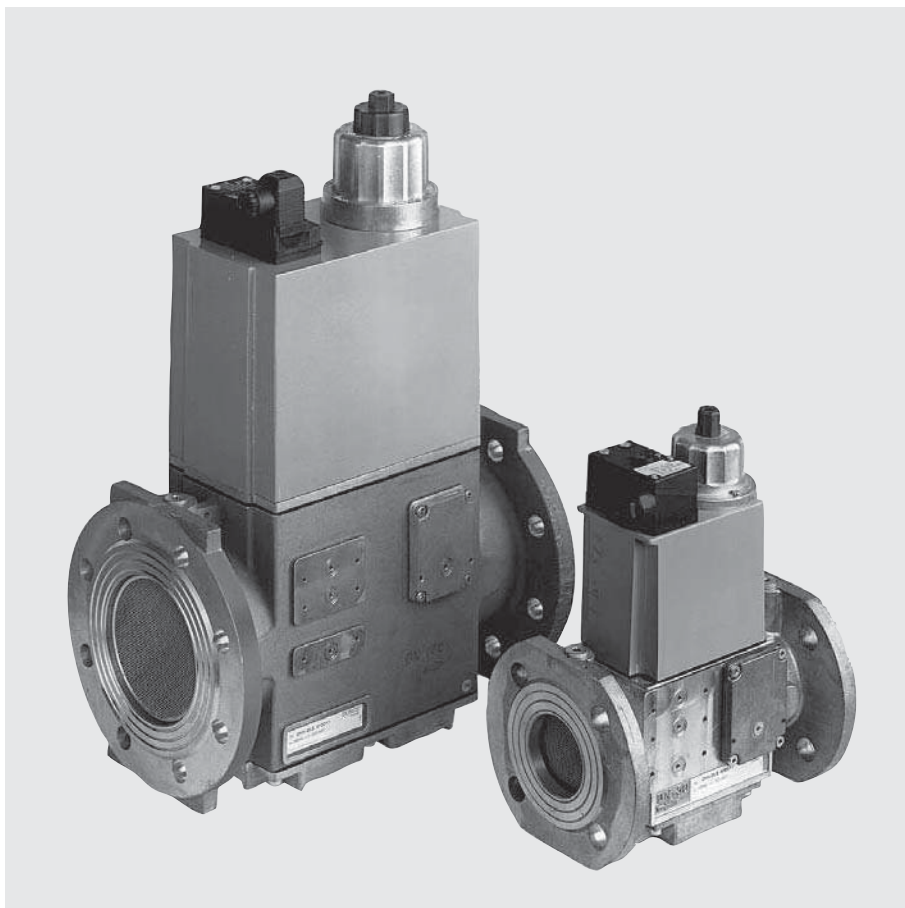


Double solenoid valve DN 40 - DN 125 nominal diameters

DMV-D/11
DMV-DLE/11

DUNGS®

7.31



Technical description

The DUNGS double solenoid valve DMV integrates two solenoid valves in one compact fitting.

- Automatic shut-off valves as per DIN EN 161 Class A Group 2.
- Two A valves in one housing
- Double seat valves
- High flow rates
- Max. operating pressure up to 0.5 bar
- Fast closing
- Fast opening (DMV-D/11) or slow opening (DMV-DLE/11) with adjustable fast stroke for start gas volume
- Adjustable main volume
- DC solenoid
- Mountable closed position signal contact
- Compact, light-weight

Application

Double solenoid valves are used where two single valves were mounted previously. In connection with DUNGS gas regulators and additional components, a wide variety of regulating tasks can be performed. 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

EC type test approval as per EC Gas Appliance Directive:
DMV-...5040-5125/11 CE-0085 AN 2801
EC type test approval as per EC Pressure Equipment Directive:
DMV-...5040-5125/11 CE0036
Approvals in other important gas consuming countries.

