

BEIJING HUADE HYDRAULIC INDUSTRIAL GROUP CO.,LTD.	Meter-in pressure compensator, direct operated, Type ZDC			RE 24750/06.2004
	Size 10.16.32	up to 35 MPa	up to 325 L/min	Replaces:

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.

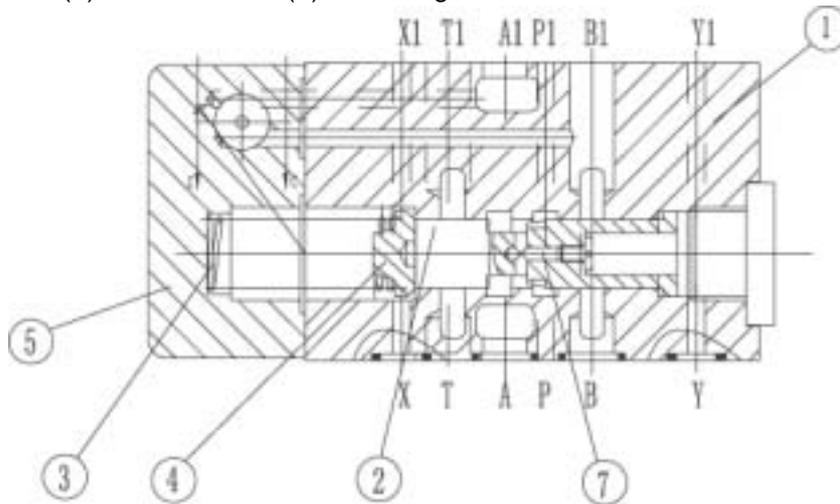
They are used for the load compensation as a meter-in pressure compensator in channel P.

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

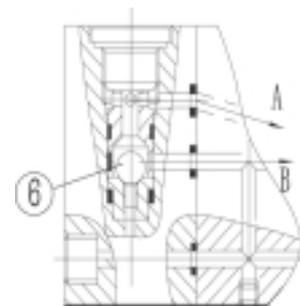
valve (6).

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.



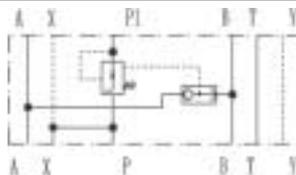
Type ZDC (NS 10)



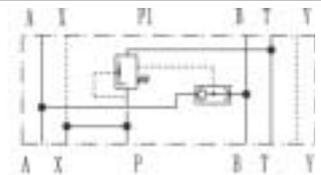
section C-C

Symbols

Pilot oil supply
"internal"

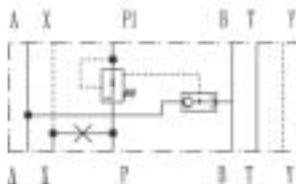


Type ZDC...P-20B/...

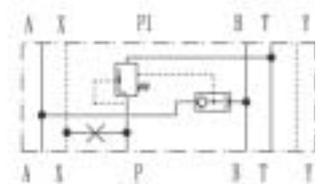


Type ZDC...PT-20B/...

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



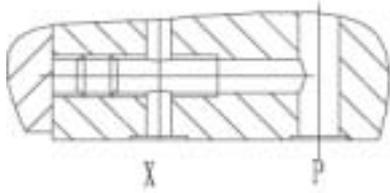
Type ZDC...P-20B/X...



Type ZDC...PT-20B/X...

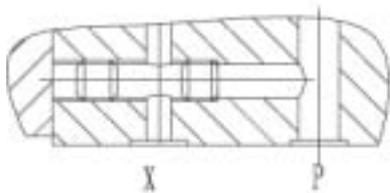
Pilot oil supply

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.

