2/2-WAY PRESSURE OPERATED VALVE, FORCE OPERATED, FLANGE DESIGN

**FDV2600**

**Description:**
- 2/2-way pressure operated seat valve
- seat valve with plunger washer
- direct force operated
- body in gray iron, cast steel or stainless steel
- flange connection EN1092-1 PN16 respectively PN40
- installation position only with standing magnet
- DN32 up to DN100 serial-productional with adjustable close muting

**Application area:**
- viscosity 50mm²/s
- medium temperature -40°C to +200°C (PTFE)
- ambient temperature -10°C to +60°C
- operating pressure up to 40 bar (cast steel/stainless steel) respectively 16 bar (gray iron). See chart.
- control pressure 4 up to 10 bar
- for hot and cold water, oil and air, in stainless steel design also for aggressive media
- control medium air and neutral liquids

**Explanation:**
During the installation please pay attention to the **flow pattern** (marking with arrow on the body). Optional flow pattern with optional available double-acting piston drive. Other sealings, operating pressures and control cylinder bodies on request. Valves of this line have to be used closing with the medium.

**With aluminium cylinders (Type „xxZ“) there must not be used water as control medium.**

The adjustable close muting can be optional ordered for other nominal sizes (Option RS).

Flanges also according to ANSI and in other pressure stages available.

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Component</th>
<th>Gray iron</th>
<th>Cast steel</th>
<th>Stainless steel</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>GG-25</td>
<td>L</td>
<td>GS-C25</td>
<td>K</td>
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<tr>
<td>2</td>
<td>Seat sealing</td>
<td>PTFE</td>
<td>T</td>
<td>PTFE</td>
<td>T</td>
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<tr>
<td>3</td>
<td>Cylinder</td>
<td>Ø50: Brass</td>
<td>A</td>
<td>Ø50: Brass</td>
<td>A</td>
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<td>4</td>
<td>Spindle sealing</td>
<td>PTFE</td>
<td>T</td>
<td>PTFE</td>
<td>T</td>
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</tbody>
</table>

**Differing medium temperature** for optional sealings:
- EPDM and FKM -10°C up to +80°C

**Wear parts:**
- Valve plate
- Seat sealing
- Retaining disc
- Main valve spindle
- Pilot spindle
- Pilot sealing
- Union nut
- disc
- U-ring
- O-ring
- Spring
- V-Packaging
- Ring
- Piston ring

**Options:**
- PV: Pilot valve GMV3197 / GMV3164
- OF: Free of oil and grease
- DW: Actuator double-acting
- PS: Optional position indication (NO and double-acting)
- PS: Electrical position indication (limit switch)
- PS: 2 inductive limit switch in the transparent box
- HA: Manual override
- VU: Vacuum design with soft sealing
- VU: Vacuum design, also for pressure
- RS: Adjustable close muting

You find information about the appointment code under „Appointment details“. An overview of the complete material code is in the catalog at the beginning of the chapter of the respective product group.
2/2-WAY PRESSURE OPERATED VALVE, FORCE OPERATED, FLANGE DESIGN

* declared is the maximal pressure range at a control pressure of 6bar

**KV-Value:** The nominal flow of KV to VDI/VDE 2173 indicates the water amount in cubic metres per hour, at 100% opened armature, ΔP=1 bar and at a water temperature from 5 to 30°C.

**SYSTEM VALVES**
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<table>
<thead>
<tr>
<th>Matchcode</th>
<th>Size</th>
<th>Operating pressure*</th>
<th>Measures [mm]</th>
<th>Weight [kg]</th>
<th>Kv-Value** [m³/h]</th>
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<tbody>
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<td>closing with medium</td>
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<tr>
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<td>NC</td>
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<td></td>
<td>tion [inch]</td>
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Body gray iron (PN16)

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<tr>
<th>Matchcode</th>
<th>Size</th>
<th>Operating pressure*</th>
<th>Measures [mm]</th>
<th>Weight [kg]</th>
<th>Kv-Value** [m³/h]</th>
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<tbody>
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<td>DN15  15  50</td>
<td>12A 0-16</td>
<td>22A 0-16</td>
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<td>24Z 0-16</td>
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<td>150 667</td>
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</table>

Body cast steel / stainless steel (PN16/PN40)

<table>
<thead>
<tr>
<th>Matchcode</th>
<th>Size</th>
<th>Operating pressure*</th>
<th>Measures [mm]</th>
<th>Weight [kg]</th>
<th>Kv-Value** [m³/h]</th>
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<td>25Z 0-40</td>
<td>600 580 375</td>
<td>155 667</td>
</tr>
</tbody>
</table>

Errors and changes excepted. Change status: 01/2017-002

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Functions:

closed in rest position (NC):

Type 1xx: closing with the medium, single-acting. With liquids there can occur closing and opening strokes.

Type 3xx: closing against the medium, single-acting.

opened in rest position (NO):

Type 2xx: closing with the medium, single-acting

Type 4xx: closing against the medium, single-acting

optional flow pattern:

Type 5xx/Type 6xx: for optional flow pattern

Optional available:

The GMV3197 as 3/2-way-pilot valve, direct force operated, for control of the compressed air cylinder. If necessary for big nominal sizes we advise the GMV3164 for faster closing times.

You find detailed information in the product group „Solenoid valve“.

Appointment details:

1: Basistype: FDV2600

2: Connection size:
   - 52-63 (see chart)
   - 82-90 (ANSI-Flanges)
   - attached is the pressure stage:
     1: PN16
     3: PN40

3: Material:
   - 1. Body material
     L=Grey iron
     K=Cast steel
     O=Stainless steel
   - 2. Spindle sealings and
     E=EPDM
     T=PTFE
     V=FKM
   - 3. Seat sealings

4. Nominal size in 1/10mm (s. chart)

5: Type of the pressure cylinder (other types on request):
   - 1. Information about the function
     1=closing with medium, NC, single-acting
     2=closing with medium, NO, single-acting
     3=closing against medium, NC, single-acting
   - 2. Information about the cylinder diameter:
     2: Ø50
     4: Ø80
     5: Ø125
   - 3. Material of the cylinder
     A=Brass (blank)
     O=Stainless steel
     Z=Aluminium

6: Options (see „Options“)

Demands on your application conditions that are not listed on the data sheet, can be requested!

The guide book and the maintenance guidelines, particularly the given safety instructions have to be paid attention to before the installation!