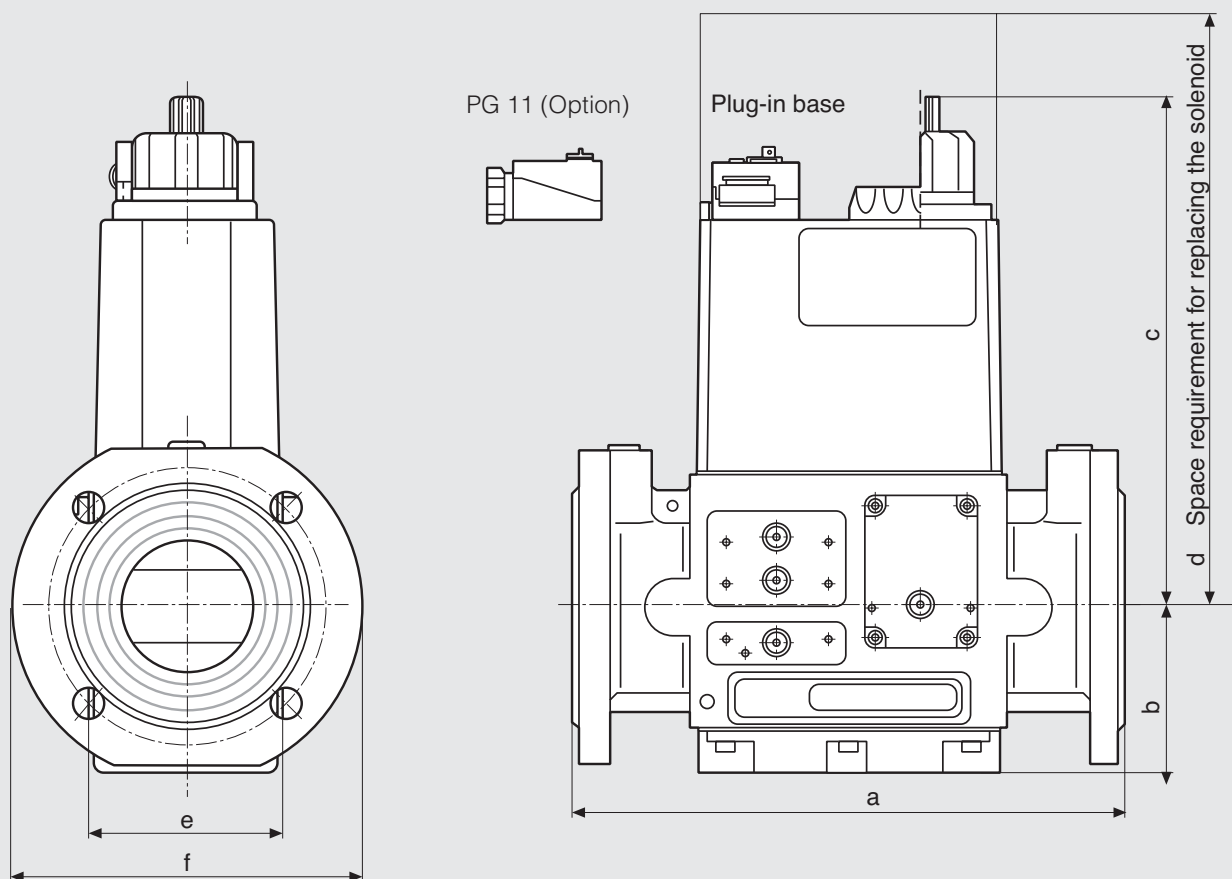
DMV-D/11 Two single-stage solenoid valves normally closed, fast opening, fast closing. Manual limitation of flowing gas volume by main volume setting (D) at valve 1 (V1).

DMV-DLE/11 Two single-stage solenoid valves normally closed, slow opening (L), fast closing. Opening time setting (E) with fast stroke section at valve 2 (V2). Manual limitation of flowing gas volume by main volume setting (D) at valve 1 (V1).

