

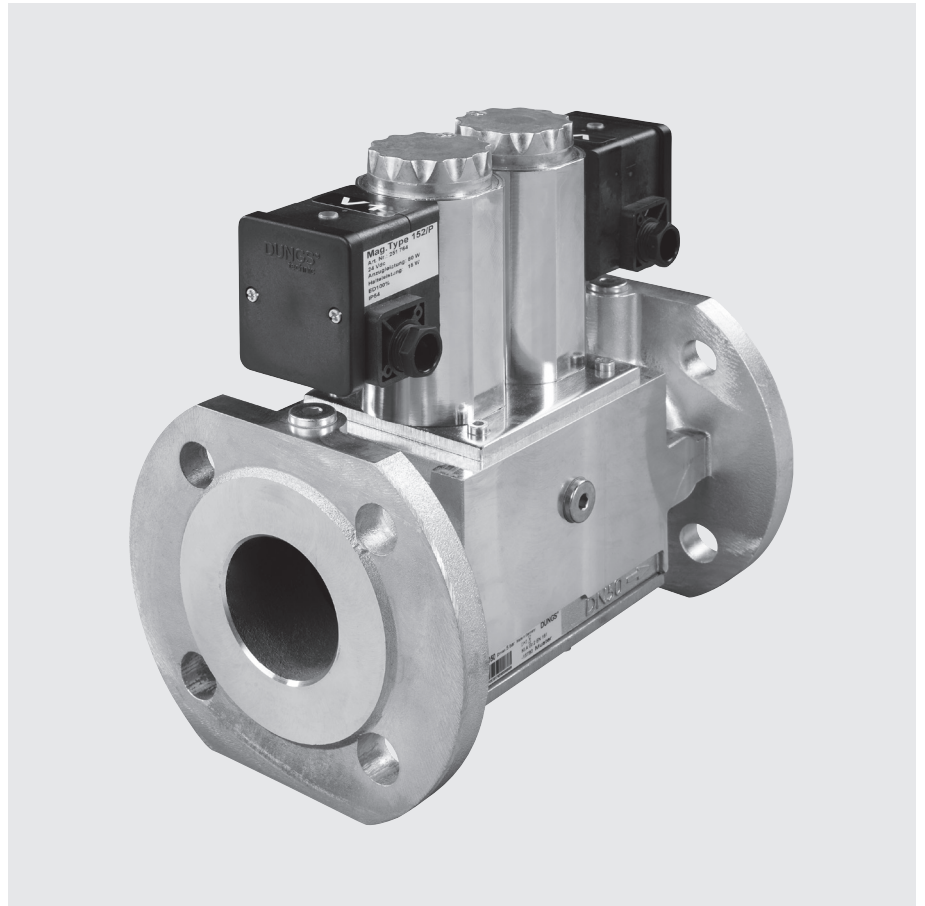
# Double solenoid valve DN 50 nominal diameters

DMV 50050

7.39

**DUNGS**<sup>®</sup>  
Combustion Controls

- Low power consumption
- Low weight
- Compact design
- High flow rates
- Max. operating pressure  
5000 mbar (5 bar, 500 kPa)



## 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 5.0 bar (500 kPa)
- Fast closing
- Fast opening
- DC solenoid
- Low electric power consumption through power switching
- 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. Suitable for gases of families 1, 2, 3 and other neutral gaseous media.

## Approvals

EC type testing certificate as per:

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

Approvals in other important gas consuming countries.

