

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 test approval as per EC Gas Appliance Directive:

MV... CE-0085 AO3219

EC type test approval as per EC Pressure Equipment Directive:

MV... CE0036

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) 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

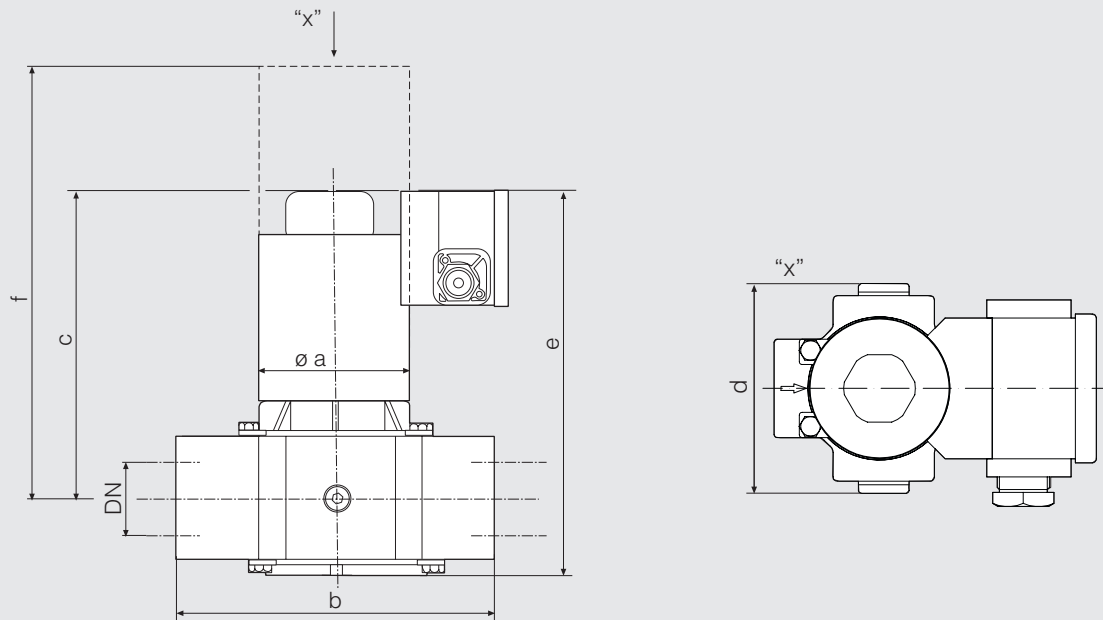
Type	p _{max.}	DN / Rp	Sole-noid No.	Order No.	P _{max.} [VA]	I _{max.} ~ (AC) 230 V	Opening time	Dimensions [mm]						Weight [kg]
								ø a	b	c	d	e	f	
MV 1005	1000	Rp 1/2	100	246 921	24	0.11	< 1 s	50	75	135	75	113	200	1.00
MV 1007	1000	Rp 3/4	100	246 922	30	0.12	< 1 s	75	100	135	80	160	190	1.75