Specifications

| Nominal diameters | DN 40 50 65 80 100 125 | | | | | | | | | | | | | | | | | | | | | |
|--|---|-------------------------------|---------------------|-------------------------------|-------------------|----|------|-------------------|----|------|-------------------|-----|------|-------------------|-----|------|-------------------|-----|------|-------------------|-----|------|
| Flange | Connection flange as per DIN 2501 Part 1, to fit preweld flanges as per DIN 2633 (PN 16) DN 40 to DN 125, ISO 7005 - 1 (PN 16), ISO 7005 - 2 (PN 16) Construction length as per DIN 3202 Part 1, row F1 for DN 65 to DN 125 | | | | | | | | | | | | | | | | | | | | | |
| 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-D.../11: < 1 s DMV-DLE.../11: approx. 20 s at room temperature +20°C and without fast stroke | | | | | | | | | | | | | | | | | | | | | |
| Fast stroke | Adjustable | | | | | | | | | | | | | | | | | | | | | |
| Main valve restrictor | Adjustable | | | | | | | | | | | | | | | | | | | | | |
| Materials of gas conveying parts | Housing: aluminium, steel, no non-ferrous metals Seals at valve seat: NBR basis, suitable for gases as per G260/I | | | | | | | | | | | | | | | | | | | | | |
| Ambient temperature | -15 °C to +60 °C | | | | | | | | | | | | | | | | | | | | | |
| Installation position | Solenoid vertically upright to lying horizontally | | | | | | | | | | | | | | | | | | | | | |
| Dirt trap | Sieve installed. To protect the complete gas train we recommend you to install an upstream gas filter (refer to Datasheet 2.03) | | | | | | | | | | | | | | | | | | | | | |
| Measuring gas connection | G 1/4 DIN ISO 228 centrally upstream of V1 and downstream of V2 G 1/8 DIN ISO 228 on both sides upstream of V1, between V1 and V2, downstream of V2 | | | | | | | | | | | | | | | | | | | | | |
| Ignition gas connection | G 3/4 ignition gas flange as per ISO 228, possible on both sides between V1 and V2 | | | | | | | | | | | | | | | | | | | | | |
| Voltage/frequency | 50 - 60 Hz, 220 V - 240 V AC, -15% +10%, further voltages on request Other preferred voltages: 110 V - 120 V AC, 24 V - 28 V DC | | | | | | | | | | | | | | | | | | | | | |
| Rating / power consumption at 230 V AC, + 20°C | <table border="1"> <thead> <tr> <th>Version</th> <th>Approx. rating [VA]</th> <th>Approx. operating current [A]</th> </tr> </thead> <tbody> <tr> <td>DMV-D(LE) 5040/11</td> <td>90</td> <td>0.37</td> </tr> <tr> <td>DMV-D(LE) 5050/11</td> <td>90</td> <td>0.37</td> </tr> <tr> <td>DMV-D(LE) 5065/11</td> <td>110</td> <td>0.46</td> </tr> <tr> <td>DMV-D(LE) 5080/11</td> <td>110</td> <td>0.46</td> </tr> <tr> <td>DMV-D(LE) 5100/11</td> <td>135</td> <td>0.56</td> </tr> <tr> <td>DMV-D(LE) 5125/11</td> <td>200</td> <td>0.84</td> </tr> </tbody> </table> | Version | Approx. rating [VA] | Approx. operating current [A] | DMV-D(LE) 5040/11 | 90 | 0.37 | DMV-D(LE) 5050/11 | 90 | 0.37 | DMV-D(LE) 5065/11 | 110 | 0.46 | DMV-D(LE) 5080/11 | 110 | 0.46 | DMV-D(LE) 5100/11 | 135 | 0.56 | DMV-D(LE) 5125/11 | 200 | 0.84 |
| Version | Approx. rating [VA] | Approx. operating current [A] | | | | | | | | | | | | | | | | | | | | |
| DMV-D(LE) 5040/11 | 90 | 0.37 | | | | | | | | | | | | | | | | | | | | |
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| DMV-D(LE) 5080/11 | 110 | 0.46 | | | | | | | | | | | | | | | | | | | | |
| DMV-D(LE) 5100/11 | 135 | 0.56 | | | | | | | | | | | | | | | | | | | | |
| DMV-D(LE) 5125/11 | 200 | 0.84 | | | | | | | | | | | | | | | | | | | | |
| Degree of protection / switch-on duration | IP 54 / 100 % | | | | | | | | | | | | | | | | | | | | | |
| Electrical connection | PG* 11 cable gland, plug connection as per DIN EN 175301-803 on request (* = heavy-gauge conduit thread) | | | | | | | | | | | | | | | | | | | | | |
| Radio interference | Degree of interference N | | | | | | | | | | | | | | | | | | | | | |
| Closed position signal contact | Type K01/1 (DIN tested), can be mounted on V1 and V2 | | | | | | | | | | | | | | | | | | | | | |

