

## PRESSURE CONTROL

# Pressure reducing valve DM 762

Millibar control valve for small to medium flow rates



### Technical data

Connection DN	15 - 50
Connection G	1/2 - 2
Nominal pressure PN	16
Inlet pressure	up to 16 bar
Outlet pressure	0.002 - 0.52 bar
$K_{vs}$ value	0.2 - 3.6 m <sup>3</sup> /h
Temperature	130 °C
Medium	gases and liquids

### Description

Self-acting pressure reducers are simple control valves offering accurate control while being easy to install and maintain. They control the pressure downstream of the valve without requiring pneumatic or electrical control elements.

The DM 762 pressure reducing valve is a diaphragm-controlled spring-loaded proportional control valve for very small outlet pressures and medium volumes in potentially explosive atmospheres. This pressure reducer is manufactured from deep-drawn stainless steel featuring excellent corrosion resistance. The valve cone is fitted with a soft seal.

The outlet pressure to be controlled is balanced across the control unit by the force of the valve spring (set pressure). As the outlet pressure rises above the pressure set using the adjusting screw, the valve cone moves towards the seat and the volume of medium is reduced. As the outlet pressure drops, the valve control orifice increases; when the pipeline is depressurised, the valve is open. Rotating the adjusting screw clockwise increases the outlet pressure.

The valve requires a sense line (to be installed on-site).

We recommend that G 1 and G 1½ or DN 25 and DN 40 connections be used.

These valves are no shut-off elements ensuring a tight closing of the valve. In accordance with DIN EN 60534-4 and/or ANSI FCI 70-2 they may feature a leakage rate in closed position in compliance with the leakage classes V optional IV.

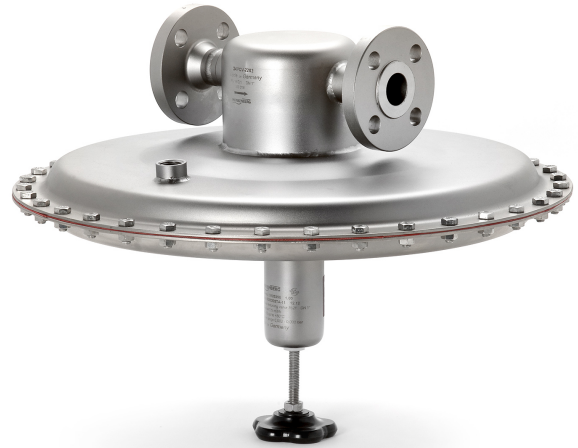
### Standard

- » All stainless steel construction
- » Sense line connection

### Options

- » Pressure gauge connection
- » Clean gas version with special connections
- » For toxic or hazardous media: sealed bonnet complete with leakage lineconnection (incl. sealed adjusting screw). Must be installed with a leakage line capable of draining leaking medium safely and without pressure
- » different materials for diaphragm and seals, suitable for your medium
- » Special connections: Aseptic, ANSI or DIN flanges, NPT, welding spigots; other connections on request
- » Special versions on request

### Product



Picture similar

### Technical specification

#### $K_{vs}$ values [m<sup>3</sup>/h] for all body sizes

0.2	0.9	1.5	2.2	2.8	3.6
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#### Setting ranges [bar] for gases

Setting ranges [bar] for gases			Diaphragm
0.002 - 0.004	0.003 - 0.015		ø 500 mm
0.004 - 0.010	0.005 - 0.032		ø 360 mm
0.008 - 0.016	0.015 - 0.065	0.05 - 0.28	ø 270 mm
0.015 - 0.03	0.025 - 0.125	0.1 - 0.52	ø 220 mm

#### Setting ranges [bar] for fluids

0.05 - 0.28	ø 270 mm
0.1 - 0.52	ø 220 mm

#### Permissible Reduction Ratio (max. $p_1/p_2$ )

diaphragm [mm]	$K_{vs}$ value					
	0.2	0.9	1.5	2.2	2.8	3.6
ø 500	15000	7500	4500	2200	1500	1100
ø 360	8000	4000	2500	1200	800	650
ø 270	4000	2000	1250	600	400	320
ø 220	2200	1100	660	320	210	170