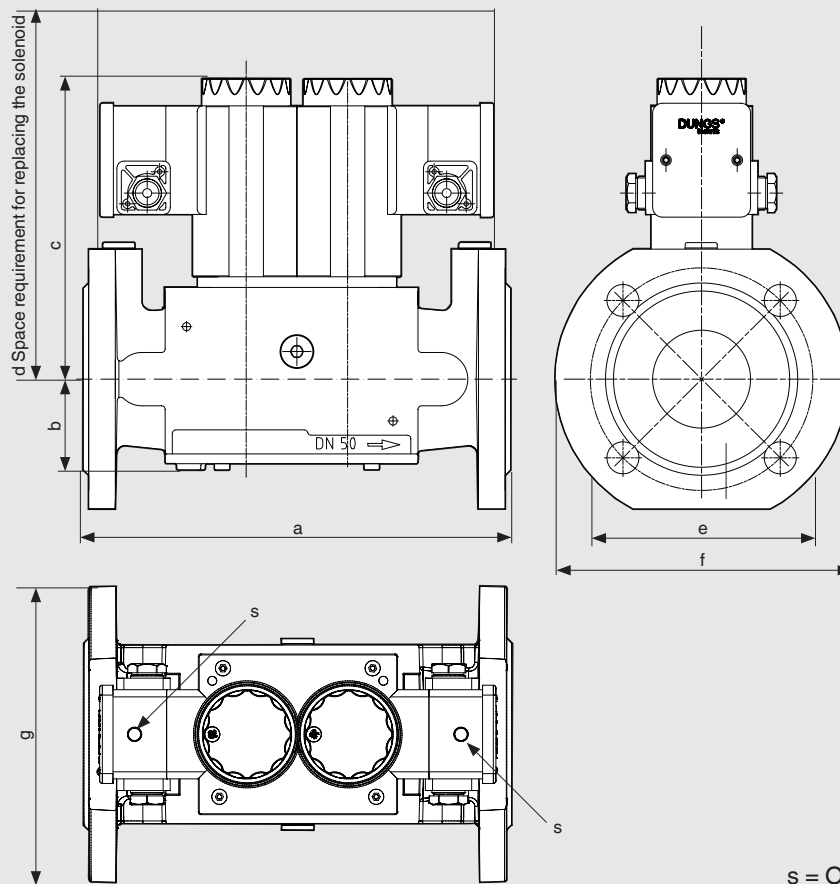
**DMV-50050**

Two single-stage solenoid valves normally closed, fast opening, fast closing.  
Electric activation: separately opening

**Specifications**

Nominal diameters	DN 50				
Flange	Connection flange as per DIN 2501 Part 1, to fit preweld flanges as per DIN 2633 (PN 16) DN 50, ISO 7005 - 1 (PN 16), ISO 7005 - 2 (PN 16) Construction length as per DIN 3202 Part 1, row F1 for DN 50				
Max. operating pressure	5000 mbar (500 kPa) max. pressure difference $\Delta p = 500$ mbar max. flow velocity = 50 m/s				
Solenoid valve V1	Automatic shut-off valve as per EN 161: Class A, Group 2, Version: double-seat				
Solenoid valve V2	Automatic shut-off valve as per EN 161: Class A, Group 2, Version: double-seat				
Closing time	< 1 s				
Opening time	< 1 s				
Materials of gas conveying parts	Housing: aluminium, steel, no non-ferrous metals Seals at valve seat: NBR basis, suitable for gases as per G260/l				
Ambient temperature	-15 °C bis +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				
Measuring gas connection	G 1/4 DIN ISO 228 centrally upstream of V1 and downstream of V2 G 1/4 DIN ISO 228 between V1 and V2				
Voltage/frequency	50 - 60 Hz, 230 V AC, -15% +10%, further voltages on request Other preferred voltages: 110 V - 120 V AC, 24 V DC				
Rating / power consumption	Version	Starting power approx. [W]	Holding power approx. [W]	Break-away starting current [A]	Holding current [A]
at 230 V AC, +20 °C All indications are effective values	DMV 50050	2 x 80	2 x 15	2 x 0.8	2 x 0.5
at 24 V DC, +20 °C	DMV 50050	2 x 80	2 x 15	2 x 9.5	2 x 3.3
Power supply display	Green LED				
Degree of protection / switch-on duration	IP 54 as per IEC 529 (EN 60529)				
Switching cycles	60 per hour (30 s on/off)				
Electrical connection	At screw terminals via PG 11 Plug connection as per DIN 175 0301-803 can be retrofitted				
Radio interference	Degree of interference N				