Dimensions for DMV-D/11 and DMV-DLE/11



| Version | Order No. (PG11) | p _{max.} [bar] | Conne- ction DN | Dimensions [mm] | | | | | | Sole- noid No. | Swit- ching rate/h ¹⁾ | Weight [kg] |
|------------------------|------------------|-------------------------|-----------------------|-----------------|------|-----|-----|-----|-----|----------------------|--|----------------|
| | | | | a | b | c | d | e | f | | | |
| DMV-D 5040/11 | 224 380 | 0.5 | DN 40 | 240 | 62.5 | 192 | 330 | 100 | 150 | 1211 | 1000 | 7.8 |
| DMV-D 5050/11 | 224 381 | 0.5 | DN 50 | 240 | 73 | 192 | 330 | 100 | 165 | 1212 | 1000 | 8.3 |
| DMV-D 5065/11 | 224 382 | 0.5 | DN 65 | 290 | 87 | 251 | 450 | 102 | 185 | 1411 | 1000 | 14.6 |
| DMV-D 5080/11 | 224 383 | 0.5 | DN 80 | 310 | 104 | 293 | 510 | 129 | 200 | 1511 | 1000 | 23.6 |
| DMV-D 5100/11 | 224 384 | 0.5 | DN 100 | 350 | 119 | 331 | 600 | 143 | 220 | 1611 | 1000 | 30.6 |
| DMV-D 5125/11 | 224 385 | 0.5 | DN 125 | 400 | 142 | 412 | 750 | 161 | 255 | 1711 | 1000 | 50.6 |
| DMV-DLE 5040/11 | 224 923 | 0.5 | DN 40 | 240 | 62.5 | 220 | 330 | 100 | 150 | 1211 | 100 | 7.9 |
| DMV-DLE 5050/11 | 224 924 | 0.5 | DN 50 | 240 | 73 | 220 | 330 | 100 | 165 | 1212 | 100 | 8.4 |
| DMV-DLE 5065/11 | 224 925 | 0.5 | DN 65 | 290 | 87 | 269 | 450 | 102 | 185 | 1411 | 100 | 14.8 |
| DMV-DLE 5080/11 | 224 926 | 0.5 | DN 80 | 310 | 104 | 312 | 510 | 129 | 200 | 1511 | 100 | 24.1 |
| DMV-DLE 5100/11 | 226 111 | 0.5 | DN 100 | 350 | 119 | 382 | 600 | 143 | 220 | 1611 | 100 | 31.1 |
| DMV-DLE 5125/11 | 226 107 | 0.5 | DN 125 | 400 | 142 | 462 | 750 | 161 | 255 | 1711 | 100 | 51.1 |