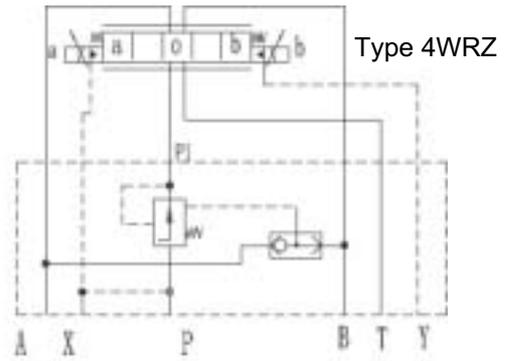


Pilot oil supply internal

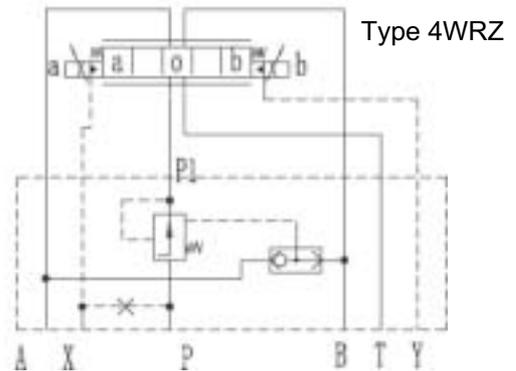
With external pilot oil supply, the connection in port p is closed. The pilot oil is supplied by a separate control circuit.



Pilot oil supply external

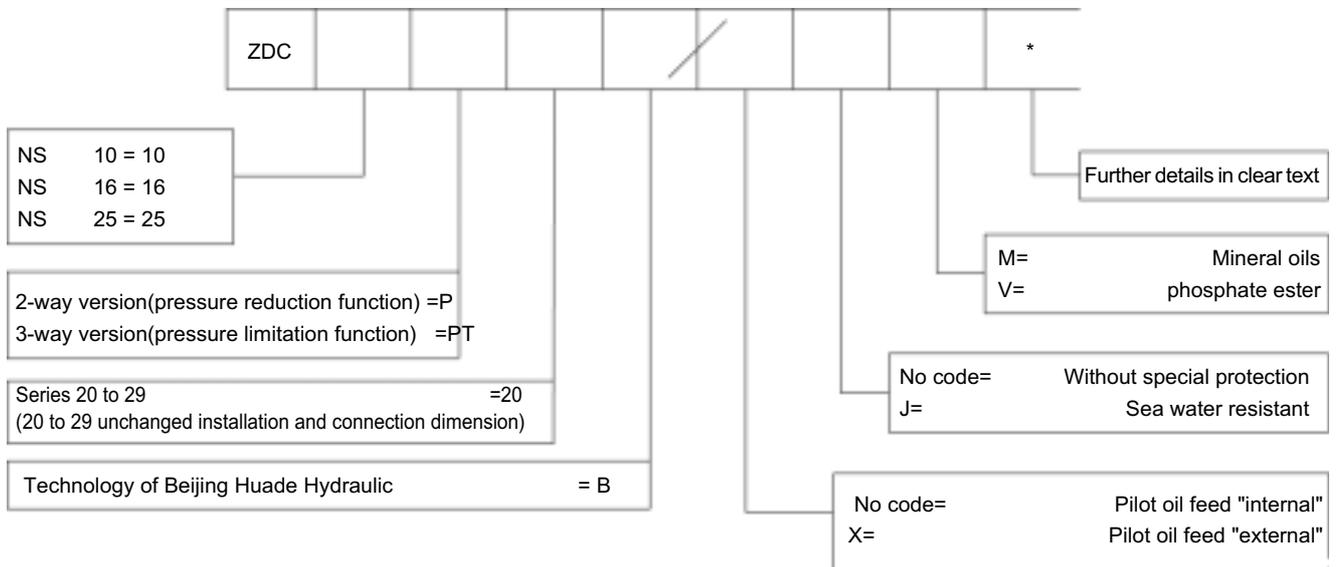


Type ZDC . . . P . . . 20B/ . . .



