



Pressure reducer for liquids and gases up to 130°C, steam up to 180 °C
CIP/SIP design for sanitary use

Technical Data

Connection	DN 25 - 100 clamps other connections on request
Nominal Pressure	PN 2.5 - 10 (see table below)
Inlet Pressure	up to 8 bar
Outlet Pressure	0.8 - 12 bar in 5 setting ranges
K _{vs} -Value	4.4 - 50 m ³ /h
Tightness	acc. to VDI/VDE-guideline 2174 (leakage rate ≤ 0.5% of K _{vs} -value)
Surface Roughness	Ra ≤ 3.2 µm

Description

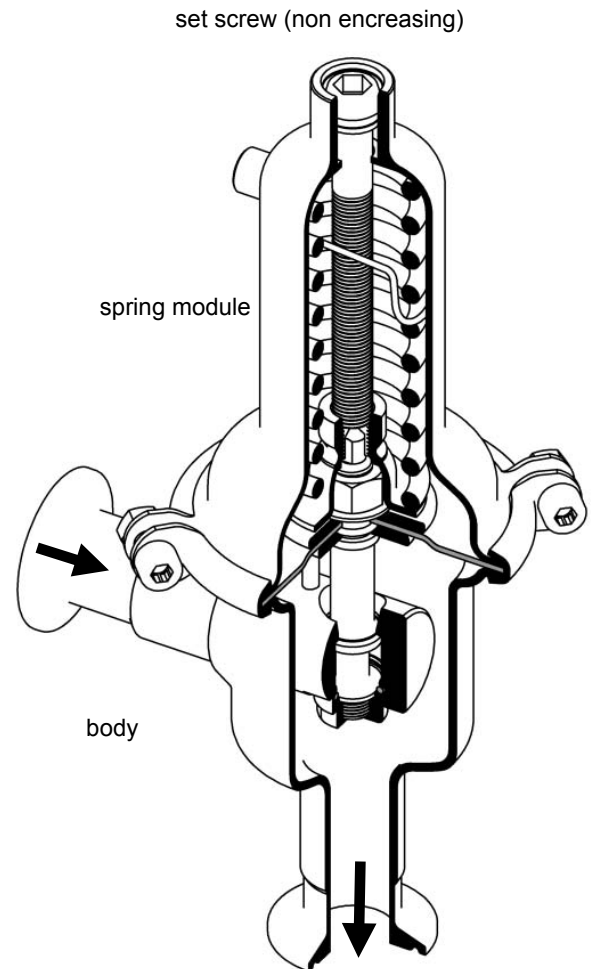
Medium-controlled pressure reducers are simple control valves offering accurate control while being easy to install and maintain. They control the pressure downstream of the valve without requiring pneumatic or electrical control elements.

The DM 462 pressure reducer is a twin seat diaphragm-controlled spring-loaded proportional control valve which is primarily used for hygienic applications in the food processing and pharmaceutical industries. A PTFE protective foil renders the diaphragm physiologically safe and steamproof up to 180 °C. The valve does not require an external pilot line.

This pressure reducer is manufactured from deep-drawn stainless steel featuring excellent corrosion resistance. It contains virtually no dead pockets and is suitable for use in CIP and SIP systems. The angled design allows complete draining.

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. Changing the control pressure setting does not affect the height of the valve (non-rising setting spindle).

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.



STANDARD EQUIPMENT

- All stainless steel construction
- Non-rising setting spindle
- Quick-release body clamp ring
- Diaphragm protected by PTFE foil

OPTIONS

- Polished version for food, pharmaceutical and superclean applications, surface roughness Ra ≤ 0.25 / 0.4 / 0.8 / 1.6 µm
- 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]					
nominal diameter DN					
25	40	50	65	80	100
4.4	14	16	40	45	50

Setting Ranges [bar] and Nominal Pressure PN				
Nennweite DN				
40 + 50	25 - 50	25 - 50	25	25
0.3 - 1.1	0.8 - 2.5	2 - 5	4 - 8	6 - 12
PN 16/2.5	PN 16/6	PN 16/10	PN 16	PN 10

Setting Ranges [bar] and Nominal Pressure PN		
nominal diameter DN		
65 - 100		
0.3 - 1.1	0.8 - 2.5	2 - 5
PN 16/2,5	PN 10/6	PN 10

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Materials		
Temperature	130 °C	180 °C
Body, Spring Cap, Internals	CrNiMo-steel	CrNiMo-steel
Valve Seal	EPDM	FEPM
Spring	CrNi-steel	CrNi-steel
Diaphragm	EPDM	FPM
Protection Foil for Diaphragm	PTFE	PTFE

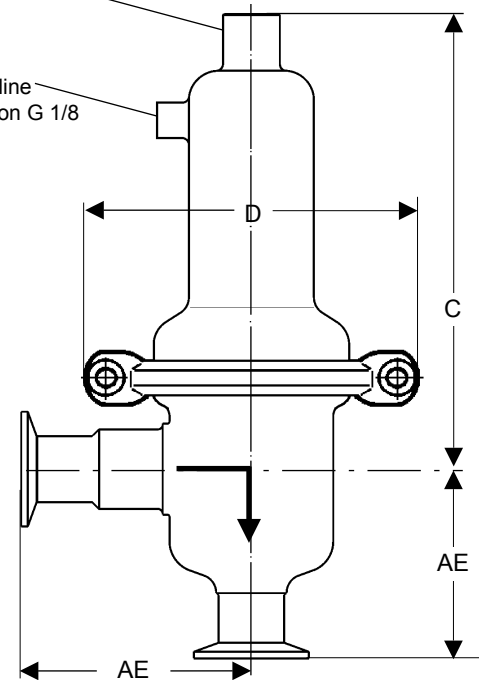
Dimensions [mm]						
	nominal diameter DN (clamping flanges)					
size	25	40	50	65	80	100
AE	100	115	125	175	175	175
C	205	230	230	510	510	510
D	138	200	200	265	265	265

Weights [kg]						
	nominal diameter DN (clamping flanges)					
size	25	40	50	65	80	100
Weight	2.5	6.5	6.5	26	26	26

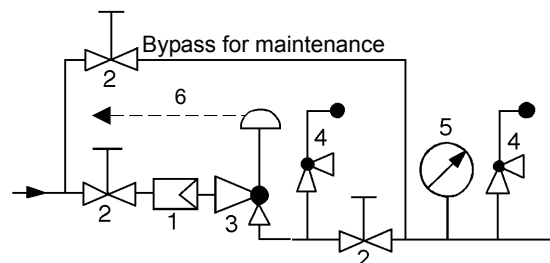
We reserves the right, to alter or improve the designs or specifications of the products described herein without notice.
Special designs on request.

set screw sealing (option)

leakage line connection G 1/8 (option)



Recommended installation



- 1 Strainer
- 2 Shutoff valves
- 3 Pressure reducer
- 4 Safety valve
- 5 Pressure gauge
- 6 Leakage line G 1/8 (option)