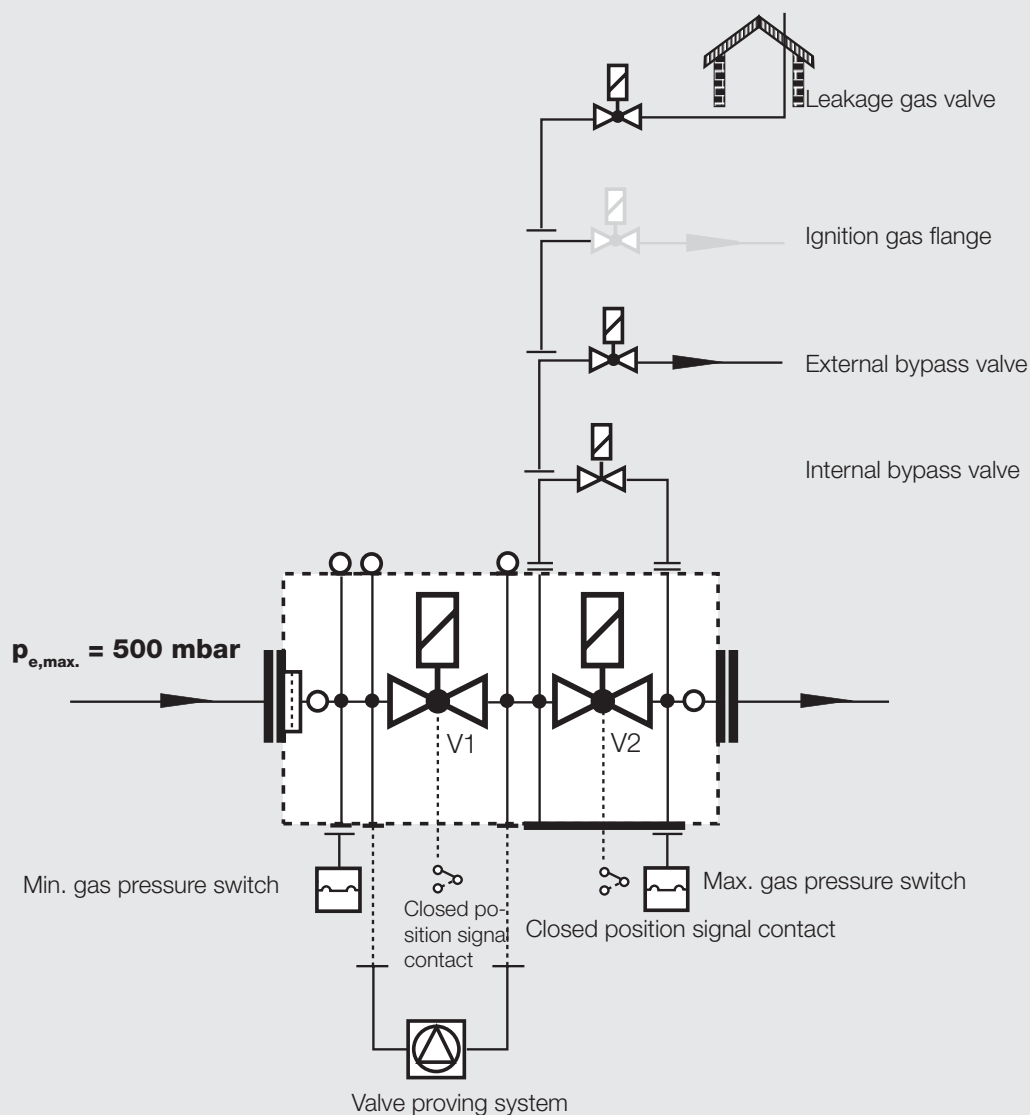
¹⁾ Switching rate of DMV-DLE 50.../11 depends on opening time setting

⚠ Important: Always order, plug connection and system accessories separately.

| Equipment variants of DMV.../11 double solenoid valve, single-stage mode | DMV 5040/11 - DMV 5125/11 |
|--|---------------------------|
| DMV-D | ◆ |
| DMV-DLE | ◆ |
| Sieve | ◆ |
| Gas pressure switch can be mounted: on flange downstream of sieve downstream of valve 2 | -- ◆ ◆ |
| Valve V1, double-seat | ◆ |
| Valve V2, double-seat | ◆ |
| Valves opening separately | ◆ |
| G 3/4 ignition gas flange can be mounted | ◆ |

◆ = standard
 (◆) = on request
 -- = not possible

Double solenoid valve modular system



System accessories

The double solenoid valve is prepared for direct mounting of **DUNGS** system accessories and additional equipment.

Compact pressure switch for multiple actuators GW...A5

Datasheet 5.02



If a system accessory is added, it may not be possible to mount further devices.

