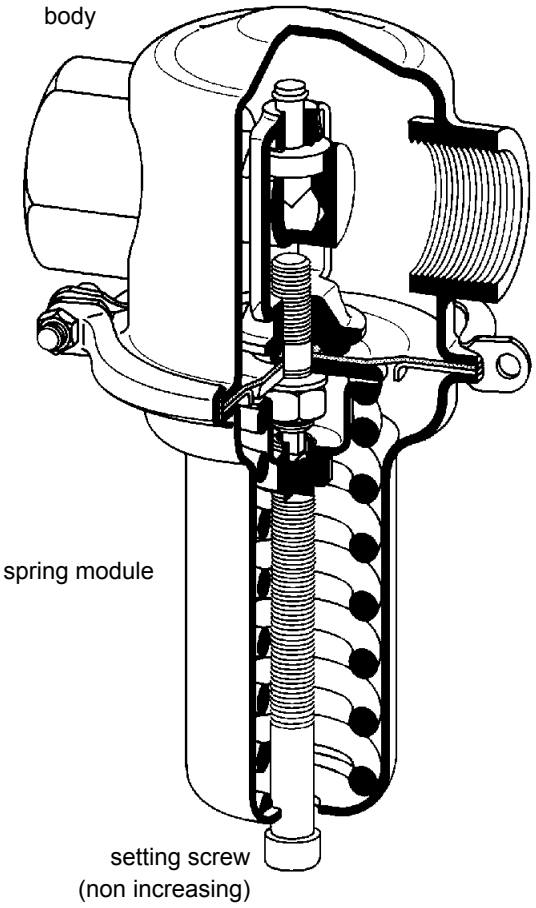
Pressure Control Valves DM 582

Pressure Reducer for liquids and gases

Technical Data

Connection	G 3/4 - 2
	DN 20 - 50
Medium	liquids, gases
Nominal Pressure	Inlet PN 40 (flanges)
	PN 100 (threats)
	Outlet PN 1 - 16
Inlet Pressure	up to 40 bar
Outlet Pressure	0.8 - 12 bar in 4 setting ranges
K_{VS}-Value	1.5 - 4.2 m^3/h
Tightness	as per VDI/VDE direktive 2174
	(leakage rate ≤ 0.05 % of K_{VS}-value)



Description

Medium-controlled pressure reducers of the Mankenberg make are simple control valves offering accurate control while being easy to operate. They control the pressure downstream of the valve without requiring pneumatic or electrical control elements.
The DM 582 pressure reducing valve is a diaphragm-controlled spring-loaded proportional control valve made completely of stainless steel. The valve cone is provided with a soft seal. Setting screw and spring are integrated in such a way that the face-to-face dimension remains unchanged when the downstream pressure varies. Tightness of the valve closing part complies at least with the VDI/VDE directive no. 2174.
On a depressurized piping the valve spring keeps the cone in open position. When under pressure, the medium flows from the inlet side through the valve seat into the body and acts from the outlet side (downstream pressure) on the diaphragm-spring system.
At the diaphragm the downstream pressure to be regulated is in balance with the valve spring force (loading force). If the downstream pressure rises above the set point adjusted on the setting screw, the valve cone will move towards the seat and the flow rate is throttled. With the downstream pressure going down, the throttle cross section increases, and with the depressurized piping the valve is in open position. Turning the setting screw in clockwise direction increases the downstream pressure.
The maximum admissible downstream pressure is the 1.5fold value of the set pressure, unless otherwise indicated.

K_{VS}-Values [m^3/h]					
nominal	G	3/4	1	1 1/2	2
diameter	DN	20	25	40	50
K_{VS}-value	m^3/h	1.5	4.2	4.2	4.2

Setting Ranges [bar], Nom. Pressure, max. Inlet Pressure [bar]			
0,8 - 2,5	2 - 5	4 - 8	6 - 12
PN 16-40/6	PN 16-40/10	PN 16-40/16	PN 16-40/16
5 - 15	12 - 30	24 - 40	36 - 40

STANDARD

- completely made of stainless steel
- flanges ANSI or DIN, threads NPT or G
- non rising setting screw
- quick closing device
- Teflon protective foil for the diaphragm
- manometer connection

OPTIONS

- bright refined outer surface
- for toxic or hazardous media the valve must be provided with a sealed spring cover with leak line connection (incl. sealed setting screw). Upon installation a leak line must be laid draining possibly penetrating medium in a pressure-free and hazard-free way.
- Various diaphragm and seal materials suitable for your medium. Kindly consult us if you have a problematic medium.
- Special versions available upon request.

Operation instructions, Know How and safety instructions must be observed.
The pressure has always been indicated as overpressure.
We reserve the right to alter technical specifications without notice.

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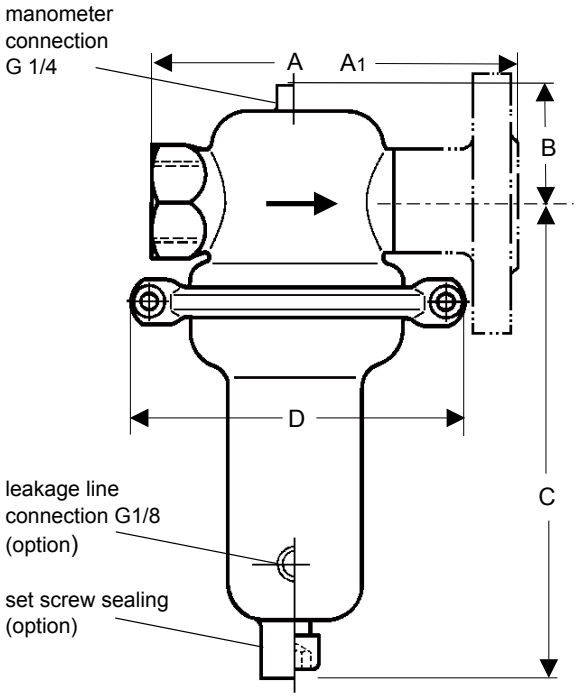
Pressure Control Valves DM 582

Pressure Reducer for liquids and gases

Materials	
Temperature	130°C
Body, Spring Cap	CrNiMo-steel
Internals	
Spring	
Valve Sealing	EPDM
Diaphragm	
Protection Foil	PTFE



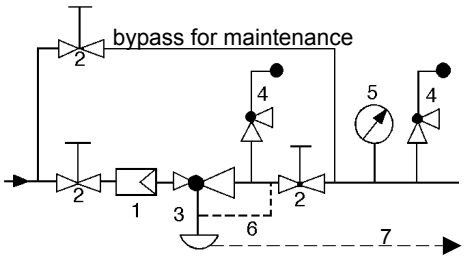
Dimensions [mm]								
size	nominal diameter							
	G 3/4	G 1	G 1 1/2	G 2	DN 20	DN 25	DN 40	DN 50
A	155	155			200	200	200	
B	70							
C	220							
D	138 / 110							

flanges ANSI or DIN, threads NPT or G

Weights [kg]							
nominal diameter							
G 3/4	G 1	G 1 1/2	G 2	DN 20	DN 25	DN 40	DN 50
1,5	2	3	3,5	3,5	4,5	5,5	6,5

Special designs on request.
The pressure has always been indicated as overpressure.
Mankenberg reserves the right, to alter or improve the designs or specifications of the products described herein without notice.

Recommended installation



1 Strainer
2 Shutoff valves
3 Pressure reducer
4 Safety valve
5 Pressure gauge
6 Sense Line (optional)
7 Leakage Line Connection (optional)

use MANKENBERG-products

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