



DR10DP...type Direct Operated Reducing Valve



DR10DP...4XJ...type

Size 10

Max. Working Pressure: 210 bar

Max. Flow: 80 L/min

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Features

- Direct operated structure
- Porting pattern conforms to DIN 24 340 form D and ISO5781
- 4 pressure ratings
- 2 adjustment elements:
 - Rotary knob
 - Adjustable bolt with protective cap
- With pressure gauge connection
- Check valve, optional

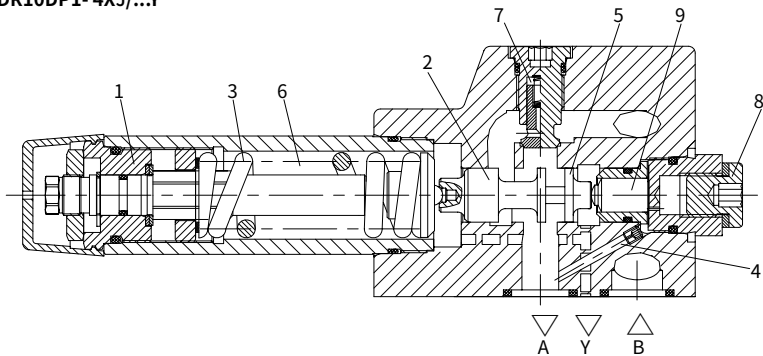
Function and configurations

DR10DP 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 (1).

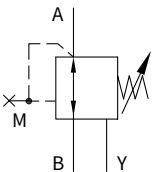
In zero position, the valve is normally open and the pressure fluid flows unhindered from port B to port A. The pressure in port A acts at the small spool(9) area opposite to the compression spring (3) via the control line (4). When the pressure in port A get the value setting at the compression spring (3), the small spool(9) pushes the control spool (2) 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 (4). If the pressure in port A still increases due to external forces on the actuator, a flow path is to be opened via control land(5) on the control spool (2) . Port Y is open and sufficient fluid then flows back to tank to prevent any further pressure rise.

Fluid in spring chamber (6) always drained to tank externally via port Y. For free return flow from port A to port B an optional check valve(7) can be fitted. One pressure gauge connection (8) used for monitoring the secondary pressure at the valve.

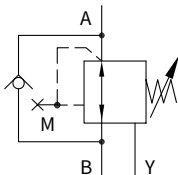
Type DR10DP1- 4XJ/...Y



Symbols

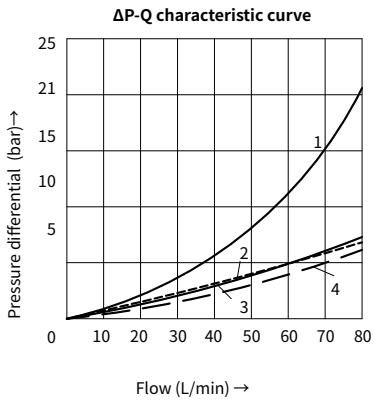
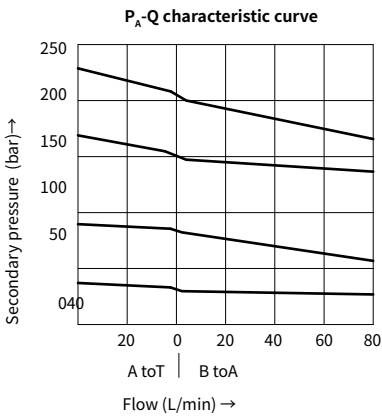


Version "YM"
Pilot oil supply internal
oil drain external
Without check valve



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

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



Unit dimensions

(Dimensions in mm)

