Solenoid Valve
Type 150
Nominal size DN 10–20
Pressure range 0.0–2.0 bar

Features
• direct acting thermoplastic valve
• fast switching
• core tube sealed by PTFE bellows
• independent of compressed air supply
• wide area of application

Additional options on demand
• Atex
• special voltages

www.asv-stuebbe.com/produkte/armaturen
Pictogram  Solenoid Valve Type 150

Actuator:

... NC 1 NO
... 24 V DC 1 230 V, 50 Hz

Sealing

EPDM

FPM

Pressure setting range:
DN 10  0 - 2 bar
DN 15  0 - 1 bar
DN 20  0 - 0.5 bar

Basic normal size:

<table>
<thead>
<tr>
<th>DN 8</th>
<th>DN 10</th>
<th>DN 15</th>
<th>DN 20</th>
<th>DN 25</th>
<th>DN 32</th>
<th>DN 40</th>
<th>DN 50</th>
<th>DN 65</th>
<th>DN 80</th>
<th>DN 100</th>
<th>DN 125</th>
<th>DN 200</th>
<th>DN 250</th>
<th>DN 300</th>
<th>DN 350</th>
<th>DN 400</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Connection material (process connection)

1. PVC-U socket DIN
2. PP socket DIN
3. PTFE female thread Rp fix *

* only available DN 10, DN 15

We reserve the right to make technical changes.

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Use
• chemical plant engineering
• industrial plant engineering
• Water treatment

Application
• Quick-closing, electrically actuated shut-off valve for small flow volumes
• Suitable for high switching frequencies
• for low operating pressures between 0–2 bar

Functions
• controlled directly, closed when de-energized (NC)
• controlled directly, open when de-energized (NO)
• A solenoid system opens and closes the valve directly. No operating or differential pressure is required. The valve is active from 0 bar.

Design
• seat valve with PTFE bellows

Flow medium
• Technically pure, neutral and aggressive fluids, provided that the selected valve materials are resistant at the operating temperature according to the ASV resistance guide.
• Not suitable for use in medium types containing solids.

ASV-Stübbe resistance guide
• www.asv-stuebbe.de/pdf_resistance/300051.pdf

Medium temperature
• PVC-U, PTFE: 0–50 °C
• PP: 10–50 °C

Operating pressure
• PN 0.0–2.0 bar
• When connected to direct current, the operating pressure is reduced by approx. 20%.
• See graphics „Pressure/temperature diagram“

Viscosity
• up to approx. 37 mm²/s (cSt)

Housing
• PVC-U, PP, PTFE

Bellows
• PTFE

Sealing element
• FPM, EPDM

Ambient temperature
• 0–50 °C (max.)

Connection
• PVC-U: socket end for solvent welding
• PP: fusion socket end
• PTFE: female threaded socket

Connector plug
• according to DIN EN 175301-803, shape A
• for AC with integrated rectifier

Voltage
• 24 V DC
• 230 V, 50 Hz
• special voltages on request

Voltage tolerance
• +/-10% according to VDE 0580

Coil capacity
• 8 Watt

Power consumption
• 230 V, 50 Hz: 8.5 W
• 24 V DC: 7.5 W

Duty cycle
• 100 %

Type of protection
• IP 65 with mounted connector plug
• ATEX II 2 G Ex m II T4 on request

Mounting position
• magnet preferably at the top

Options
• Special voltages
Solenoid Valve Type 150

Connection socket

<table>
<thead>
<tr>
<th>d (mm)</th>
<th>16</th>
<th>16</th>
<th>20</th>
<th>20</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN (mm)</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Pressure (bar)</td>
<td>0 - 2</td>
<td>0 - 2</td>
<td>0 - 1</td>
<td>0 - 1</td>
<td>0 - 0.5</td>
</tr>
<tr>
<td>A PVC-U / PP</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>13</td>
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<tr>
<td>PTFE</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
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<tr>
<td>d</td>
<td>-</td>
<td>16.0</td>
<td>-</td>
<td>20.0</td>
<td>25.0</td>
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<tr>
<td>D</td>
<td>69.0</td>
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<td>69.0</td>
<td>69.0</td>
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<tr>
<td>G*</td>
<td>3/8</td>
<td>-</td>
<td>1/2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H</td>
<td>138</td>
<td>138</td>
<td>138</td>
<td>138</td>
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</table>

all dimensions in mm / * dimensions in inch

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NC circuit diagram (closed when de-energized)

NO circuit diagram (open when de-energized)

<table>
<thead>
<tr>
<th>Position</th>
<th>Quantity</th>
<th>Designation</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>valve body</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Bellows</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Intermediate element</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Union nut</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Intermediate ring</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Plunger</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Plunger guide tube</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Magnet coil</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>Cap nut</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>Flat sealing ring</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>Pressure spring</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>O-ring</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>Flat sealing ring</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>O-ring</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>Threaded bush</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>O-ring</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>Seal bonnet</td>
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</tbody>
</table>

kv value

<table>
<thead>
<tr>
<th>DN (mm)</th>
<th>10</th>
<th>15</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>kv (l/mm)</td>
<td>20.7</td>
<td>29.7</td>
<td>53.0</td>
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</tbody>
</table>

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