BEIJING HUADE HYDRAULIC INDUSTRIAL GROUP CO.,LTD.	Pressure reducing valve, direct operated, type DR 6 DP			RE 26896/12.2004
	Size 6	up to 21MPa	up to 60L/min	Replaces：RE26896/05.2001

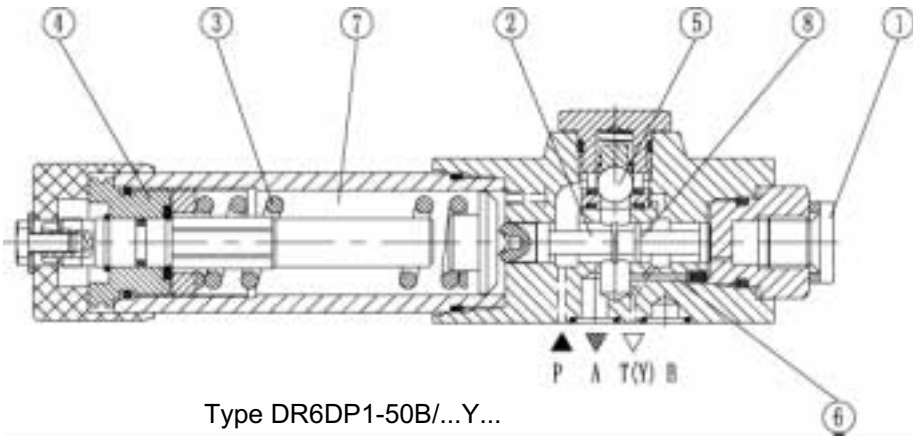
Features:

- Subplate mounting
- 5 pressure ratings
- 4 adjustment elements:
  · Rotary knob,
  · Set screw with hexagon and protective cap,
  · Lockable rotary knob with scale,
  · Rotary knob with scale
- Check valve, optional
- Porting pattern to DIN 24 340, form D,ISO 5781 and CETOP-RP 121H



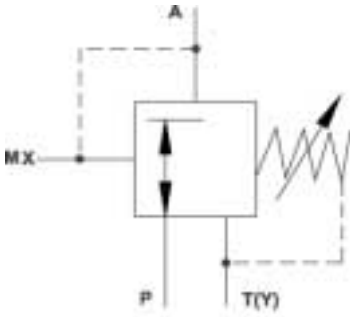
Functional,section

The valve type DR 6 DP is a 3-way direct operated pressure reducing valve with a pressure relief function on the secondary side.
It is used to reduce the system pressure. The secondary pressure is set by the pressure adjustment element (4). At rest, the valve is normally open and the pressure fluid can flow unhindered from port P to port A. The pressure in port A is at the same time, via the control line (6), present at the spool area opposite to the compression spring (3). When the pressure in port A exceeds the pressure level set at compression spring (3), the control spool (2) moves into the control position and holds the set pressure in port A constant.
The control and pilot oil are taken from port A via control line (6).
If the pressure in port A still increases due to external forces on the actuator, the control spool (2) moves still further towards the compression spring (3).
This causes a flow path to be opened at port A via control land (8) on the control spool (2) to the tank. Sufficient pressure fluid then flows to tank to prevent any further rise in pressure.
The spring chamber (7) is always drained to tank externally via port T (Y).
For free return flow from port A to port P an optional check valve (5) can be fitted.
A pressure gauge connection (1), permitts the secondary pressure at the valve to be monitored.

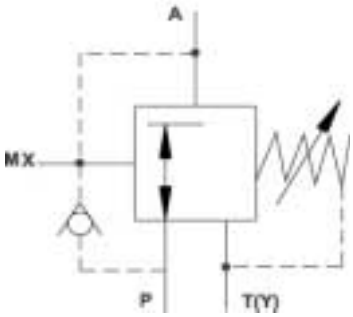


Type DR6DP1-50B/...Y...