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

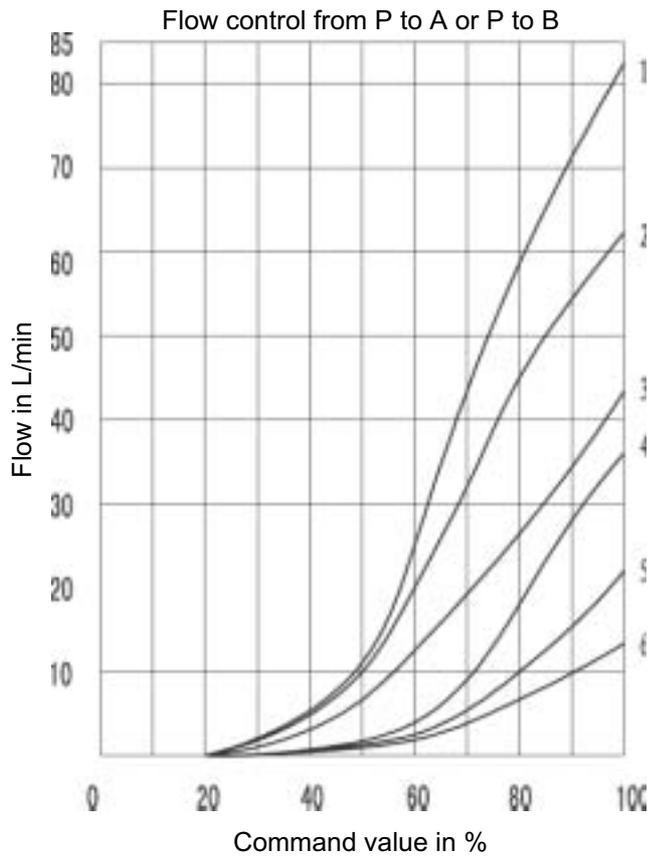
Ordering code



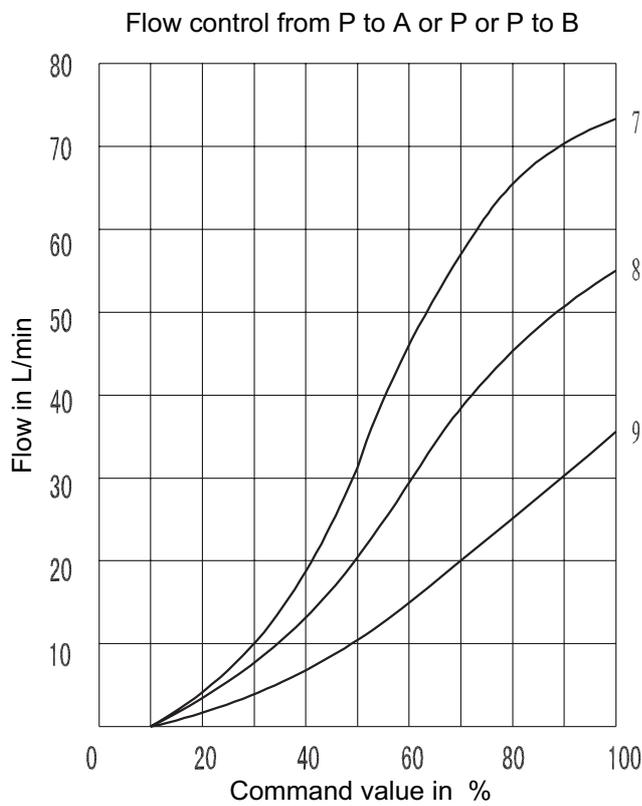
size		10	16	25	others is the same as the valves having same dimension
flow (L/min)		85	150	325	
weight (Kg)		3	3.5	8.9	
Operating pressure (MPa) P _{max}	A, B, P	35			
	T	25			
	X	3 to 10			
	Y	up to 3, (Only when be used with the port operated proportional direction valve, otherwise 15)			
Degree of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

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

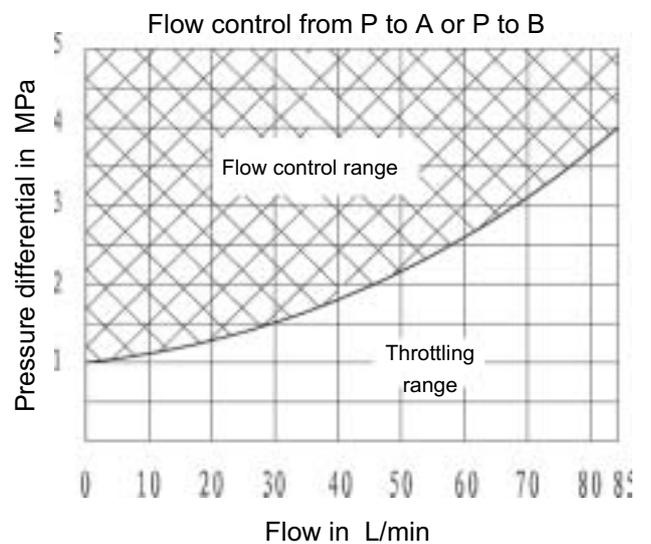
ZDC10:



- 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/...

