Pressure Control Valves DM 762

Pressure reducer for liquids and gases up to 130 °C

Technical Data

Connection	G 1/2 - 2
	DN 15 - 50
Nominal Pressure	Inlet PN 16
	Outlet PN 1
Inlet Pressure	up to 16 bar
Outlet Pressure	0.002 - 0.52 bar in 16 setting ranges
K_{VS}-value	0.2 - 3.6 m^3/h
Tightness	acc. VDI/VDE-guideline 2174
	(leakage rate ≤ 0.05 % of K_{VS}-values)

Description

Medium-controlled 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 large volumes.

This pressure reducer is manufactured from deep-drawn stainless steel featuring excellent corrosion resistance. The valve cone is fitted with a soft seal.

The spring module comprising spring cover, spring, setting spindle, diaphragm and internal components, is connected to the valve body only by means of a clamp ring and two bolts. Changing the diaphragm or the complete spring assembly for a different control pressure range is extremely simple and does not call for special tools. The same applies to servicing and maintenance.

The outlet pressure to be controlled is balanced across the diaphragm by the force of the valve spring (set pressure). As the outlet pressure rises above the pressure set using the setting spindle, 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 setting spindle clockwise increases the outlet pressure.

The DM 762 pressure reducer requires a pilot line (to be installed on-site).

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

STANDARD EQUIPMENT

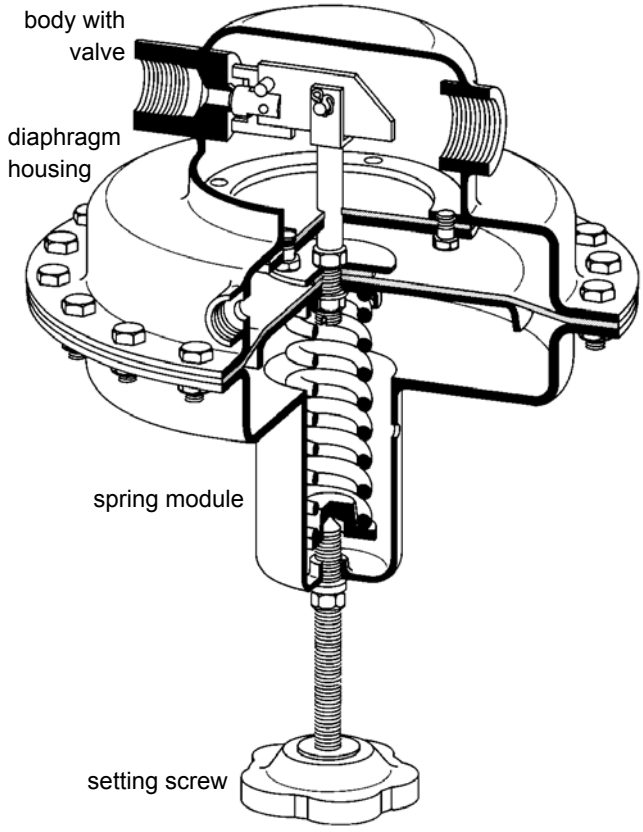
- All stainless steel construction
- Pilot line connection

OPTIONS

- Pressure gauge connection
- Oil and grease-free version for oxygen
- Clean gas version with special connections
- For toxic or hazardous media: sealed spring cover complete with leakage line connection (incl. sealed setting spindle). Must be installed with a leakage line capable of draining leaking medium safely and without pressure
- Various diaphragm and seal materials suitable for your medium
- Special connections: Aseptic, ANSI or DIN flanges, welding spigots; other connections on request
- Special versions on request

Operating instructions, Know How and Safety instructions must be observed.

We reserve the right to alter technical specifications without notice.



