

DR6DP...type Direct Operated Reducing Valve



DR6DP...5XJ...type

Size 6
Max. Working Pressure: 210 bar
Max. Flow: 60 L/min

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Features

- Direct operated structure
- Porting pattern to DIN 24 340 form A, ISO4401
- 5 pressure ratings
- 2 adjustment elements:
 - Rotary knob
 - Adjustable bolt with protective cap
- With pressure gauge connection
- Check valve, optional

Function and configuration

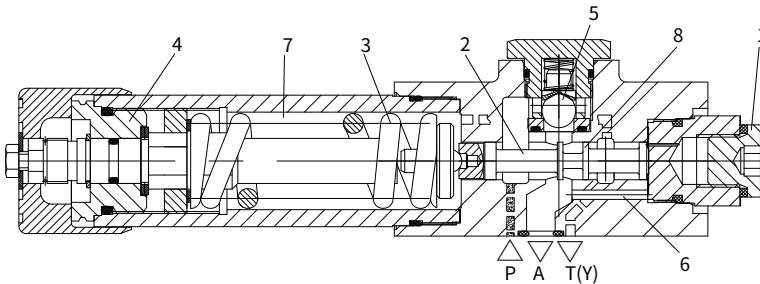
DR6DP type valve is a direct operated pressure reducing valve with 3-way design, with a pressure limitation of the secondary side, to insure the secondary pressure steady. It is used to reduce the system pressure. The secondary pressure is set by the pressure adjustment element (4).

In the zero position, the valve is normally open and the pressure fluid flows unhindered from port P to port A. The pressure in port A acts at the spool (2) area opposite to the compression spring (3) via the control line (6). When the pressure in port A get the value setting at compression spring (3), the control spool (2) moves into the control position and keeps the setting pressure in port A constant. The internal control oil is taken from port A via the 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 via control land (8) on the control spool (2). Sufficient fluid then flows back to tank to prevent any further pressure rise.

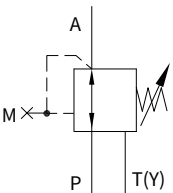
Fluid in spring chamber always drained to tank externally via port T(Y). For free return flow from port A to port P an optional check valve (5) can be fitted. One pressure gauge connection (1) used for monitoring the secondary pressure at the valve.

03

Type DR6DP1-5XJ/...Y



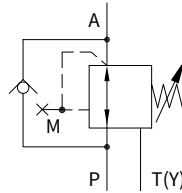
Symbols



Version "YM"

Pilot oil supply internal
oil drain external

Without check valve



Version "Y"

Pilot oil supply internal
oil drain external

With check valve

Specification

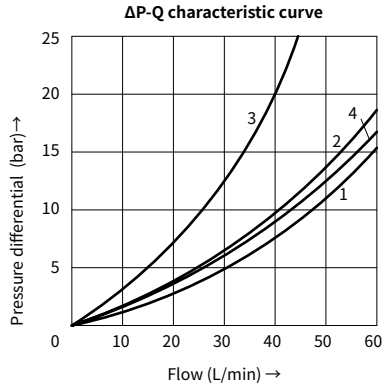
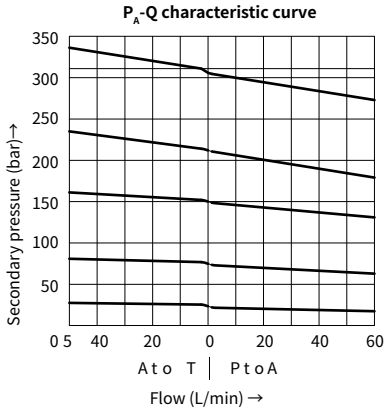
	DR6DP	-	5XJ	/	Y	/		*	Further details in clear text
Direct operated pressure reducing valve nominal size 6									
Rotary knob	=1							No code =	NBR seals
Adjustable bolt with protective cap	=2							V =	FKM seals
Lockable rotary knob with scale	=3								Pressure tapping thread
Rotary knob with scale	=7							No code =	Inch G1/4
Series 50J to 59J	=5XJ							2 =	Metric M14×1.5
(50J to 59J: unchanged installation and connection dimensions)								No code =	With check valve
Max. secondary pressure 25 bar	=	25						M =	Without check valve
Max. secondary pressure 75 bar	=	75						Y =	Pilot oil supply internal
Max. secondary pressure 150 bar	=	150							Oil drain external
Max. secondary pressure 210 bar	=	210							

Technical data

Fluid		Mineral oil suitable for NBR and FKM seal
		Phosphate ester for FKM seal
Fluid temperature range	°C	-30 to +80 (NBR seal) -20 to +80 (FKM seal)
Viscosity range	mm ² /s	10 to 800
Degree of contamination		Maximum permissible degree of fluid contamination: Class 9. NAS 1638 or 20/18/15 , ISO4406
Max.operating pressure	Port P	315
Max.secondary pressure	Port A bar	25; 75; 150; 210; 315(without check valve)
Max.backing pressure	PortT(Y)	16
Max. flow-rate	L/min	60
Weight	kg	Approx.1.6

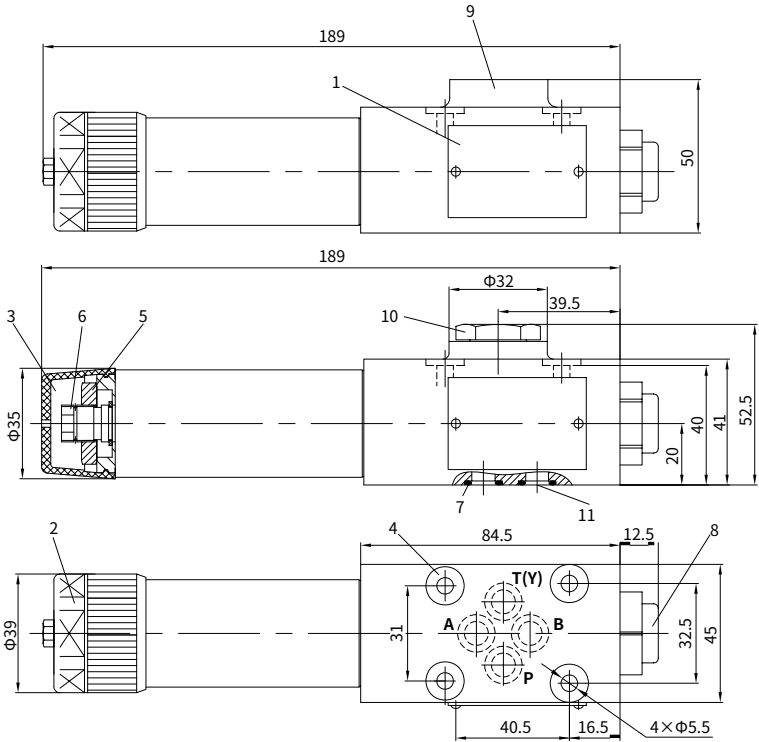
Characteristic curves

(Measured at $t=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)



Unit dimensions

(Dimensions in mm)



- 1 Nameplate
- 2 Adjustment element "1"
- 3 Adjustment element "2"
- 4 Valve fixing holes
- 5 Lockable nut S=24
- 6 Internal hexagon screw S=10
- 7 O-ring 9.25×1.78 (A, B, P, T)
- 8 Pressure gauge connection:
G1/4 or M14×1.5; 12 deep
Hex wrench S=6
- 9 Without check valve
- 10 With check valve
- 11 Port B blocked, has no function

