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Double solenoid valve
Nominal width
Rp 2 (DN 50)
DN 65 - DN 125

DMV/12
DMV-D/12
DMV-DLE/12

7.37

Technical Description
The DUNGS double solenoid valve DMV consists of two solenoid valves in one compact unit:
- Automatic shut-off valves as per DIN EN 161 Class A Group 2.
- Two A-valves in one housing
- Double disc valves
- High flow rates
- Max. operating overpressure 0.5 bar (50 kPa)
- Fast-closing
- Fast-opening (DMV-D) or slow-opening (DMV-DLE) with adjustable fast stroke for start gas rate
- Adjustable main load (DMV-D, DMV-DLE)
- DC solenoid
- Closed position signal contact can be mounted
- Small dimensions, low weight

Application
Double solenoid valves are used at places where earlier two single valves were assembled. A large variety of regulation functions can be carried out by combining these valves with DUNGS gas pressure regulation devices and additional components. It does not contain any non-ferrous metals, suitable for gases of up to max. 0.1 vol.% H₂S, dry. Suitable for gases of families 1, 2, 3 and other neutral gaseous media.

Approvals
EU type test approval as per EU Gas Appliance Directive:
DMV-...D Rp 2 (DN 50) CE-0085 BO 0236
DMV-...DN 65-125 CE-0085 BO 0236
EU type test approval as per EU Pressure Equipment Directive:
DMV-...DN 65-125 CE0036
Approvals in other important gas-consuming countries.
### Technical Data

#### Nominal width

<table>
<thead>
<tr>
<th>Flanges</th>
<th>DN 65</th>
<th>80</th>
<th>100</th>
<th>125</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection flanges as per DIN 2501 part 1 for welding neck flanges as per DIN 2633 (PN16) DN 65 - DN 125, EN 1097-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length as per DIN 3202 part 1, series F1 for DN 65 - DN 125</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Nominal diameters

<table>
<thead>
<tr>
<th>Flange with pipe thread as per ISO 7-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMV 525/12</td>
</tr>
<tr>
<td>Rp 2</td>
</tr>
<tr>
<td>and their combinations</td>
</tr>
</tbody>
</table>

#### Max. operating pressure

500 mbar (50 kPa)

#### Solenoid valve V1

Automatic shut-off valve as per EN 161: Class A, Group 2

#### Solenoid valve V2

Automatic shut-off valve as per EN 161: Class A, Group 2

#### Closing time

< 1 s

#### Opening time

DMV/12 + DMV-D/12: < 1 s
DMV-DLE/12: approx. 20 s at room temperature + 20 °C and without fast stroke

#### Fast stroke

Adjustable (DMV-DLE/12)

#### Main load restrictor

Adjustable (DMV-D/12, DMV-DLE/12)

#### Material used for gas-conveying parts

- **Housing:** aluminium, steel, non-ferrous heavy metals
- **Seals at the valve seat:** NBR-based, suitable for gases as per G260/I

#### Ambient temperature

-15 °C to +60 °C

#### Installation position

Solenoid in upright vertical to horizontal position

#### Dirt trap device

Filter integrated. We recommend mounting an upstream gas filter to protect the entire gas train. See data sheet gas filter 11.02.

#### Measuring gas connection

G 1/4 DIN ISO 228, in the centre before V1 and after V2
G 1/8 DIN ISO 228, on both sides before V1, between V1 and V2, after V2

#### Ignition gas connection

Ignition gas flange G 3/4, DIN ISO 228 possible on both sides between V1 and V2

#### Voltage / frequency

~(AC) 50 - 60 Hz 230 V -15 % + 10 %, other voltages on request.
Standard voltages: ~(AC) 110 V - 120 V, = (DC) 24 V - 28 V

#### Power / current draw at ~(AC) 230 V, +20 °C

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DMV 525/12</td>
<td>2 x 65</td>
<td>2 x 16</td>
<td>2 x 0.32</td>
<td>2 x 0.11</td>
</tr>
<tr>
<td>DMV...5065/12</td>
<td>2 x 95</td>
<td>2 x 20</td>
<td>2 x 0.54</td>
<td>2 x 0.20</td>
</tr>
<tr>
<td>DMV...5080/12</td>
<td>2 x 125</td>
<td>2 x 25</td>
<td>2 x 0.54</td>
<td>2 x 0.20</td>
</tr>
<tr>
<td>DMV...5100/12</td>
<td>2 x 125</td>
<td>2 x 25</td>
<td>2 x 0.54</td>
<td>2 x 0.20</td>
</tr>
<tr>
<td>DMV...5125/12</td>
<td>2 x 130</td>
<td>2 x 25</td>
<td>2 x 0.56</td>
<td>2 x 0.20</td>
</tr>
</tbody>
</table>

