**3/2-WAY SOLENOID VALVE, DIRECT OPERATED SEAT VALVE (ECO)**

**Description:**
- 3/2-way valve
- seat valve
- direct operated
- female thread acc. to ISO228
- duty cycle 100% (VDE0580)
- any installation position, upright solenoid position recommended

**Range of application:**
- viscosity 22mm²/s
- medium temperature -10°C up to +130°C
- ambient temperature: -10°C up to +50°C
- working pressure from 0 bar, no pressure difference required
- IP65 (with a professionally installed connector socket) according to DIN 40050
- for hot and cold water, oil and air

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

The tube is also available with a G1/8" connector.

Other voltage and coil power on request! Other sealings on request. Included is the connector socket GS01 (21x28mm). Further connector sockets can be found in the catalog under square parts and accessories. Higher protection class than IP65 is possible with special coils and connector sockets.

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

<table>
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<tr>
<th>pos.</th>
<th>part</th>
<th>brass</th>
<th>optional material</th>
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<tr>
<td>8</td>
<td>body</td>
<td>CW617N</td>
<td>A</td>
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<tr>
<td>5</td>
<td>tube</td>
<td>stainless steel and FKM</td>
<td>V  stainless steel and EPDM</td>
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<tr>
<td>6</td>
<td>plunger and sealing</td>
<td>FKM</td>
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<tr>
<td>3</td>
<td>o-ring</td>
<td>FKM</td>
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<td>7</td>
<td>o-ring</td>
<td>FKM</td>
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<tr>
<td>4</td>
<td>solenoid</td>
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</tbody>
</table>

wear parts: sealing system:
- Pos. 7: o-ring

wear parts solenoid system:
- Pos. 3: o-ring
- Pos. 4: solenoid
- Pos. 5: tube
- Pos. 6: plunger and sealing

* Please note different medium temperatures:
- EPDM up to max. 120°C

**Options:**
- NO: opened in rest position up to nominal size 3mm
- OF: free of oil and grease
- CV: chemically nickel plated body
- HA: manual override up to nominal size 3mm
- NPT: pipe thread ANSI B 1.20.1
GMV3197-01Ax10-M01-x
1/8 1 0 18 30 60.8 7 18 0.15 0.03 16/10VA 7W
GMV3197-01Ax12-M01-x
1/8 1.2 0 15 30 60.8 7 18 0.15 0.042 16/10VA 7W
GMV3197-01Ax15-M01-x
1/8 1.5 0 10 30 60.8 7 18 0.15 0.06 16/10VA 7W
GMV3197-01Ax20-M01-x
1/8 2 0 5 30 60.8 7 18 0.15 0.114 16/10VA 7W
GMV3197-01Ax30-M01-x
1/8 3 0 2 30 60.8 7 18 0.15 0.21 16/10VA 7W

*solenoid 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: GMV3197
2: connection size: 01 (1/8”)
3: materials:
   • 1. digit: body material A (brass)
   • 2. digit: sealing E=EPDM V=FKM (standard)
4. nominal size in 1/10mm (see table)

5: operation
   • specification of the solenoid type: M01
   • 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 +130 °C.