K_{VS}-values [m^3/h] for all body sizes					
0.2	0.9	1.5	2.2	2.8	3.6

Setting Ranges [bar] diaphragm diameter 500 mm			
0.002 - 0.003	0.003 - 0.015	0.008 - 0.03	0.012 - 0.07

Setting Ranges [bar] diaphragm diameter 360 mm			
0.004 - 0.006	0.005 - 0.032	0.015 - 0.06	0.025 - 0.14

Setting Ranges [bar] diaphragm diameter 270 mm			
0.008 - 0.016	0.015 - 0.065	0.02 - 0.12	0.05 - 0.28

Detting Ranges [bar] diaphragm diameter 220 mm			
0.015 - 0.030	0.025 - 0.125	0.05 - 0.22	0.1 - 0.52

Permissible Reduction Ratio (max. p_1/p_2)						
diaphragm diameter	K_{VS}-value [m^3/h] 0.2	0.9	1.5	2.2	2.8	3.6
500	15000	7500	4500	2200	1500	1100
360	8000	4000	2500	1200	800	650
270	4000	2000	1250	600	400	320
220	2200	1100	660	320	210	170

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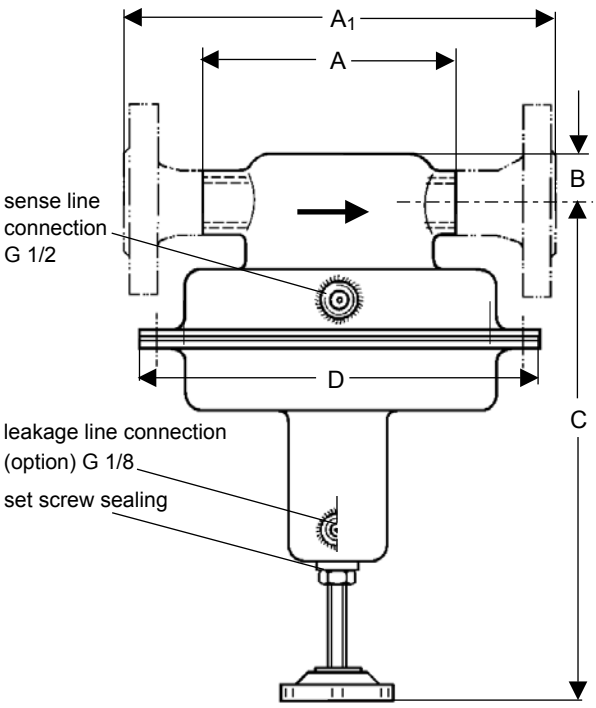
Pressure reducer for liquids and gases up to 130 °C

Materials		
Temperature	80 °C	130 °C
Body, Spring Cap, Internals, Screws	CrNiMo-steel	CrNiMo-steel
Set Screw	CrniMo-steel M10 with handwheel made of Duroplast	
Spring	CrNi-steel	CrNi-steel
Valve Seal	FPM	FPM
Diaphragm	NBR	EPDM



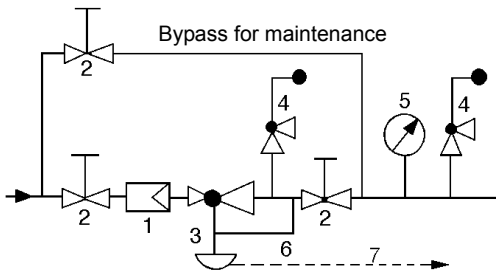
Dimensions [mm]						
size	nominal diameter G					
	1/2	3/4	1	1 1/4	1 1/2	2
A	165	170	170	180	180	180
B	35	35	35	40	45	50
C	320	330	330	340	350	360
D	= diaphragm diameter, see table pressure ranges					

Dimensions [mm]						
size	nominal diameter DN					
	15	20	25	32	40	50
A_1	240	240	250	250	260	260
B	35	35	35	40	45	50
C	320	330	330	340	350	360
D	= diaphragm diameter, see table pressure ranges					

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

We reserves the right, to alter or improve the designs or specifications of the products described herein without notice.
Special designs on request.

Recommended Installation



1 Strainer
2 Shutoff Valves
3 Pressure Reducer
4 Safety Valve
5 Pressure Gauge
6 Sense Line 1/2
7 Leakage Line G 1/8 (option)

Sense line connection 10 - 20 x DN behind the valve

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