



## Modular Pressure Reducing Valve

Model: ZDR6DP0-4XJ



- ◆ Size 6
- ◆ Maximum working pressure 40 bar
- ◆ Maximum working flow 7L/min

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### Features

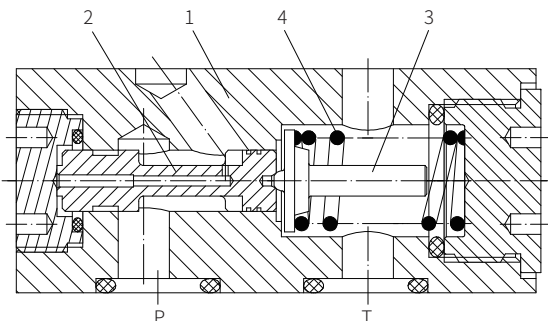
- Sandwich plate connection

### Function description, sectional drawing

The ZDR6DP0...4XJ/40YM type reducing valve is modular direct-operated pressure reducing valve, it is used to reduce the system pressure. The valve is composed of valve body (1), valve spool (2), spring seat (3) and pressure spring (4).

At rest, the valve is normally open and the oil can freely flow from port P1 to port P2. The pressure in port P2 acts on the piston area opposite to the pressure spring. If the pressure in port P2 continues to increase due to external force, the valve spool is moved still towards the pressure spring (4), then the oil at port P2 is connected to the oil tank through the shoulder on the control piston (2).

The sufficient oil flows back to the tank to prevent further pressure increase. The oil in the spring chamber is drained to the oil tank through the port T.



Model ZDR6DP0...4XJ/40YM

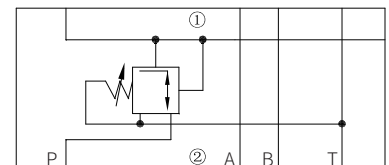
### Models and specifications

|  |     |   |   |   |   |    |   |    |   |   |   |
|--|-----|---|---|---|---|----|---|----|---|---|---|
| Z  | DR  | 6 | D | P | 0 | 4X | J | 40 | Y | M | *   |
| sandwich plate connection  | =Z  |   |   |   |   |    |   |    |   |   | more information in text  |
| reduce valve   | =DR |   |   |   |   |    |   |    |   |   | sealing material  |
| size 6   | =6  |   |   |   |   |    |   |    |   |   | No code= NBR seals<br>V= FKM seals<br>(consult for other seals) |
| direct operated  | =D  |   |   |   |   |    |   |    |   |   | M= without check valve  |
| pressure reducing at P1  | =P  |   |   |   |   |    |   |    |   |   | Y= pilot oil supply internal<br>drain external                  |
| outlet pressure fixed  | =0  |   |   |   |   |    |   |    |   |   | 40= secondary pressure 40 bar                                   |
| 40 to 49 series<br>(40 to 49 series: installation and connection size unchanged) | =4X |   |   |   |   |    |   |    |   |   |   |
| Rekith   | =J  |   |   |   |   |    |   |    |   |   |   |

### Functional symbols

(①= Valve side, ②= Subplate side)

Model ZDR6DP0...4XJ/...YM...



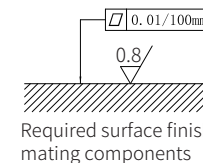
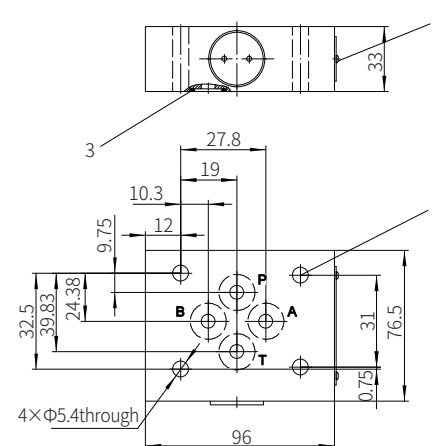
### Technical parameters

|                                  |                    |  |
|----------------------------------|--------------------|--|
| Medium                           |                    | Mineral hydraulic oil or phosphate hydraulic oil                       |
| Working medium temperature range | °C                 | -30 to +80(NBR seal) -20 to +80 (FKM seal)                             |
| Viscosity range                  | mm <sup>2</sup> /s | 10 to 800  |
| Cleanliness of oil               |                    | The maximum allowable pollution level of oil is ISO4406 Class 20/18/15 |
| Inlet pressure (outlet)          | bar                | to 300   |
| Secondary pressure (outlet)      | bar                | to 40  |
| Back pressure( port Y)           | bar                | to 160   |
| Maximum working flow             | L/min              | 7  |

### Component size

Unit size: mm

Model ZDR6DP0...4XJ/40YM



Required surface finishing of mating components

- 1 Name plate
- 2 Valve fixing hole
- 3 O ring 9.25x1.78  
(for oil port P, T, A, B)