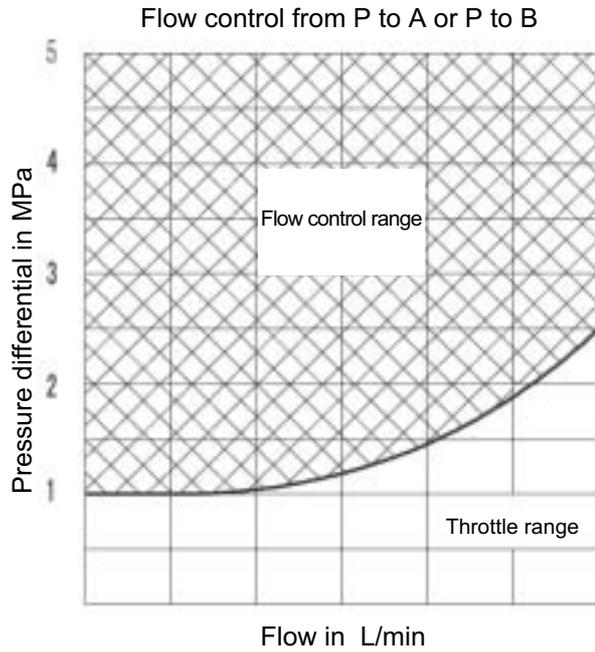
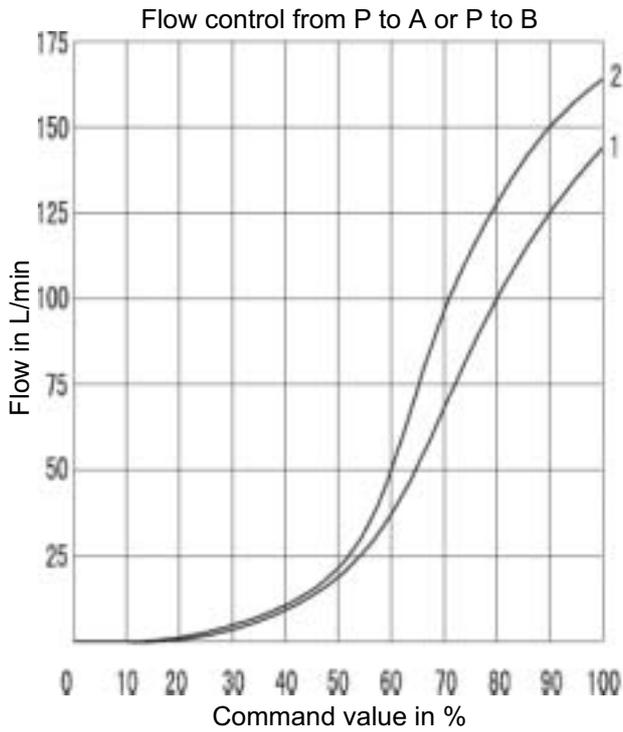


- 7= With valve type 4WRE10...64-10B/24Z4/...
- 8= With valve type 4WRE10...32-10B/24Z4/...
- 9= With valve type 4WRA10...16-10B/24Z4/...

