

PRESSURE CONTROL

Back pressure regulators UV 1.8

Valve for medium to high flow rates



Technical data

Connection DN	25 - 100
Connection G	1 - 2
Nominal pressure PN	25 / 16
Inlet pressure	2 - 20 bar
K _{vs} value	6 - 50 m ³ /h
Temperature	200 °C
Medium	liquids and gases
*RT = -10 °C TO + 50 °C	

Description

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

The UV 1.8 back pressure regulator is a spring-loaded, seat-controlled proportional control valve balanced by diaphragm or piston. It is designed for hygienic applications and medium volumes of high-viscosity media. The valve cone can be fitted with a metallic or soft seal.

This valve 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 cap, spring, adjusting screw, 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 range is very easy and without special tools. The same applies to servicing and maintenance.

The inlet pressure to be controlled is balanced across the valve seat by the force of the valve spring (set pressure). If the inlet pressure rises above the set pressure, the valve opens. With decreasing inlet pressure the valve control orifice reduces, when the pipeline is depressurised, the valve is closed. Rotating the adjusting screw clockwise increases the inlet pressure.

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 III or V.

Options

- » Polished version for food, pharmaceutical and superclean applications, surface roughness Ra ≤ 0,25 oder 0,4 oder 0,8 µm
- » For toxic or hazardous media: sealed bonnet complete with leakage line connection (incl. sealed adjusting screw). 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

Product



Picture similar

Technical specification

K_{vs} values [m³/h]

seat	nominal diameter DN						
	25	32	40	50	65	80	100
I	6	6	6	12	15	20	35
II	-	12	12	15	20	35	40
III	-	-	15	20	35	40	50

Setting ranges [bar], nominal pressure, balanced by diaphragm

setting range	bar	2 - 5	4 - 10
nominal pressure	PN	10	16

Setting ranges [bar], nominal pressure, balanced by piston

setting range	bar	2 - 5	4 - 10	8 - 16	14 - 20
nominal pressure	PN	10	16	16	25

Materials

Materials			
Temperature	80 °C	130 °C	200 °C
Body	Stainless steel	Stainless steel	Stainless steel
Bonnet	Steel welded optional stainless steel		
Spring	Spring steel optional stainless steel		
Soft seal	NBR	EPDM optional FKM	-
Metallic seal	Stainless steel	Stainless steel	Stainless steel
Membrane	CR	EPDM optional FKM	-
O-ring	NBR	EPDM optional FKM	FEPM

*All materials equal or of higher quality

Dimensions and weights

Dimensions [mm]							
size	nominal diameter DN						
	25	32	40	50	65	80	100
A ₁ *	100	105	115	125	145	155	175
B	100	105	115	125	145	155	175
C	on request						
øD	on request						

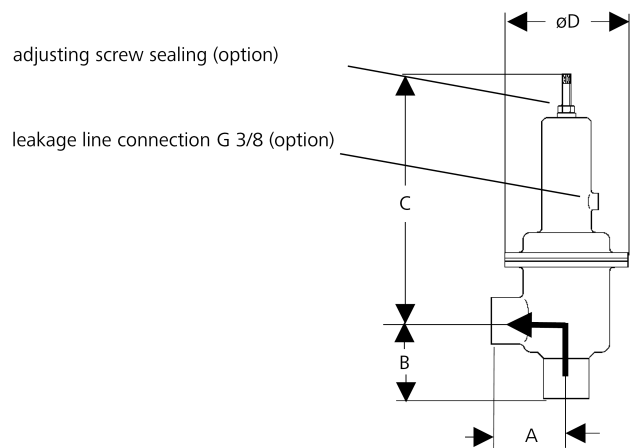
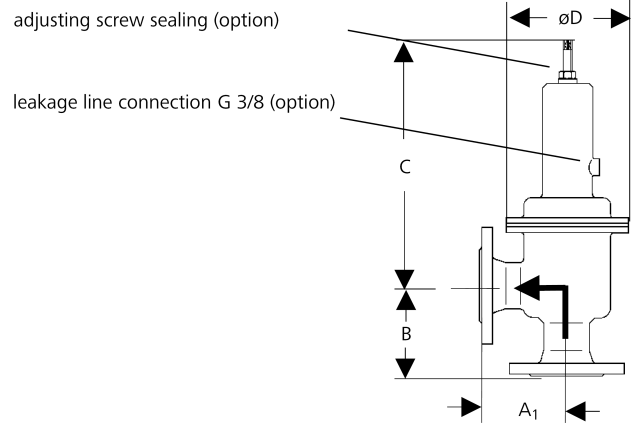
Dimensions [mm]				
size	nominal diameter G			
	1	1 1/4	1 1/2	2
A ₁ *	80	80	80	80
B	80	80	80	80
C	on request			
øD	on request			

*overall length tolerances in acc. with DIN EN 558

Weights [kg]								
nominal diameter	DN	25	32	40	50	65	80	100
weight	kg	10.2	11.5	12	13.5	14	14.7	15.6

Weights [kg]					
nominal diameter	G	1	1 1/4	1 1/2	2
weight	kg	10.2	11.5	12	13.5

Customs tariff number	
84814010	



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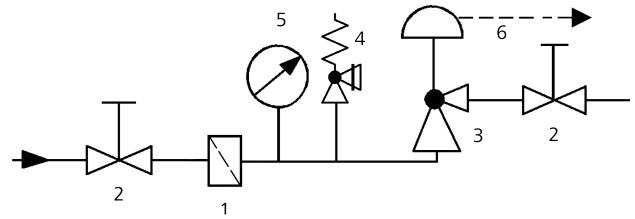
Please send us your enquiry and allow us to advise you. Special designs on request.
The pressure has always been indicated as overpressure. Mankenberg reserves the right to alter technical specifications without notice.

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Recommended installation

- | | | | |
|---|-------------------------|---|--|
| 1 | Strainer | 4 | Safety valve |
| 2 | Shut-off valves | 5 | Pressure gauge |
| 3 | Back pressure regulator | 6 | Leakage line connection G 3/8 (optional) |



Authorised Distributor:



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