f = Space requirement for solenoid changing

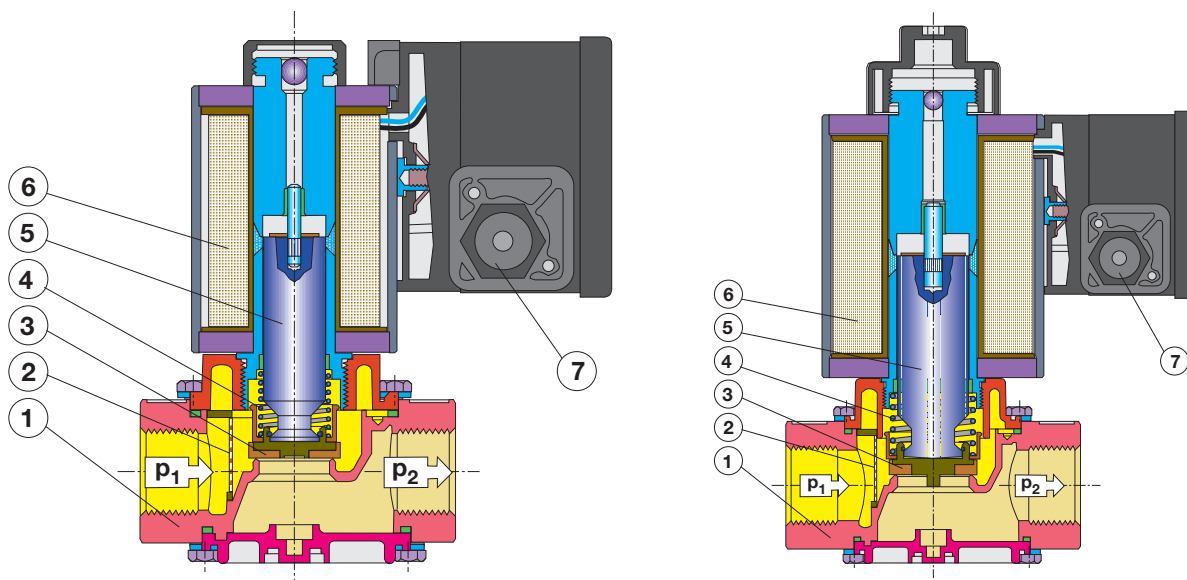
d = largest width

Dimensions [mm]

MV 10..



Type MV 10..



- 1 Housing
- 2 Sieve
- 3 Valve plate
- 4 Closing spring

- 5 Armature
- 6 Solenoid coil
- 7 Electrical connection

Functional description

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

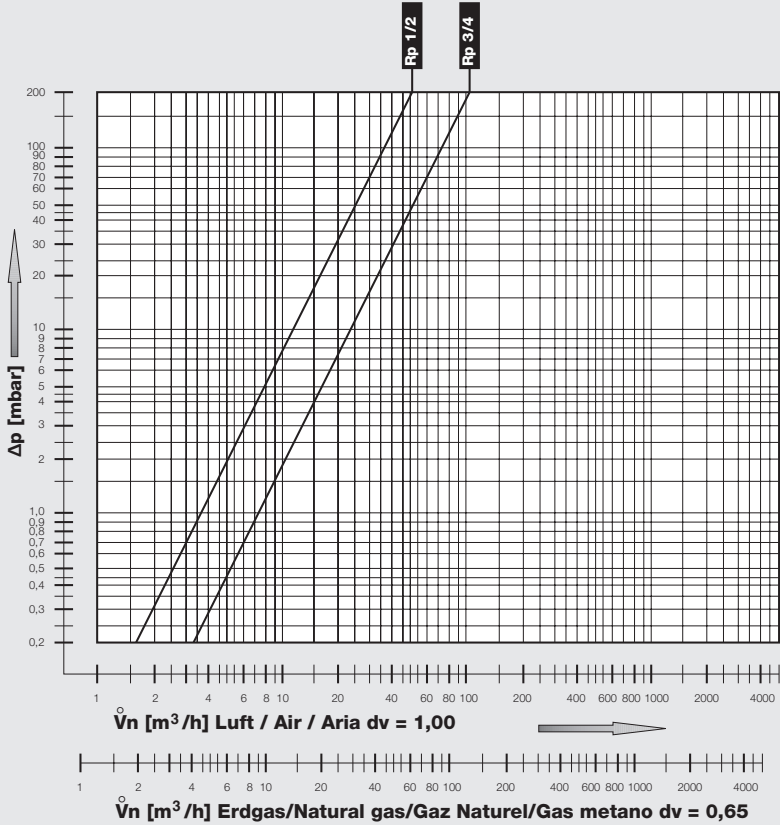
The electromagnetic drive opens against the force of the closing spring 4. If the auxiliary power is interrupted

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

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Flow diagram



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

f =

Dichte Luft
Spec. weight air
poids sp  cifique de l'air
peso specifico aria

Dichte des verwendeten Gases
Spec. weight of gas used
poids sp  cifique du gaz utilis  
peso specifico del gas utilizzato

Gasart
Type of gas
Type de gaz
Tipo di gas

Dichte
Spec. Wgt.
poids sp  cifique
Peso specifico
[kg/m  ]

dv

f

Erdgas/Nat.Gas/
Gaz naturel/Gas metano

0.81

0.65

1.24

Stadtgas/City gas/
Gaz de ville/Gas citt  

0.58

0.47

1.46

Fl  ssiggas/LPG/
Gaz liquide/Gas liquido

2.08

1.67

0.77

Luft/Air/
Air/Aria

1.24

1.00

1.00