## Dimensions

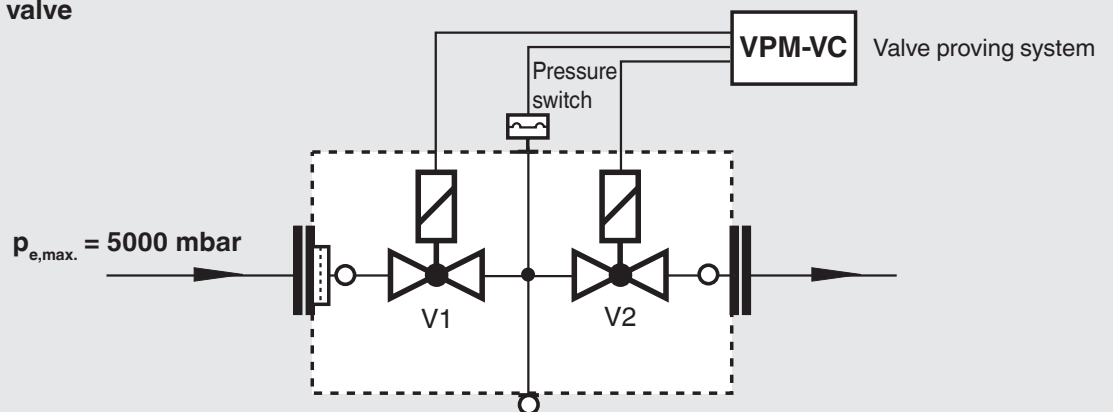


s = Operation display, Green LED

Version	Voltage	Order No.	p <sub>max.</sub> [bar]	Conne- ction DN	Dimensions [mm]						Sole- noid No.	Swit- ching rate/h	Weight [kg]
					a	b	c	d	e	f			
DMV50050	230VAC	254 849	5.0	DN 50	240	51	170	270	102	116	152/P	60	8.6
DMV50050	24 VDC	251 762	5.0	DN 50	240	51	170	270	102	165	152/P	60	8.6

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

## Double solenoid valve



### Accessories

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

### Information on accessories

**VPM-VC valve proving system**  
Datasheet 8.22

**Compact pressure switch for multiple actuators GW...A4 HP**  
Datasheet 5.04

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

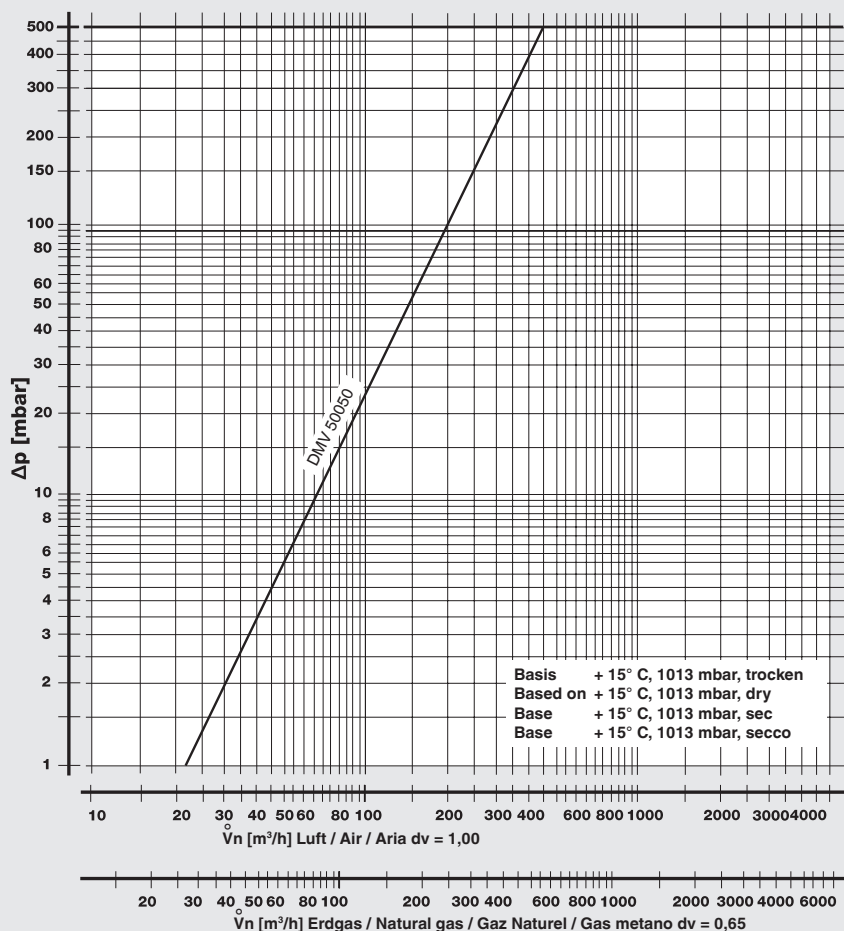
**⚠ When selecting the system components, you must observe the max. operating pressure!**

Double solenoid valve  
DN 50  
nominal diameters

DMV 50050



Flow diagram



max. pressure difference  
Δp = 500 mbar  
max. flow velocity  
= 50 m/s

$$f = \sqrt{\frac{\text{Dichte Luft}}{\text{Dichte des verwendeten Gases}}}$$

Spec. weight air  
 poids spécifique de l'air  
 peso specifico aria  
 Spec. weight of gas used  
 poids spécifique du gaz utilisé  
 peso specifico 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

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

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