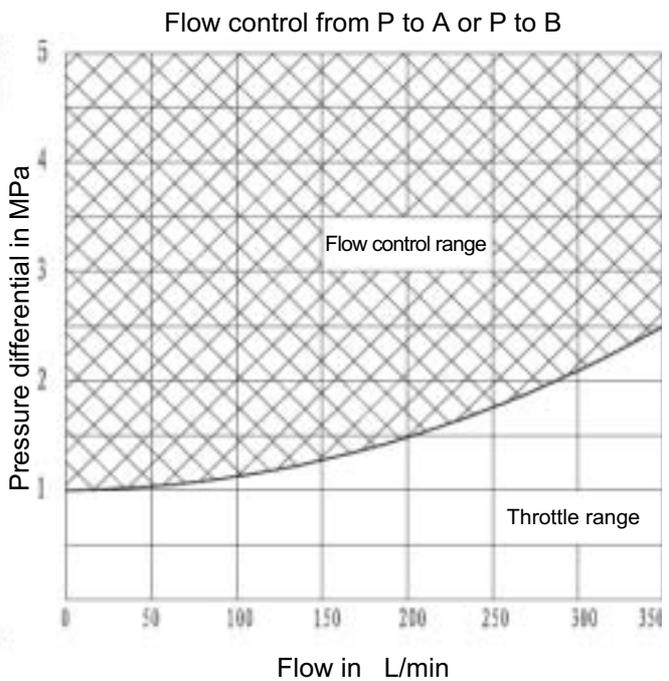
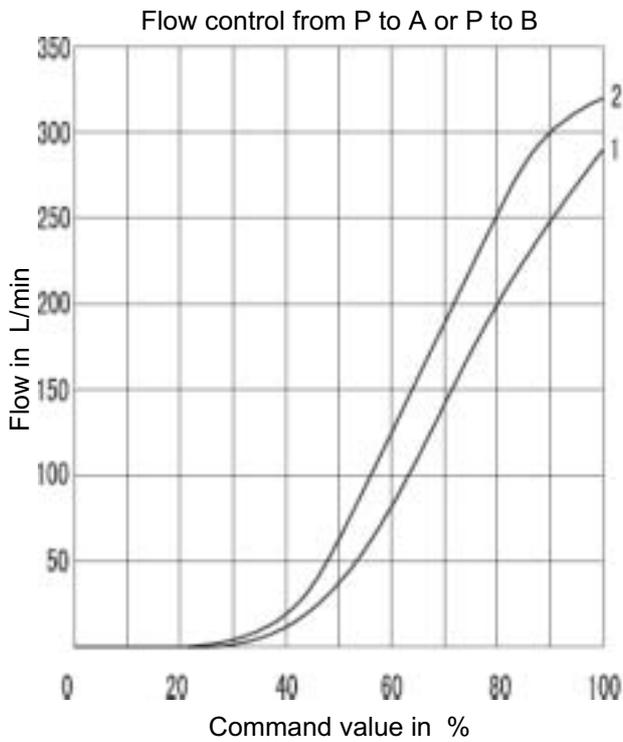


Characteristic curves (measured at $V = 41 \text{ mm}^2/\text{s}$ and $t = 50^\circ\text{C}$)

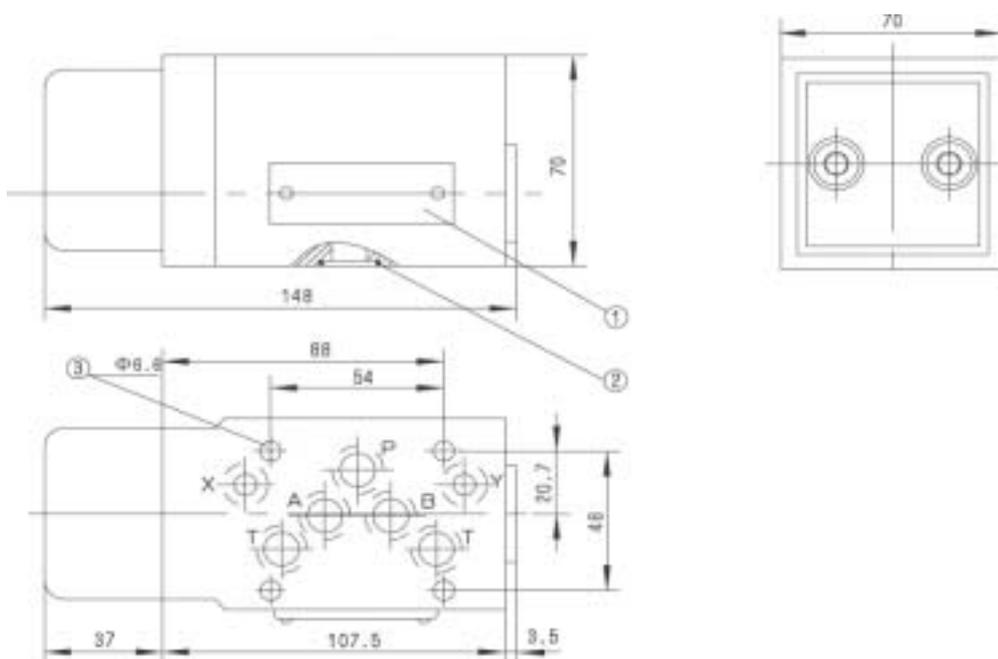
ZDC16: 1= with valve type 4WRZ16...100-30B/6A.../...
 2= with valve type 4WRZ16...150-30B/6A.../...



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:

