

BEIJING HUADE HYDRAULIC INDUSTRIAL GROUP CO.,LTD.	Direct operated pressure sequence valve, type DZ 5 DP			RE 20392/12.2004
	Size 5	up to 31.5MPa	up to 30L/min	Replaces, RE20392/05.2001

Features:

- For subplate mounting
- Front flange mounting
- 5 pressure ranges
- 4 different setting elements:
 - Rotary knob
 - Sleeve with hexagon and protective cap
 - Lockable rotary knob with scale
 - Rotary knob with scale
- Optional non return valve
- Mounting pattern to DIN 24 340, form C for subplates



Functional,Section

Valves type DZ 5 DP are direct operated sequence valves. They are used to direct oil to a second system at a set pressure.

Valves of this type consist basically of the housing (1), control spool (2), springs (3) and pressure setting element (4), and additionally non-return valve (5) if required.

The pressure at which the valve passes oil is set at the pressure setting element (4). The springs (3) hold the control spool (2) in the starting position, and the valve remains closed. The pressure in port P passes via drilling (6) and jet (7) on to the spool operating area at the opposite end to the control springs (3).

When pressure in port P reaches the set value, the spool moves against the spring to connect port P to port A.

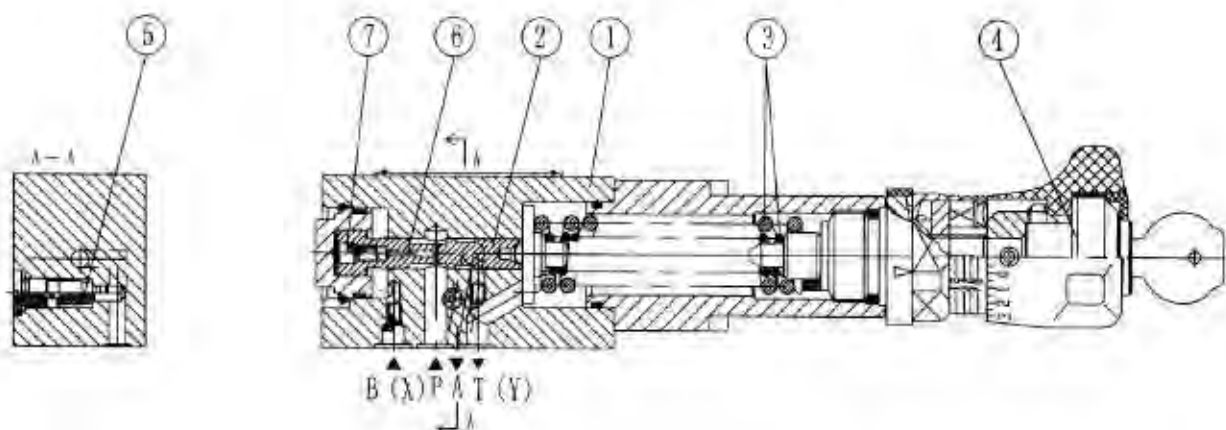
The signal for this passes internally via drilling (6) from port P.

Oil now passes to the system connected to port A, but the pressure in port P does not fall.

The pilot oil may also be fed externally via port B(X).

Depending on the application of the valve, the pilot oil return may be externally via port T(Y) or internally.

In order to allow free return flow of the oil from port A to port P, non-return valve (5) may be included if required.



Type DZ5DP-3-10B/...

Symbols

with non-return valve	DZ5DP.,-10B/...	DZ5DP.,-10B/...X...	DZ5DP.,-10B/Y..	DZ5DP.,-10B/...XY..
without non-return valve	DZ5DP.,-10B/...M..	DZ5DP.,-10B/...XM..	DZ5DP.,-10B/...YM...	DZ5DP.,-10B/...XYM..

