Dimensions:

(dimensions in mm)

1. Nameplate
2. O-rings 22x2.5 for port A,B,P,T
3. Valve fixing screws

ZDC25,



1. Nameplate
2. O-rings 27x3 for ports A,B,P,T
O-rings 19X3 for ports X,Y
3. Valve fixing screws