Danfoss SBFV - High performance steel butterfly valves

High performance butterfly valves
Tight and reliable solution

Special design for district heating and cooling applications

Danfoss SBFV are high performance steel butterfly valves that together with Danfoss JIP™ ball valves complete the family of shut off valves designed especially for district heating and district cooling systems.

Danfoss SBFV are triple offset butterfly valves with unique lamellar seat design that ensures reliable operation and tightness in both directions even at high and low temperatures. They are primarily designed as shut-off valves but can be as well used for simple control purposes.

The packing box has been designed on the same principle as on JIP™ ball valves where a carbon reinforced PTFE sealing is used that does not deteriorate over years and can be tightened while in the pipeline thus ensuring external tightness for lifetime.

Quality

tight and reliable

Unique lamellar seal with triple offset design together with special carbon reinforced PTFE stem sealing secure reliable operation and tightness.

www.heating.danfoss.com
### Technical data

<table>
<thead>
<tr>
<th>DN (mm)</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
<th>400</th>
<th>450</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>1000</th>
<th>1200</th>
<th>1400</th>
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<tbody>
<tr>
<td>kvs (m³/h)</td>
<td>1270</td>
<td>2100</td>
<td>3300</td>
<td>4200</td>
<td>6700</td>
<td>7700</td>
<td>9900</td>
<td>14500</td>
<td>22000</td>
<td>28000</td>
<td>38000</td>
<td>47000</td>
<td>65000</td>
<td>88000</td>
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<tr>
<td>Torque (Nm)</td>
<td>560</td>
<td>790</td>
<td>1560</td>
<td>1930</td>
<td>2450</td>
<td>3270</td>
<td>4280</td>
<td>4930</td>
<td>9800</td>
<td>14200</td>
<td>15200</td>
<td>22500</td>
<td>32600</td>
<td>55500</td>
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<tr>
<td>PN</td>
<td>16/25</td>
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<tr>
<td>Δp max (bar)</td>
<td>16*</td>
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<tr>
<td>Temperature (°C)</td>
<td>-20 - 240**</td>
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<tr>
<td>Medium</td>
<td>Circulation water / glycolic water up to 50%</td>
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</table>

* on special demand products with higher Δp can be delivered
** temperature depends on the pressure. Please see pressure-temperature diagram for details

### SBFV flow diagram (water)

For best performance of controlling the flow please choose dedicated Danfoss control valves.

SBFV butterfly valves can be used for simple regulation in opening angles from 30° to 90°.

To avoid high flow speed, cavitation and turbulence, opening angle from 0-30° should not be used.

Maximum flow velocities for media should not exceed:
- 3 m/s [DN200-400]
- 2.5 m/s [DN450-800]
- 2m/s [DN1000-1400]