

# Single-stage safety solenoid valves

MV 10..

6.30

**DUNGS®**  
Combustion Controls

neuvità  
nouveau

- Max. operating pressure  
1000 mbar (100 kPa)
- Compact design
- High flow rates
- Degree of protection IP 54
- Low weight
- Low power consumption



## Technical description

The DUNGS safety solenoid valve MV is a single-stage automatic shut-off valve as per EN 161 for gas burners and gas appliances.

- Max. operating pressure up to 1000 mbar (100 kPa)
- normally closed
- MV fast opening
- DC solenoid for low-noise operation; rectifier wiring with radio interference suppression in terminal box with PG screw union
- Pipe thread as per ISO 7/1
- Reliable function, rugged and maintenance-free

## Application

The solenoid valve is used for securing, shutting off and releasing gas supply to gas burners and gas appliances.

The DUNGS safety solenoid valve MV... is suitable for gases of families 1, 2, 3 and other neutral gaseous media.

## Approval

EC type testing certificate as per:

- EC-Gas Appliances Regulation
- EC-Pressure Equipment Directive

Approvals in other important gas consuming countries.

**MV 10..** Single-stage solenoid valve, normally when closed, fast opening, fast closing.

## Specifications

|                                   |                                                                                                                                          |                         |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Nominal diameters                 | 15                                                                                                                                       | 20                      |
| Pipe thread as per ISO 7/1, Rp    | 1/2                                                                                                                                      | 3/4                     |
| Flange                            |                                                                                                                                          |                         |
| Max. operating pressure           | up to 1000 mbar (100 kPa)                                                                                                                |                         |
| Solenoid valve                    | Valve as per EN 161, Class A, Group 2, single-stage mode                                                                                 |                         |
| Closing time                      | < 1 s                                                                                                                                    |                         |
| Opening time                      | < 1 s                                                                                                                                    |                         |
| Materials of gas-conveying parts  | Housing:                                                                                                                                 | aluminium, steel, brass |
|                                   | Seals:                                                                                                                                   | NBR basis               |
| Voltage/frequency                 | 230 V AC (+10 % -15 %); 50-60 Hz - other voltages on request                                                                             |                         |
| Rating / power consumption        | Refer to type overview                                                                                                                   |                         |
| Switch-on duration                | 100 %                                                                                                                                    |                         |
| Degree of protection              | IP 54, IP 65 on request                                                                                                                  |                         |
| Electrical connection             | At screw terminals via PG* 11 cable gland (* = heavy-gauge conduit thread)<br>Plug connection as per DIN 175 0301-803 can be retrofitted |                         |
| Switching rate                    | MV... max. 1000/h                                                                                                                        |                         |
| Measuring/ignition gas connection | G 1/4 ISO 118, on both sides in inlet section                                                                                            |                         |
| Dirt trap                         | Sieve installed, mesh width 1 mm                                                                                                         |                         |
| Ambient temperature               | -15 °C to +60 °C                                                                                                                         |                         |
| Temperature of the medium         | -15 °C to +60 °C                                                                                                                         |                         |
| Installation position             | Solenoid from vertically upright to horizontally lying                                                                                   |                         |
| Accessories                       | Equipment plug for line socket, DIN 175301-803                                                                                           | 215 733                 |

