Proportional flow control valve, 2-way version

Type 2FRE 6

Size 6
Component series 2X
Maximum operating pressure 210 bar
Maximum flow 25 l/min

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Features

- Valve with pressure compensator for the pressure-compensated control of a flow
- Actuation by means of proportional solenoid
- For subplate mounting:
  - Position of ports to ISO 4401-03-02-0-94
  - Subplates according to data sheet RE 45052 (separate order), see page 10
- With electrical closed-loop position control of the metering orifice
- The position transducer coil can be axially shifted, which simplifies zero point balancing of the metering orifice (electrical-hydraulic) without the need for intervening into the control electronics
- Low manufacturing tolerances of the valve and the electrical amplifier types VT-VRPA1-150-1X (analogue) and amplifier module types VT-MRPA1-150-1X (analogue), separate order, see page 6
- Flow control in both directions due to rectifier sandwich plate

Information on available spare parts:
www.boschrexroth.com/spc
**Ordering code:** Proportional flow control valve

| 2FRE 6 | \( _{-2X/4} \) | K4 | V | *
|---|---|---|---|---

**Size 6**

With external closing of the pressure compensator \( = A \) (suppression of start-up jump)

Without external closing of the pressure compensator \( = B \)

Component series 20 to 29 \( = 2X \)

(20 to 29: unchanged installation and connection dimensions)

Nominal flow \( A \rightarrow B / \)

Flow characteristics

Linear:
- up to 1 l/min \( = 1L \)
- up to 2 l/min \( = 2L \)
- up to 8 l/min \( = 8L \)

Progressive:
- up to 3 l/min \( = 3Q \)
- up to 6 l/min \( = 6Q \)
- up to 10 l/min \( = 10Q \)
- up to 16 l/min \( = 16Q \)
- up to 25 l/min \( = 25Q \)

Progressive with rapid speed

Fine control range up to 2 l/min \( = 2QE \)

Further details in clear text

**FKM seals, suitable for mineral oil (HL, HLP) to DIN 51524**

**R =** With check valve

**M =** Without check valve

**Electrical connection**

**K4 =** Without cable socket

with component socket to DIN EN 175301-803-A
for proportional solenoid and
GSA20 for position transducer

Cable sockets – separate order see page 7

**Standard types**

<table>
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<tr>
<th>Type</th>
<th>Material number</th>
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<tbody>
<tr>
<td>2FRE 6 B-2X/LK4RV</td>
<td>R900947600</td>
</tr>
<tr>
<td>2FRE 6 B-2X/8LK4RV</td>
<td>R900934070</td>
</tr>
<tr>
<td>2FRE 6 B-2X/10QK4RV</td>
<td>R900949563</td>
</tr>
<tr>
<td>2FRE 6 B-2X/25QK4RV</td>
<td>R900937871</td>
</tr>
<tr>
<td>2FRE 6 B-2X/2QEK4RV</td>
<td>R900954501</td>
</tr>
</tbody>
</table>

**Ordering code:** Rectifier sandwich plate

| Z4S 6-1X/V | *
|---|---|

**Size 6**

Component series 10 to 19 \( = 1X \)

(10 to 19: unchanged installation and connection dimensions)

FKM seals, suitable for mineral oil (HL, HLP) to DIN 51524 \( = V \)

Further details in clear text

**Type** | **Material number**
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<tbody>
<tr>
<td>Z4S 6-1X/V</td>
<td>R900489356</td>
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</table>

**Attention!**

Rectifier sandwich plate type **Z4S 6-1X/V** can **not** be used in conjunction with a proportional flow control valve of type **2FRE 6 A-2X/…** (with external closing of the pressure compensator).