#### Degree of protection / switch-on duration

IP 54 / 100 % duty

#### Electrical connection

Plug-in connection as per DIN EN 175301-803

#### Radio interference suppression

Interference level N

#### Closed position signal contact

Type K01/1 (DIN tested) can be mounted at V1 and V2
### Dimensions for DMV-...-

<table>
<thead>
<tr>
<th>Type</th>
<th>Ordering no.</th>
<th>Connection DN</th>
<th>(P_{\text{max.}}) [W]</th>
<th>Opening time</th>
<th>Dimensions in [mm]</th>
<th>Solenoid No.</th>
<th>Switching operations/h[^1]</th>
<th>Weight [kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMV 525/12</td>
<td>on request</td>
<td>Rp 2 (DN 50)</td>
<td>130</td>
<td>&lt; 1 s</td>
<td>162 88 179 275 125</td>
<td>97</td>
<td>1411/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV 5065/12</td>
<td>243 099</td>
<td>DN 65</td>
<td>190</td>
<td>&lt; 1 s</td>
<td>290 104 246 365 185</td>
<td>110</td>
<td>1511/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV-D 5065/12</td>
<td>243 100</td>
<td>DN 65</td>
<td>190</td>
<td>&lt; 1 s</td>
<td>290 104 246 365 185</td>
<td>110</td>
<td>1511/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV-DLE 5065/12</td>
<td>245 719</td>
<td>DN 65</td>
<td>190</td>
<td>&lt; 20 s</td>
<td>290 104 265 365 185</td>
<td>110</td>
<td>1511/2PL</td>
<td>20</td>
</tr>
<tr>
<td>DMV 5080/12</td>
<td>244 427</td>
<td>DN 80</td>
<td>250</td>
<td>&lt; 1 s</td>
<td>310 119 292 450 200</td>
<td>116</td>
<td>1611/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV-D 5080/12</td>
<td>244 294</td>
<td>DN 80</td>
<td>250</td>
<td>&lt; 1 s</td>
<td>310 119 292 450 200</td>
<td>116</td>
<td>1611/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV-DLE 5080/12</td>
<td>245 686</td>
<td>DN 80</td>
<td>250</td>
<td>&lt; 20 s</td>
<td>310 119 347 450 200</td>
<td>116</td>
<td>1611/2PL</td>
<td>20</td>
</tr>
<tr>
<td>DMV 5100/12</td>
<td>244 300</td>
<td>DN 100</td>
<td>250</td>
<td>&lt; 1 s</td>
<td>350 142 329 500 220</td>
<td>125</td>
<td>1711/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV-D 5100/12</td>
<td>244 299</td>
<td>DN 100</td>
<td>250</td>
<td>&lt; 1 s</td>
<td>350 142 329 500 220</td>
<td>125</td>
<td>1711/2P</td>
<td>60</td>
</tr>
<tr>
<td>DMV-DLE 5100/12</td>
<td>245 687</td>
<td>DN 100</td>
<td>250</td>
<td>&lt; 20 s</td>
<td>350 142 390 500 220</td>
<td>125</td>
<td>1711/2PL</td>
<td>20</td>
</tr>
<tr>
<td>DMV-D 5125/12</td>
<td>246 383</td>
<td>DN 125</td>
<td>260</td>
<td>&lt; 1 s</td>
<td>400 128 415 635 250</td>
<td>140</td>
<td>1811/2P</td>
<td>60</td>
</tr>
</tbody>
</table>

[^1]: Number of switching operations for DMV-...-... also depends on the opening time.

Note: Plug-in connection and system accessories must be ordered separately.
<table>
<thead>
<tr>
<th>Variants</th>
<th>DMV/12 Rp 2 (DN 50)</th>
<th>DMV/12 DN 65 - DN 125</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMV</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>DMV-D</td>
<td>--</td>
<td>□</td>
</tr>
<tr>
<td>DMV-DLE</td>
<td>--</td>
<td>□</td>
</tr>
<tr>
<td>Filter</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Gas pressure switch can be mounted:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on the flange</td>
<td>□</td>
<td>(∙)</td>
</tr>
<tr>
<td>after the filter, before V1</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>between V1 and V2</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>after valve 2</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>valve V1, double seat</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>valve V2, double seat</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Valves open separately</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Ignition gas flange G 3/4</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

- □ = standard
- (∙) = on request
- -- = not possible
- □' = only DN 65-100

**DMV/12** Two single stage solenoid valves, de-energised in absence of current, fast-opening, fast-closing.

**DMV-D/12** Two single stage solenoid valves, de-energised in absence of current, fast-opening, fast-closing. Manual limitation of gas flow is possible with main load adjustment (D) at valve 1 (V1).

**DMV-DLE/12** Two single stage solenoid valves, de-energised in absence of current, slow-opening (L), fast-closing. Adjustment of opening time (E) with fast stroke range at valve 2 (V2). Manual limitation of gas flow is possible with main load adjustment (D) at valve 1 (V1).
Modular system double solenoid valve

System accessories
The double solenoid valve has been designed for direct assembly of DUNGS system accessories and supplementary equipment.

Information on system accessories

Valve testing system VPS 504
Data sheet 8.10

Pressure limiter for multiple actuators ÜB, NB…A2
Data sheet 5.08

Compact pressure switch for multiple actuators GW...A5
Data sheet 5.02

Signal contact K01/1 for checking the closed position of valves
Data sheet 12.01

If system accessories are assembled, it may not be possible to mount an additional device!
Double solenoid valve
Nominal width
Rp 2 (DN 50)
DN 65 - DN 125

DMV/12
DMV-D/12
DMV-DLE/12

We reserve the right to make changes in the interest of technical progress.