



DR5DP...type Direct Operated Reducing Valve



DR5DP...10J...type

Size 5

Max. Working Pressure: 315 bar

Max. Flow: 15 L/min

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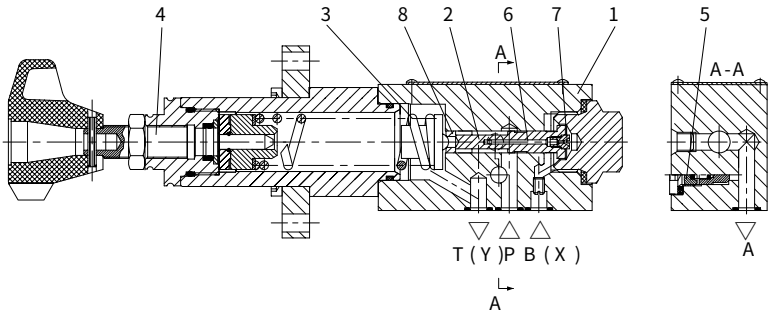
Features

- Direct operated structure
- Porting pattern to DIN 24 340 form A and ISO4401
- 5 pressure ratings
- 3 adjustment elements:
 - Rotary knob
 - Adjustable bolt with protective cap,
 - Lockable adjustable handle
- Check valve, optional

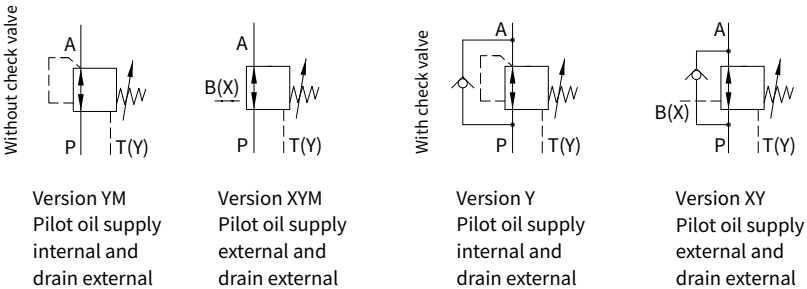
Function and configuration

DR5DP type valve 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).

In initial 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 area opposite to the compression spring (3) via the control line (6) and the spray nozzle (7). When the pressure in port A gets 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, or from external by port X. 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 Y. For free return flow from port A to port P an optional check valve (5) can be fitted.



Symbols



Specification

	DR5DP	10J				*
Without plate fixing flange (Standard version)=No code						
With plate fixing flange =F						
Direct operated pressure reducing valve nominal size 5						
Rotary knob		=1				
Adjustable bolt with protective cap		=2				
Lockable adjustable handle		=3				
Series 10J		= 10J				

Further details in
clear text

No code = NBR seals
V = FKM seals

No code = With check valve
M = Without check valve

Y = Pilot oil supply internal
Oil drain external

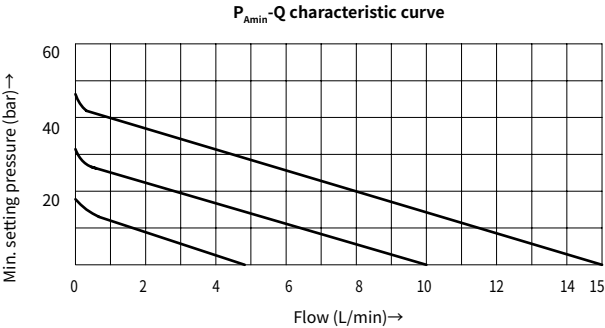
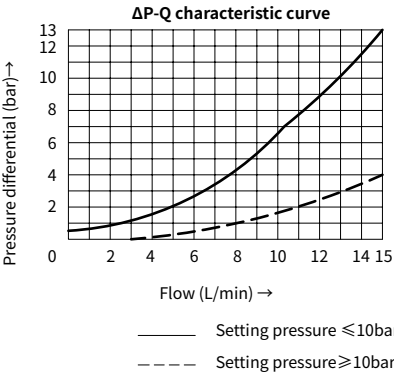
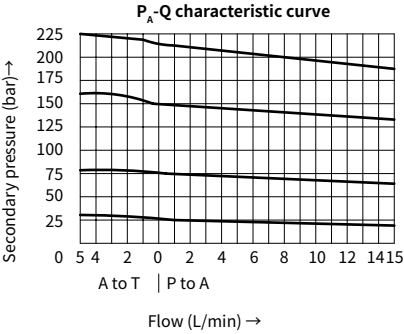
XY = Pilot oil supply external
Oil drain external

25 = Max. secondary pressure 25 bar
75 = Max. secondary pressure 75 bar
150 = Max. secondary pressure 150 bar
210 = Max. secondary pressure 210 bar
315 = Max. secondary pressure 315 bar

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	bar	315
Max.secondary pressure	Port A	bar	25; 75; 150; 210; 315(without check valve)
Max.backing pressure	PortT(Y)	bar	60
Max. flow-rate		L/min	15
Weight		kg	Approx.1.4

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



P_{Amin} -Q Characteristic curve shows the flow-rate in relation to the adjustable min. pressure rating from P to A.

Unit dimensions

(Dimensions in mm)

