CART B*, CART D*, QBF
Shuttle valves, check valves and flow regulators for piloting lines and load sensing blocks
screw-in mounting
Available only on request

Cartridge valves for piloting lines and load sensing blocks

Applications:
CART-B* are shuttle valves which automatically select the piloting line at higher pressure and contemporary shut-off the piloting line at lower pressure. They are used for pilot pressure selection in load sensing blocks or in modular pressure compensators (see KT catalog, table D150)

CART-D* are simple check valves mainly used in load sensing blocks: D-5 model is used together with CART-B* for check function on LS line among different users.

QBF-06/1 is a pressure compensated flow control valve, screw-in execution. It is used to provide a constant flow to pilot stages of proportional valves.

1 MODEL CODE of shuttle valves and check valves

<table>
<thead>
<tr>
<th>CART</th>
<th>B -</th>
<th>3</th>
<th>/</th>
<th>*</th>
</tr>
</thead>
</table>

Screw-in mounting
B = Shuttle valve
D = Check valve

Size for type B:
3 = max flow 6 l/min
5 = max flow 5 l/min
6 = max flow 15 l/min

Size for type D:
5 = max flow 5 l/min

2 MODEL CODE of flow regulator

| QBF | 06 | / | 1 | / |

Flow regulator

Size = G1/4”

3 HYDRAULIC SYMBOLS

4 HYDRAULIC CHARACTERISTICS

<table>
<thead>
<tr>
<th>VALVE MODEL</th>
<th>CART B-3</th>
<th>CART B-5</th>
<th>CART B-6</th>
<th>CART D-5</th>
<th>QBF-06/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max pressure (bar)</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max flow (l/min)</td>
<td>6</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>Regulated flow (l/min)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.75 ± 1.5</td>
</tr>
<tr>
<td>Min regulated Δp (bar)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
</tbody>
</table>

5 MAIN CHARACTERISTICS OF SHUTTLE VALVES AND FLOW REGULATORS

Assembly position
Any position
Ambient temperature
-20°C + 70°C
Fluid
Hydraulic oil as per DIN 51524. 536; for other fluids see section [1]
Recommended viscosity
15–100 mm²/s at 40°C (ISO VG 15–100)
Fluid contamination class
ISO 4401 class 2/19/16 NAS 1638 class 10 (filters at 25 µm value with β10 ≥ 75 recommended)
Fluid temperature
-20°C +60°C (standard seals) -20°C +80°C (PE seals)
Cavity CART B-3
Cavity dimensions for mounting inside manifold with optional plug A3-D5TH-100014

Cavity CART B-6
Cavity dimensions for subplate mounting

Cavity CART B-5
Cavity QBF-06/1/* Positioning QBF-06/1/*

Cavity CART D-5

<table>
<thead>
<tr>
<th>Distance L [mm]</th>
<th>l/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 2.5</td>
<td>0.75</td>
</tr>
</tbody>
</table>