Symbols



Version "YM"
Pilot oil supply internal
oil drain external
without check valve



Version "Y"
Pilot oil supply internal
oil drain external
with check valve

Ordering details

DR	6	D	P		-	50	B	/		Y			*

Size 10 =10

Direct operated pressure reducing valve

Subplate mounting =P

Adjustment element
Rotary knob = 1
Set screw with hexagon and protective cap = 2
Lockable rotary knob with scale = 3
Rotary knob with scale = 7

Series 50 to 59 = 50
(50 to 59: unchanged installation and connection dimensions)

Technology of Beijing Huade Hydraulic = B

Further details in clear text

No code. = mineral oils
V = phosphate ester

No code = With check valve
M = Without check valve

Y = Pilot oil supply internal, drain external

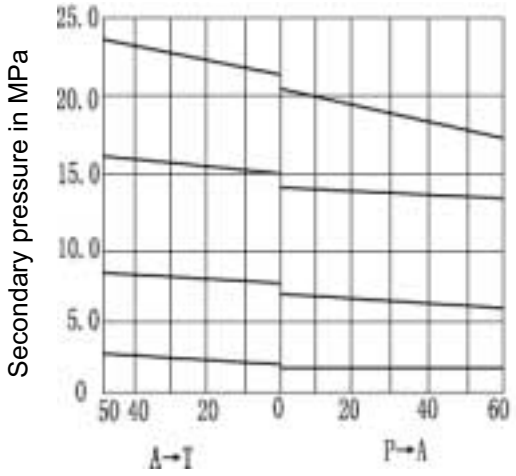
25= Max. secondary pressure 2.5 MPa
75= Max. secondary pressure 7.5 MPa
150= Max. secondary pressure 15.0 MPa
210= Max. secondary pressure 21.0 MPa

Technical data

Max. operating pressure Port P	(MPa)	up to 315
Max. secondary pressure Port A	(MPa)	up to 2.5; up to 7.5; up to 15.0; up to 21.0; up to 31.5
Max. back pressure Ports T (Y)	(MPa)	up to 160
Max. flow	(L/min)	up to 60
Pressure fluid		Mineral oil (for NBR seal)or phosphate ester(for FPM seal)
Viscosity range	(mm^2/s)	10~800
Pressure fluid - temperature range	(℃)	-30 to +80
Degree of contamination	(μm)	Maximum permissible degree of contamination of the fluid is to NAS 1638 class 9.
Weight	(Kg)	approx. 1.2

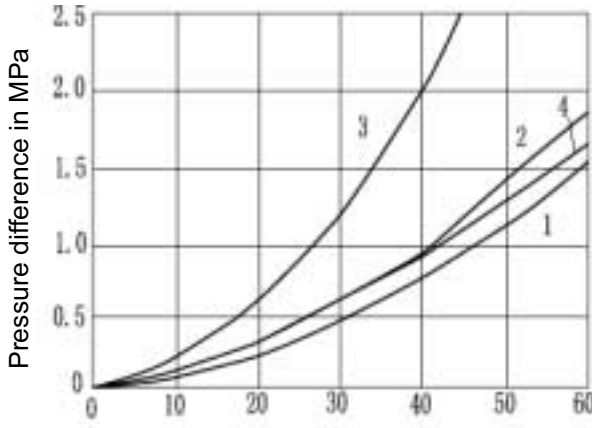
Characteristic curves (measured at v = 41 mm^2/s and t = 50℃)