Information on system accessories

VPS 504 valve proving system

Datasheet 8.10

K01/1 closed position signal contact to monitor closed position of valves

Datasheet 12.01

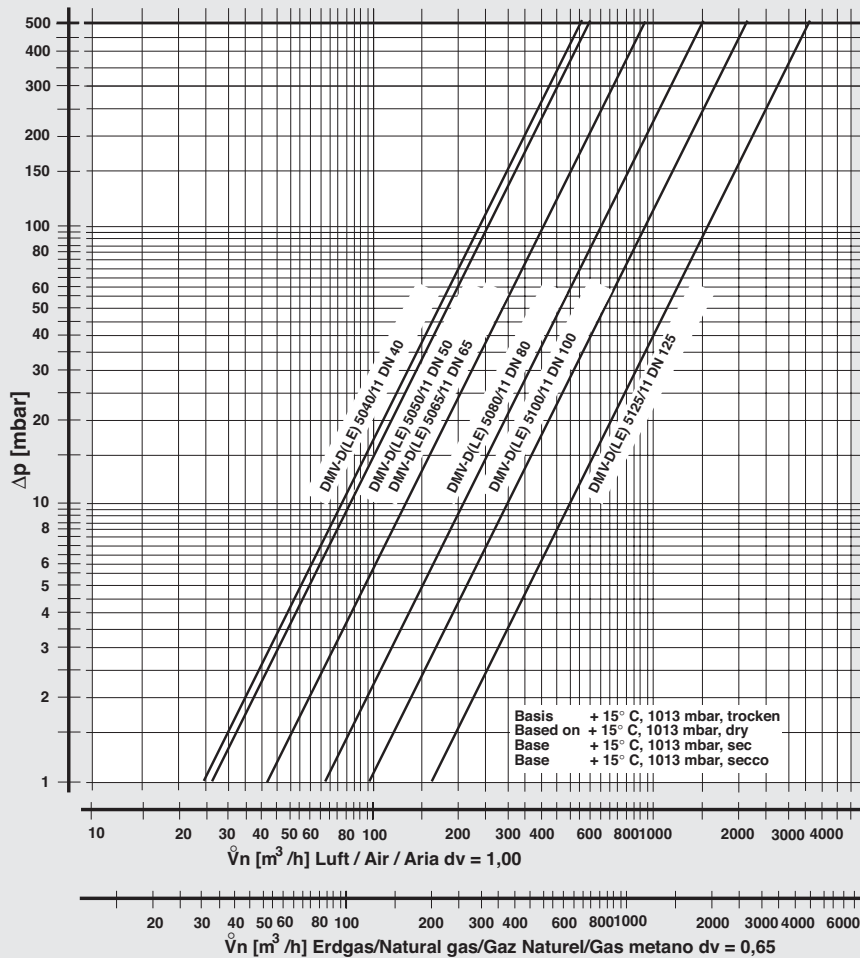
Pressure limiter ÜB, NB...A2 for multiple actuators

Datasheet 5.08

**Double solenoid valve
Flow diagram
DN 40 - DN 125
nominal diameters**

**DMV-D/11
DMV-DLE/11**

DUNGS®



$$f = \sqrt{\frac{\text{Dichte Luft} / \text{Spec. weight air} / \text{poids spécifique de l'air} / \text{peso específico aria}}{\text{Dichte des verwendeten Gases} / \text{Spec. weight of gas used} / \text{poids spécifique du gaz utilisé} / \text{peso específico del gas utilizzato}}}$$

| Gas type | Spec. Wgt. [kg/m³] | dv | f |
|----------|--------------------|------|------|
| Nat. gas | 0.81 | 0.65 | 1.24 |
| City gas | 0.58 | 0.47 | 1.46 |
| LPG | 2.08 | 1.67 | 0.77 |
| Air | 1.24 | 1.00 | 1.00 |

$$\overset{\circ}{V}_{\text{verwendetes Gas/gas used/ gaz utilisé/gas utilizzato}} = \overset{\circ}{V}_{\text{Luft/air/aria}} \times f$$

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

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