Modular check valves type SHR, SKR

direct or pilot operated, ISO 4401 sizes 06 and 10

SHR, SKR are check valves available in direct or pilot operated models.

SHR-0 = size 06: flow up to 60 l/min, pressure up to 350 bar.

SKR-0 = size 10: flow up to 120 l/min, pressure up to 315 bar.

Valves are designed to operate in hydraulic systems with hydraulic mineral oil or synthetic fluid having similar lubricating characteristics.

### VALVE CONFIGURATION

<table>
<thead>
<tr>
<th>VALVE TYPE</th>
<th>AREA RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHR</td>
<td>3:3:1</td>
</tr>
<tr>
<td>SKR</td>
<td>3:3:1</td>
</tr>
</tbody>
</table>

The pilot pressure applied through ports A or B opens the valve acting on ports B and A, respectively. The minimum pilot pressure is a function of the area ratio, see the following table.
Assembly position / location | Any position
---|---
Subplate surface finishing | Roughness index Ra 0,4 - flatness ratio 0,01/100 (ISO 1101)
MTTFd values according to EN ISO 13849 | 150 years, for further details see technical table P007
Ambient temperature | Standard execution = -30°C ÷ +70°C
| PE option = -20°C ÷ +80°C
| BT option = -40°C ÷ +70°C
Seals, recommended fluid temperature | NBR seals (standard) = -20°C ÷ +80°C, with HFC hydraulic fluids = -20°C ÷ +50°C
| FKM seals (PE option) = -20°C ÷ +80°C
| HNBR seals (BT option) = -40°C ÷ +60°C, with HFC hydraulic fluids = -40°C ÷ +50°C
Recommended viscosity | 15÷100 mm²/s - max allowed range 2.8 ÷ 500 mm²/s
Fluid contamination class | ISO 4406 class 21/18/16 NAS 1638 class 10, achievable with in-line filters - 25 μm (810 ÷ 75 recommended)

### 4. DIAGRAMS OF SHR-0 based on mineral oil ISO VG 46 at 50°C

Flow through check valve:

1. A→A; B→B of SHR-012, SHR-013, SHR-014
2. A→A; B→B of SHR-012, SHR-013, SHR-014
3. SHR-011, SHR-016

### 5. DIAGRAMS OF SKR-0 based on mineral oil ISO VG 46 at 50°C

Flow through check valve:

1. A→A; B→B of SKR-012, SKR-013, SKR-014
2. A→A; B→B of SKR-012, SKR-013, SKR-014
3. SKR-011, SKR-016
6 INSTALLATION DIMENSIONS OF SHR-0 VALVES [mm]

SHR-002  SHR-003  SHR-004  SHR-012  SHR-013  SHR-014

LATERAL VIEW

Mass: 1 Kg

SHR-011  SHR-016

LATERAL VIEW

Mass: 0.7 Kg

ISO 4401: 2005
Mounting surface: 4401-03-02-0-05
Diameter of ports A, B, P, T: Ø = 7.5 mm (max)
Seals: 4 OR 108

View from X

Fastening bolts: n° 4 socket head screws M6. The length depends on number and type of modular elements associated.

7 INSTALLATION DIMENSIONS OF SKR-0 VALVES [mm]

SKR-012  SKR-002  SKR-003  SKR-004  SKR-013  SKR-014

LATERAL VIEW

Mass: 2.3 Kg

SKR-016

LATERAL VIEW

Mass: 2.5 Kg

SKR-011

LATERAL VIEW

Mass: 1.7 Kg

ISO 4401: 2005
Mounting surface: 4401-05-04-0-05
Diameter of ports A, B, P, T: Ø = 11.2 mm (max)
Seals: 5 OR 2050

View from X

Fastening bolts: n° 4 socket head screws M6. The length depends on number and type of modular elements associated.