

D-SX100

pressure reducing valve for steam up to 190 °C, liquids and gasses up to 130 °C

data sheet

Technical Data

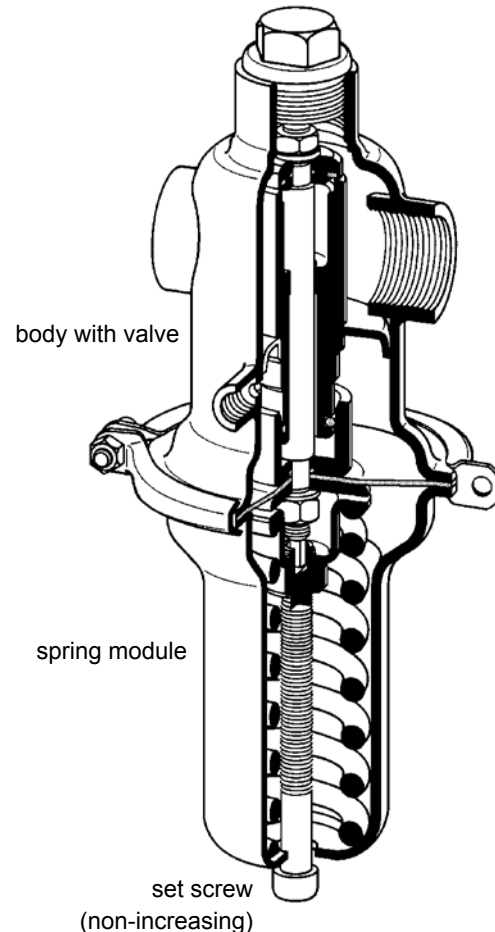
Connection	G 1/2 - 2
Nominal Pressure	inlet PN 40 outlet PN 16
Inlet Pressure	up to 40 bar
Outlet Pressure	2 - 5 bar adjustable
K_{VS} -Value	4 - 18 m ³ /h
Leak Tightness	acc. to VDI/VDE-guideline 2174 (leakage rate K 0,05 % of K_{VS} -value)

Description

The pressure reducer D-SX100 is a diaphragm-controlled, spring-loaded proportional controller with release. All parts consist of CrNiMo-steel with smooth surfaces. The valve cone is build as soft seal.

Body and spring module with spring cap, spring, set screw, diaphragm and internal parts are only combined by the profile clamp and 2 screws. To raplace the diaphragm or the complete spring module for an other pressure range is easy and possible without special tools. That applies also for maintenance.

The outlet pressure balances the force of the valve spring across the diaphragm (set value). As the outlet pressure rises above the pressure set using the set screw, the valve cone moves toward the seat causing the flow to be restricted. As the outlet pressure drops the restricting orifice becomes larger. The valve is fully open if the pipeline is depressurised. Rotating the setting screw clockwise increases the outlet pressure.



Standard

- completely stainless steel
- non-increasing set screw
- quick release fastener
- internal sense bore
- PTFE protection film for diaphragm

Options

- manometer connection
- external sense line connection
- free of oil and grease design for oxygen
- clear gas design with special connection
- mid section for steam up to 220 °C
- with toxic or hazardous media closed spring cap with leakage line connection (incl. setting spindle seal)
- different materials for diaphragm and seals suitable for your medium
- other pressure ranges available
- special connections:
Aseptik-, ANSI- or DIN-flanges, welding ends,
other connections on request
- special designs on request

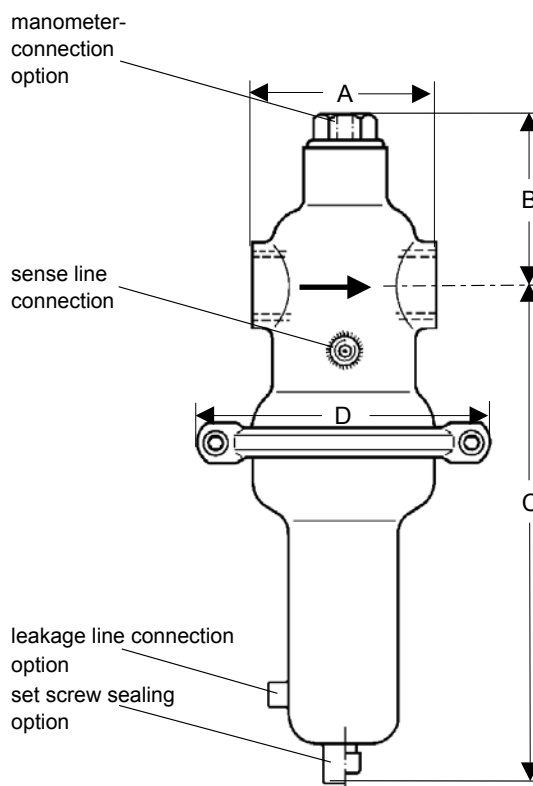
K_{VS} -Values [m ³ /h]							
nominal diam. G	1/2	3/4	1	1 1/4	1 1/2	2	
K_{VS} -value	m ³ /h	4	5	6	12	16	18

Reduction Ratio (max. p_1/p_2)	
nominal diameter	
G 1/2 - 1	G 1 1/4 - 2
20	12

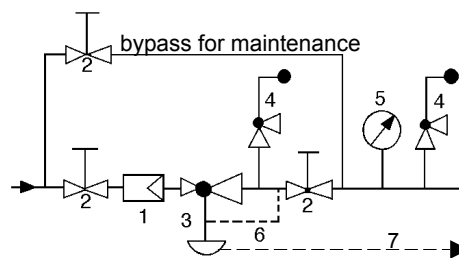
Materials		
Temperature	130 °C	for steam 190 °C
Body, Spring Cap, Internals, Screws	CrNiMo-steel	CrNiMo-steel
Spring	CrNi-steel	CrNi-steel
Valve Seal	FEPM optional EPDM or FPM	FEPM optional PTFE
Diaphragm	EPDM optional FPM	EPDM
Protection Foil	PTFE	

Dimensions [mm]						
size	nominal diameter					
	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
A	85	91	85	130	145	189
B	76	76	76	90	90	90
C	235	235	235	235	235	235
D	138	138	138	138	138	138

Weights [kg]						
nominal diameter G						
1/2	3/4	1	1 1/4	1 1/2	2	
3,1	3,1	3,1	4	4	4	
6,1	6,1	6,1	7	7	7	
7,1	7,1	7,1	8	8	8	
13,5	13,5	13,5	14,4	14,4	14,4	



recommended installation



- 1 strainer
- 2 shut-off valves
- 3 pressure reducer
- 4 safety valves
- 5 manometer
- 6 sense line (option)
- 7 leakage line (option)

sense line connection
10 - 20 x nominal diameter behind the valve