2/2-WAY SOLENOID VALVE, PILOT-OPERATED IN PISTON DESIGN FOR STEAM APPLICATIONS

Description:
- 2/2-way valve
- piston design
- pilot-operated
- female thread acc. to ISO228
- duty cycle 100% (VDE0580)
- any installation position, upright solenoid position recommended
- close muting
- high flow rate

Range of application:
- viscosity 40 mm²/s
- medium temperature -10°C up to +200°C
- ambient temperature: -10°C up to +50°C
- working pressure: 0.1 - 10 bar
- The minimum pressure is necessary for pressure difference
- IP65 (with a professionally installed connector socket) according to DIN40050 --> DIN EN 60529
- for hot water and steam

References:
For contaminated fluids insertion of a strainer is recommended
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Attention! The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Comments:
Only minor solenoid force is required, because a pilot hole uses the pressure difference.

Please note the flow direction (marked with arrow on the body) during installation. Voltage tolerance +10% / -10% at maximum pressure and standard ambient temperature.

Other voltage, coil power or sealing on request! Other sealings on request. Included is the connector socket. Further connector sockets can be found in the catalog under "square parts and accessories". Higher protection class than IP65 with special coils and connector sockets is possible on request.

Threads according to EN 228: It describes the threaded connection of a parallel male thread with a parallel female thread and is marked with "G".

<table>
<thead>
<tr>
<th>pos.</th>
<th>part</th>
<th>brass</th>
<th>optional material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>body</td>
<td>CW617N</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>cover</td>
<td>CW617N</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>valve piston including sealing ring</td>
<td>PTFE</td>
<td>T</td>
</tr>
<tr>
<td>4</td>
<td>sealing ring</td>
<td>FPM/PTFE</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>o-ring</td>
<td>FPM/PTFE</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>lip seal</td>
<td>FPM/PTFE</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>o-ring</td>
<td>FPM/PTFE</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>o-ring</td>
<td>FPM/PTFE</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>pressure spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>solenoid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>pressure spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>plunger</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wear parts:
- Pos. 3: valve piston with sealing
- Pos. 9: pressure spring
- Pos. 4: sealing ring
- Pos. 5: o-ring
- Pos. 6: lip seal
- Pos. 10 solenoid
- Pos. 8: o-ring
- Pos. 11: pressure spring
- Pos. 12: plunger
- Pos. 8: o-ring

An overview of the complete material code you can find at the beginning of each product section of the product catalogue.

Options:
- NO: opened in rest position
- HA: manual override
### GMV8532 - 2/2-WAY SOLENOID VALVE, PILOT-OPERATED IN PISTON DESIGN FOR STEAM APPLICATIONS

**Type:** GMV8532

**Errors and changes excepted.**

**Revision:** 11/2018-004

**Strong Basis. Individual Solutions.**

**SYSTEM VALVES**

- **match code**
<table>
<thead>
<tr>
<th>size [inch]</th>
<th>nominal size [mm]</th>
<th>working pressure min.</th>
<th>working pressure max. AC</th>
<th>working pressure max. DC</th>
<th>L [mm]</th>
<th>H1 [mm]</th>
<th>H2 [mm]</th>
<th>B [mm]</th>
<th>weight [kg]</th>
<th>CV* [m³/h]</th>
<th>solenoid power AC</th>
<th>solenoid power DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMV8532-02AT80-B31-x</td>
<td>G1/4</td>
<td>8</td>
<td>1</td>
<td>25</td>
<td>60</td>
<td>93.5</td>
<td>11.5</td>
<td>44</td>
<td>0.8</td>
<td>2.2</td>
<td>15/10VA</td>
<td>10W</td>
</tr>
<tr>
<td>GMV8532-03AT100-B31-x</td>
<td>G3/8</td>
<td>10</td>
<td>1</td>
<td>25</td>
<td>60</td>
<td>93.5</td>
<td>11.5</td>
<td>44</td>
<td>0.8</td>
<td>3.4</td>
<td>15/10VA</td>
<td>10W</td>
</tr>
<tr>
<td>GMV8532-04AT120-B31-x</td>
<td>G1/2</td>
<td>12</td>
<td>1</td>
<td>25</td>
<td>67</td>
<td>93.5</td>
<td>14</td>
<td>44</td>
<td>0.8</td>
<td>4.4</td>
<td>15/10VA</td>
<td>10W</td>
</tr>
<tr>
<td>GMV8532-05AT200-B31-x</td>
<td>G3/4</td>
<td>20</td>
<td>1</td>
<td>25</td>
<td>80</td>
<td>102.5</td>
<td>16.5</td>
<td>50</td>
<td>1.3</td>
<td>7</td>
<td>15/10VA</td>
<td>10W</td>
</tr>
<tr>
<td>GMV8532-06AT250-B31-x</td>
<td>G1</td>
<td>25</td>
<td>1</td>
<td>25</td>
<td>95</td>
<td>110.5</td>
<td>21</td>
<td>62</td>
<td>1.7</td>
<td>10.5</td>
<td>15/10VA</td>
<td>10W</td>
</tr>
</tbody>
</table>

*soledon power for AC*: listed are the pick-up power and the holding power.

*CV value*: The nominal flow rate CVs acc. to VDI/VDE 2173 shows the water quantity in cubic meter per hour with the valve fully opened, \(\Delta p=1\) and the water temperature between 5°C and 30°C.

**Order information:**

1. type: GMV8532
2. connection size: 02-06
3. materials:
   - 1. digit: body material A (brass)
   - 2. digit: sealing T (PTFE)
4. nominal size in 1/10mm (see table)

5. operation:
   - specification of the solenoid type: B31
   - specification of voltage:
     - 0: 230V AC
     - 1: 24V DC
   - Other voltage on request.

6. options (see "options")

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!
Heating and power of solenoid coils

default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- the self-heating of the magnet coil
- the medium temperature
- the ambient temperature

Solenoid coils are by default designed for a maximum ambient temperature of +50 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve, 100% duty cycle and a medium temperature of +200 °C.

Operating temperature solenoid (DC) reduces the power consumption. For physical reasons up to approx. 30%.