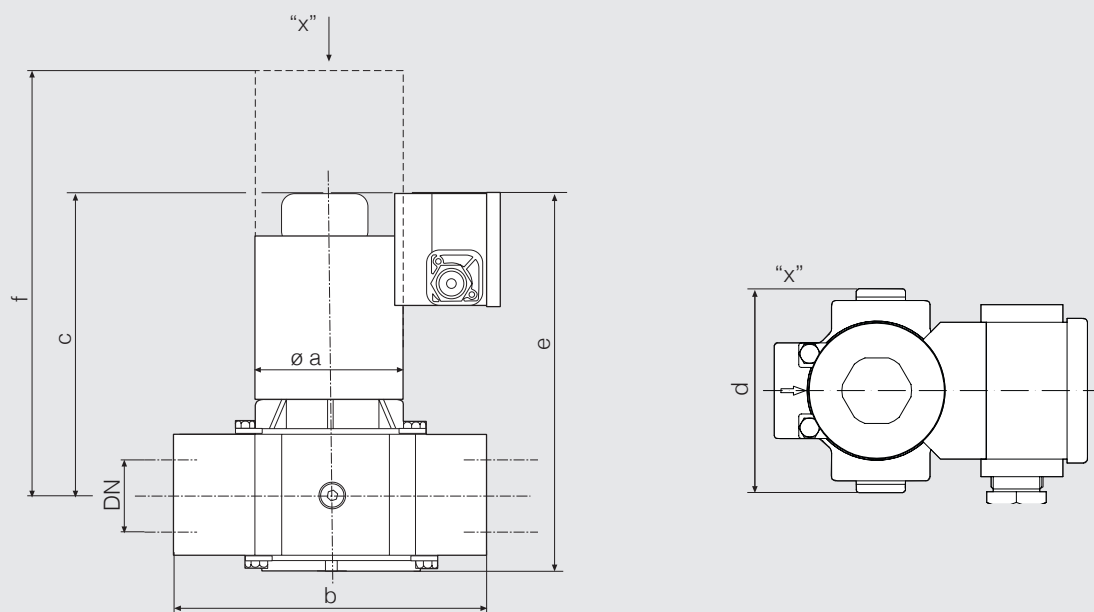
| Type    | p <sub>max.</sub> | DN / Rp | Sole-<br>noid<br>No. | Order No. | P <sub>max.</sub><br>[VA] | I <sub>max.</sub><br>~ (AC)<br>230 V | Opening<br>time | Dimensions [mm] |     |     |    |     |     | Weight<br>[kg] |
|---------|-------------------|---------|----------------------|-----------|---------------------------|--------------------------------------|-----------------|-----------------|-----|-----|----|-----|-----|----------------|
|         |                   |         |                      |           |                           |                                      |                 | ø a             | b   | c   | d  | e   | f   |                |
| MV 1005 | 1000              | Rp 1/2  | 100                  | 246 921   | 24                        | 0.11                                 | < 1 s           | 50              | 75  | 135 | 75 | 129 | 200 | 1.00           |
| MV 1007 | 1000              | Rp 3/4  | 100                  | 246 922   | 30                        | 0.12                                 | < 1 s           | 75              | 100 | 135 | 80 | 182 | 190 | 1.75           |

f = Space requirement for solenoid changing

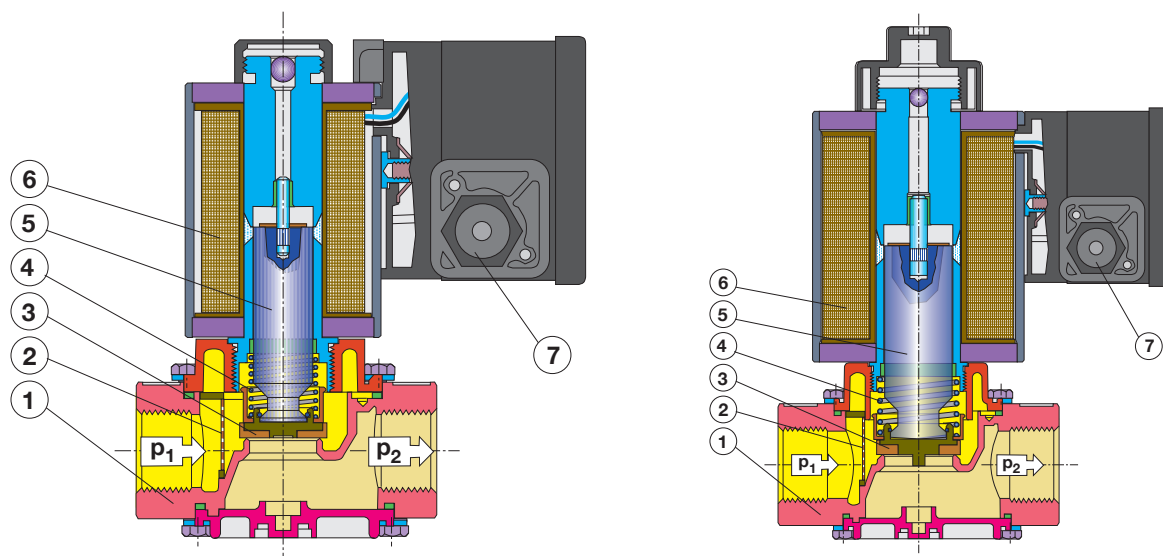
d = largest width

### Dimensions [mm]

#### MV 10..



#### Type MV 10..



- |   |                |   |                       |
|---|----------------|---|-----------------------|
| 1 | Housing        | 5 | Armature              |
| 2 | Sieve          | 6 | Solenoid coil         |
| 3 | Valve plate    | 7 | Electrical connection |
| 4 | Closing spring |   |                       |

### Functional description

The DUNGS safety solenoid valve is an automatic shut-off valve operated with auxiliary power.