Ordering code

DZ 5 D P - 10 B / / / / / *

For subplate mounting = No code
For front flange mounting = F

Size 5 = 5

Direct operated = D

Subplate ports = P

Adjusting element

Rotary knob = 1
Head screw with hexagon and protective cap = 2
Lockable rotary knob with scale 1) = 3
Rotary knob with scale = 7

Series 10 to 19 = 10
(10 to 19, installation and connection dimensions remain unchanged)

Technology of Beijing Huade Hydraulic =B

further details in clear text

No code. = mineral oils
V = phosphate ester

No code = with non-return valve
M = without non-return valve

No code = pilot oil supply internal, drain internal
X = pilot oil supply external, drain internal
Y = pilot oil supply internal, drain external
XY = pilot oil supply external, drain external

25 = Max. sequence pressure 2.5 MPa
75 = Max. sequence pressure 7.5 MPa
150 = Max. sequence pressure 15.0 MPa
210 = Max. sequence pressure 21.0 MPa
315 = Max. sequence pressure 31.5 MPa
(31.5 MPa unit only available without non-return valve)

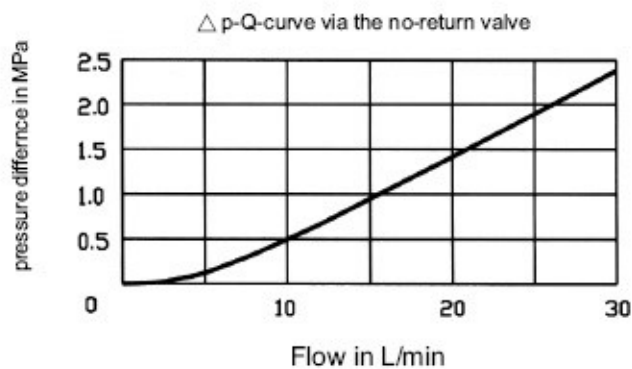
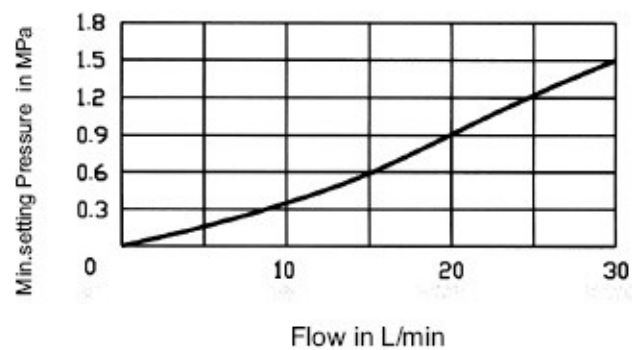
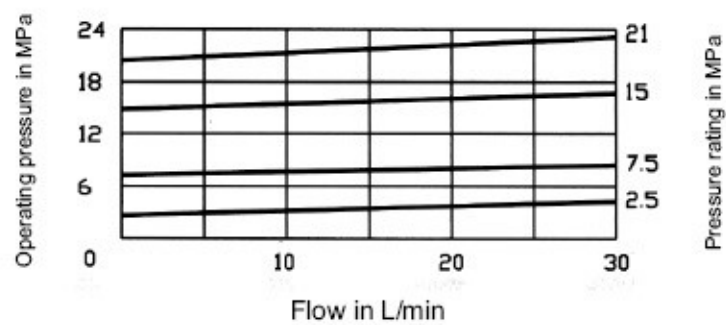
Technical Data

