Shower mode

Shut-off position is the center position

ADVANTAGES

- It simplifies the design of the shower valve
- No separate diverter mechanism
- Cost reduction in faucet production
- It provides easier, more intuitive operation
- Easier cleaning

Bath filling mode
Ceramic Bath & Shower Diverter Cartridge
Rotary Flow - Thru Type • 40 mm Size
Model BSDF-40

TECHNICAL CHARACTERISTICS
OF THE CERAMIC DISCS:

<table>
<thead>
<tr>
<th>Material:</th>
<th>AL₂O₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface roughness Ra:</td>
<td>0.3 µm</td>
</tr>
<tr>
<td>Contact surface area:</td>
<td>50-70%</td>
</tr>
</tbody>
</table>

TECHNICAL CHARACTERISTICS
OF THE CARTRIDGE:

Mixing angle in bath position (clockwise): 90°
Mixing angle in shower position (anti-clockwise): 90°
Max. water pressure: 35 bar / 500 psi
Max. temperature: 90°C / 194°F
Max. tightening torque: 12 Nm / 106 lbf•in
Pressure test:
  - Pneumatic: 6 bar / 87 psi
  - Hydraulic: 35 bar / 500 psi
Flow rate: (3 bar / 45 psi, test faucet, EN 817)
  - 28 l/min / 7.4 gpm in bath position without resistance
  - 12.6 l/min / 4 gpm in shower position without resistance
Endurance test:
  - EN 817: 70 000 cycles
  - ASME A 112.18.1M: 500 000 cycles

- Rotational action provides on-off and temperature control in two selectable outputs. (no volume control)
- Mixed water flows thru either the cartridge stem towards the bath or through the bottom outlet to the shower.
- ±90° travel from off to full hot in both operating ranges.

FLOW RATE & HYSTERESIS CURVES

Test faucet, resistance „C“
Water pressure: 3 bar

Bath

Shower

Rotational range within comfort zone

Endurance test:

Rotational range within comfort zone
BSDF-40 CARTRIDGE

Non-functional outlet

Ø25.8±0.1

Ø8 Bath outlet hole

Ø10±0.05

Cartridge

Body

Shower output

Shower: 90°

Bathe: 90°

Example for installation

A-A

M 2:1

Different stem specification is also available.