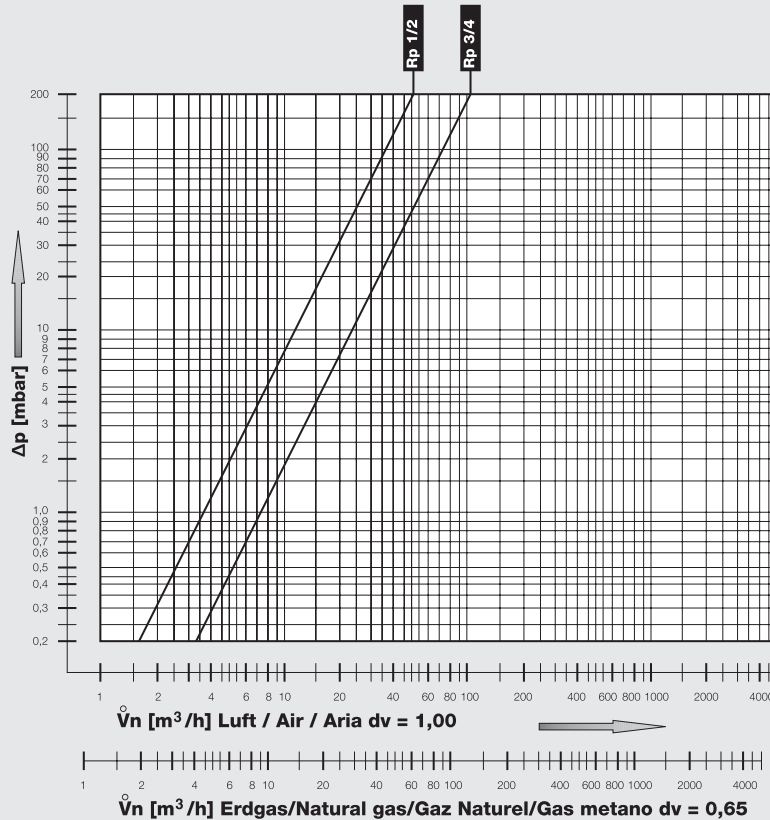
The electromagnetic drive opens against the force of the closing spring 4. If the auxiliary power is interrupted

(operating voltage), closing spring 4 closes the valve within 1 second.

Single-stage safety  
solenoid valves  
MV 10..

**DUNGS®**  
Combustion Controls

Flow diagram



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

Gasart  
Type of gas  
Type de gaz  
Tipo di gas

Dichte  
Spec. Wgt.  
poids spécifique  
Peso specifico  
[kg/m³]

dv

f

f =

Dichte Luft  
Spec. weight air  
poids spécifique de l'air  
peso specifico aria

Dichte des verwendeten Gases  
Spec. weight of gas used  
poids spécifique du gaz utilisé  
peso specifico del gas utilizzato

Erdgas/Nat.Gas/  
Gaz naturel/Gas metano

0.81

0.65

1.24

Stadtgas/City gas/  
Gaz de ville/Gas città

0.58

0.47

1.46

Flüssiggas/LPG/  
Gaz liquide/Gas liquido

2.08

1.67

0.77

Luft/Air/  
Air/Aria

1.24

1.00

1.00

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

**Head Offices and Factory**  
**Karl Dungs GmbH & Co. KG**  
**Karl-Dungs-Platz 1**  
**D-73660 Urbach, Germany**  
**Telephone +49 (0)7181-804-0**  
**Fax +49 (0)7181-804-166**

**Postal address**  
**Karl Dungs GmbH & Co. KG**  
**Postfach 12 29**  
**D-73602 Schorndorf, Germany**  
**e-mail info@dungs.com**  
**Internet www.dungs.com**