4/3-way high response directional control valve pilot operated with electrical feedback and integrated electronics (OBE)

**Type 4WRDE**

Nominal size 10 to 35  
Component series 5X  
Maximum operating pressure 350 bar  
Maximum flow 3000 L/min

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**Features**

- Pilot operated 3-stage high response directional control valve with electrical feedback of the main spool and integrated electronics (OBE)
- Acquisition of the main spool position by means of an inductive position transducer
- 2-stage pilot control valve, type 4WS2EM 6-2X/...
- Particularly suitable for closed loop position, velocity, pressure and force control with simultaneous high requirements in dynamic response and response sensitivity
- Subplate mounting: Porting pattern to ISO 4401 (NS10 to 35)
- Signal integration of the valve's closed loop control circuit, the supply to the position measuring system and the control of the pilot control valve are carried out via the integrated control electronics

Information on available spare parts:  
www.boschrexroth.com/spc
### Ordering details

**4WRDE** | **− 5X/ 6L 24** | **K9** | **R** | *Further details in clear text*
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**Nominal size** 10  | 20  | 25  | 27  | 32  | 35  

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**With spool symbol E1-, W1-, V1-:**

- \( P \rightarrow A : q_{v,\text{max}} \)
- \( B \rightarrow T : q_{v}/2 \)
- \( P \rightarrow B : q_{v}/2 \)
- \( A \rightarrow T : q_{v,\text{max}} \)

**Note:**

With W, W1- spools, there is, in the neutral position, a connection from A to T and B to T with approx. 3% of the relevant nominal cross-section.

### Further details

- **R =** R rings
- **M =** NBR seals
- **V =** FKM seals
- **No code =** Without sandwich plate directional valve
- **WG152 =** With sandwich plate directional valve
- **24 V =** Plug-in connector Z4
- **Plug-in connector – separate order** see page 8

#### Electrical connections

**K9 =** Without plug-in connector with component plug
**Plug-in connector – separate order** see pages 7 and 8

#### Pilot oil flow

- **No code =** External pilot oil supply, external pilot oil return
- **E =** Internal pilot oil supply, external pilot oil return
- **ET =** Internal pilot oil supply, internal pilot oil return
- **T =** External pilot oil supply, internal pilot oil return

#### Supply voltage

- **24 V DC**

#### Nominal size

- **6L =** Nominal size 6 servo pilot control

#### Characteristic curve form

- **Linear**
- **Linear with fine control range**

#### Nominal flow

- **25 1) or 50 2) or 100 =** For nominal size 10
- **125 = or 200 =** For nominal size 16
- **220 = or 350 =** For nominal size 25
- **500 =** For nominal size 27
- **400 = or 600 =** For nominal size 32
- **1000 =** For nominal size 35

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1) Only available with spool variants E-; W and V and with the L (linear) characteristic curve form

2) Suitable for mineral oil (HL, HLP) according to DIN 51524