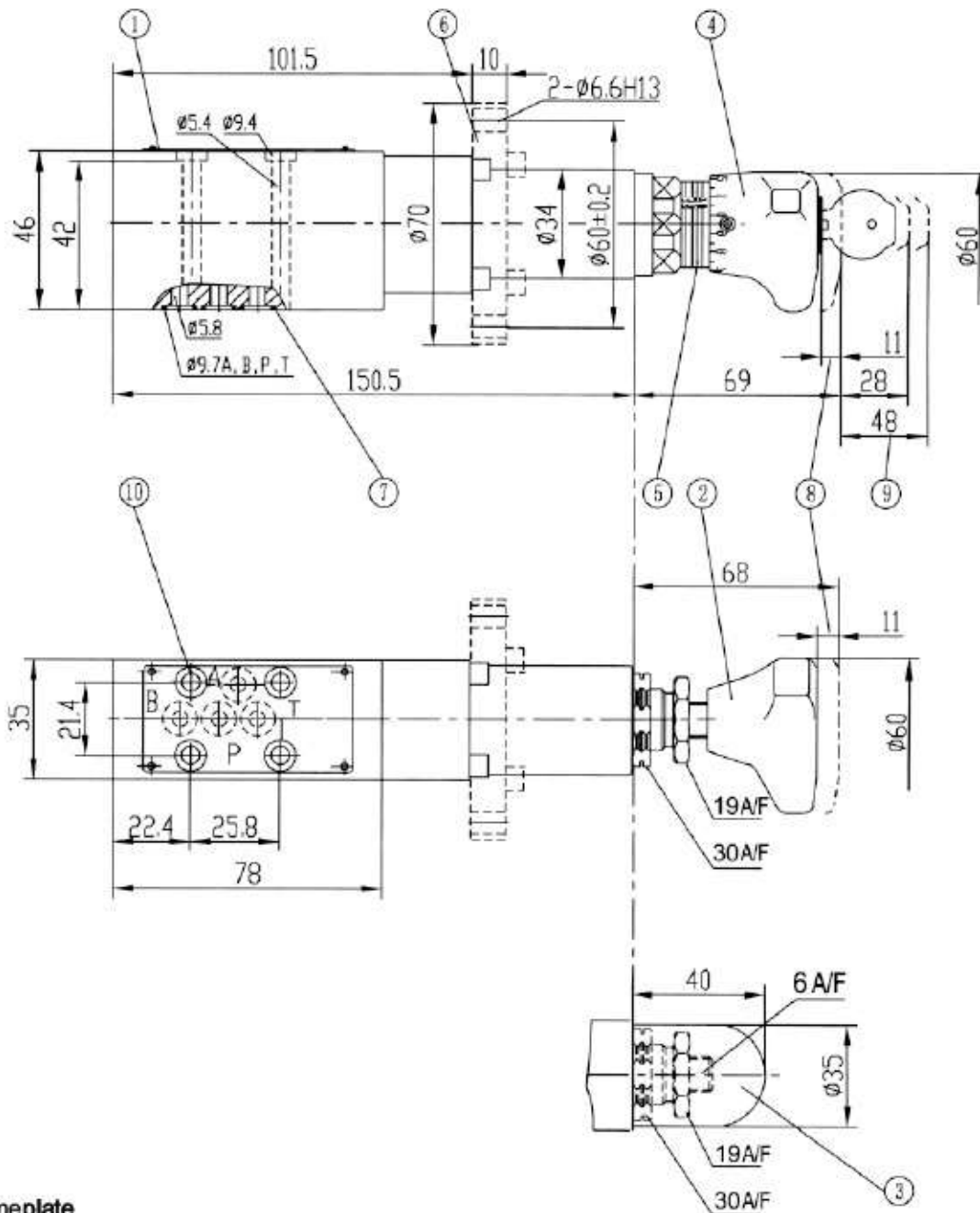
Inlet pressure, port P, B (X)	(MPa)	up to 21.0; without non-return valve up to 31.5
Outlet pressure, port A	(MPa)	to 31.5
Back pressure, port T (Y)	(MPa)	to 6.0
Max. permissible flow	(L/min)	to 30
Fluids		Mineral oil (for NBR seal), or phosphate ester (for FPM seal)
Viscosity range	(mm ² /s)	10-800
Fluid temperature range	(°C)	-30 ~ +80
Fluid cleanliness	(µm)	Fluid cleanliness Maximum permissible degree of contamination of the fluid to NAS 1638 Class 9

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

Pe- Q-curve

Inlet pressure related to flow





1. Nameplate
2. Adjustment element 1
3. Adjustment element 2
4. Adjustment element 3
5. Scale and ring marking for repeat setting
6. Panel mounting model (type DZ 5 DP../..)
7. O-ring 7 x 1.5 for ports P, A, B(X) and T(Y)
8. Max. stroke
9. Space required to remove key
10. Valve fixing holes

Subplates and valve fixing screws must be ordered separately

Subplates :see page153

G115/01 (G1/4")

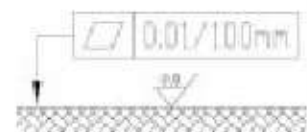
G115/02 (M14X1.5)

G96/01 (G1/4")

G96/02 (M14X1.5)

Valve fixing screws:(GB/T70.1-2000)

M5x50-10.9; $M_A = 8,9 \text{ Nm}$



Required surface finish of mating piece