p_A-q_V characteristic curves



Flow in L/min

D_p-C_q characteristic curves

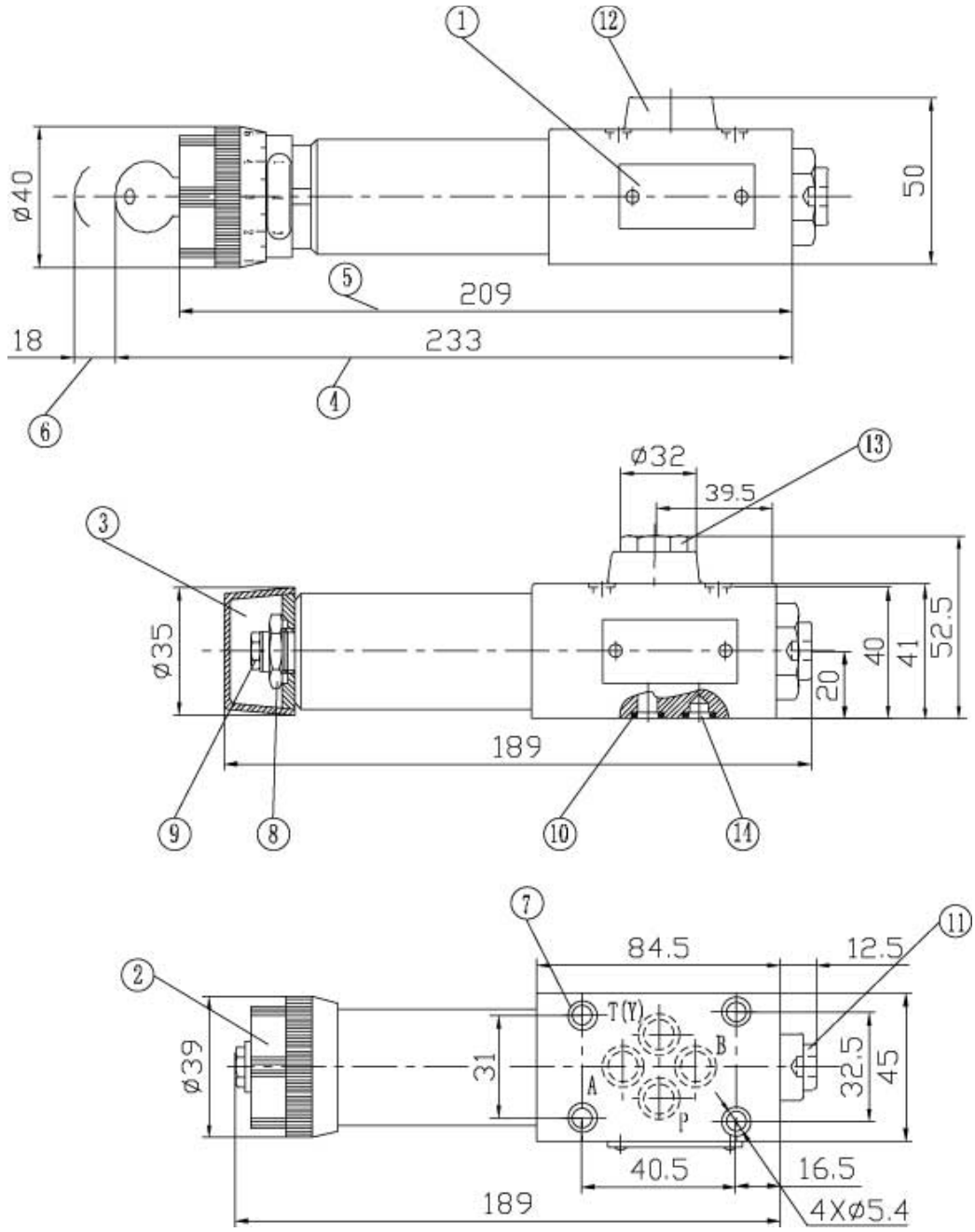


Flow in L/min

Note:
The curve characteristics remain, with a low set pressure,
the same in relation to the pressure rating .
The characteristic curves for the pressure relief function are valid for the outlet pressure = zero over the entire flow range!

1 P to A (min. pressure differential)
2 A to T (Y) (min. pressure differential)
3 △p only over the check valve
4 △p over the check valve and fully open control cross section

Unit dimensions: type DR6DP （**Dimensions in mm**）



1. Nameplate
2. Adjustment element 1
3. Adjustment element 2
4. Adjustment element 3
5. Adjustment element 7
6. Space required to remove key
7. Valve fixing holes
8. Lock nut 24 A/F
9. Hexagon 10 A/F
10. O-ring 9.25 x 1.78 for ports A, B, P, T(Y)
11. Pressure gauge connection G 1/4; Deep12; internal hexagon 6 A/F
12. Without check valve
13. With check valve
14. Port B has no function

Subplates:see page 152
- G341/01(G1/4")
- G341/02(M14X1.5)
- G342/01(G3/8")
- G342/02(M18X1.5)

Valve fixing screws
M5 x 50 - 10.9(GB/T70.1-2000)
Tightening torque M_A = 8.9 Nm



Required surface finish of mating piece

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