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## Materials

Materials*		
Temperature	80 °C	130 °C
Body, Bonnet, Internals, Spring, Screws	stainless steel	stainless steel
Adjusting screw	M10 stainless steel with handwheel made of duroplast	
Valve seal	FKM	EPDM
Diaphragm	NBR	EPDM

\*All materials equal or of higher quality

## Dimensions and weights

Dimensions [mm]						
size	connection G					
	1/2	3/4	1	1 1/4	1 1/2	2
A*	165	170	170	180	180	180
B	35	35	35	40	45	50
C	320	330	330	340	350	360
D	= diaphragm diameter, see table setting ranges					

Dimensions [mm]						
size	nominal diameter DN					
	15	20	25	32	40	50
A*	240	240	250	250	260	260
B	35	35	35	40	45	50
C	320	330	30	340	350	360
D	= diaphragm diameter, see table setting ranges					

\*overall length tolerances in acc. with DIN EN 558

Weights [kg]			
diaphragm	nominal diameter		
	G 1/2 - 2	DN 15 - 25	DN 32 - 50
ø 500	13	15	17
ø 360	12.5	14.5	16.5
ø 270	8	10	12
ø 220	6	8	10

Customs tariff number	
84811019	

## Recommended installation

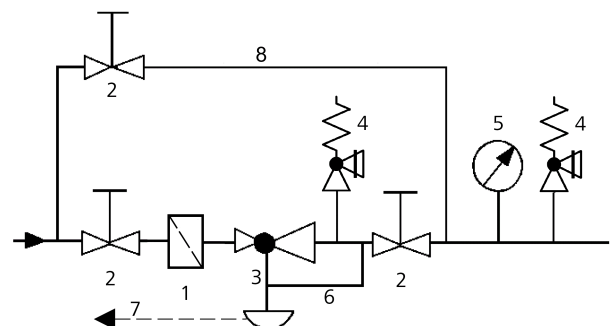
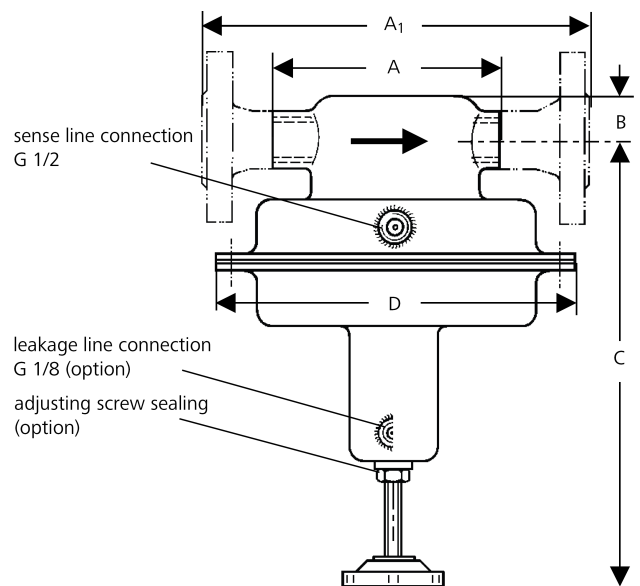
- |                           |                  |
|---------------------------|------------------|
| 1 Strainer                | 5 Pressure gauge |
| 2 Shut-off valves         | 6 Sense line     |
| 3 Pressure reducing valve | 7 Leakage line   |
| 4 Safety valve            | 8 Bypass         |

Sense line connection 10 - 20 x DN behind the valve

### Authorised Distributor:



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47400 Petaling Jaya,  
Selangor Darul Ehsan, Malaysia.  
Email: [nog@nog.com.my](mailto:nog@nog.com.my)  
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Please send us your enquiry and allow us to advise you. Special designs on request.  
The pressure has always been indicated as overpressure. Mankenberg reserves the right to alter technical specifications without notice.