

PRESSURE CONTROL

Back pressure regulators UV 3.8K

Valve for viscous media and medium to high flow rates



Technical data

Connection DN	15 - 100
Connection G	1/2 - 2
Nominal pressure PN	10 - 16
Inlet pressure	2 - 16 bar
K _{vs} value	3.5 - 9 m ³ /h
Temperature	150 °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 back pressure regulator UV 3.8K is a piston-controlled, spring-loaded proportional valve for viscous media at medium flow rates. The valve cone is provided with a metallic seal.

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.

Standard

- » Medium wetted parts made of stainless steel
- » Piston controlled

Options

- » Electro-pneumatic actuation
- » 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 O-ring and seal materials suitable for your medium
- » Special connections: ANSI or JIS flanges, NPT, welding spigots; other connections on request
- » Special versions on request

Product



Picture similar

Technical specification

K _{vs} value m ³ /h										
Nominal diameter	DN	15	20	25	32	40	50	65	80	100
	G	1/2	3/4	1	1 1/4	1 1/2	2	-	-	-
K _{vs} value	m ³ /h	3.5	3.5	3.5	3.5	5.5	5.5	9	9	9

Pressure ranges [bar], nominal pressure

pressure range	bar	2 - 5	4 - 10	8 - 16
nominal pressure	PN	10	16	16

Materials

Materials			
Temperature	80 °C	130 °C	150 °C
Body	Stainless steel	Stainless steel	Stainless steel
Bonnet	Steel welded optional stainless steel		
Spring	Spring steel C optional stainless steel		
O-ring	NBR	EPDM optional FKM	FKM – PTFE coated

*All materials equal or of higher quality

Dimensions and weights

Dimensions [mm]									
size	nominal diameter DN								
	15	20	25	32	40	50	65	80	100
A*	90	95	100	105	115	125	145	155	190
B*	90	95	100	105	115	125	145	155	175
C	500	500	500	500	500	500	500	600	800
∅D	200	200	200	200	200	200	200	200	240

*overall length tolerances in acc. with DIN EN 558

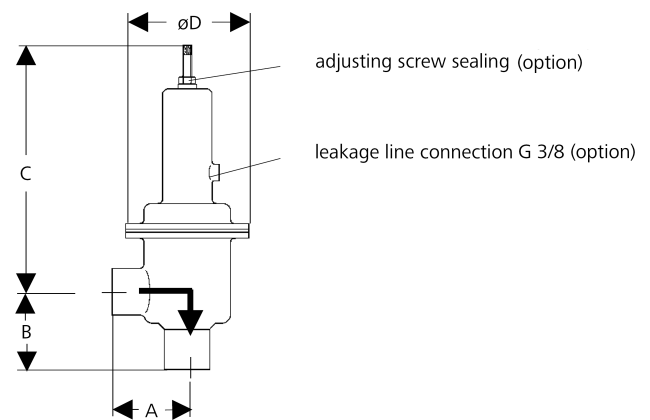
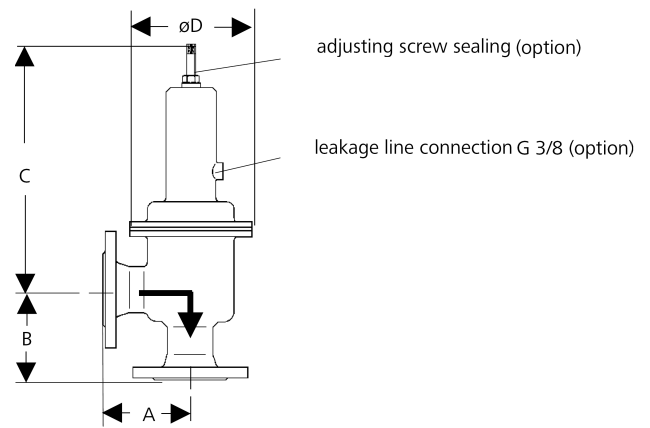
Dimensions [mm]						
size	nominal diameter G					
	1/2	3/4	1	1 1/4	1 1/2	2
A*	80	80	80	80	80	80
B*	80	80	80	85	115	125
C	500	500	500	500	500	500
∅D	200	200	200	200	200	200

*overall length tolerances in acc. with DIN EN 558

Weights [kg]									
nominal diameter DN									
15	20	25	32	40	50	65	80	100	
10.8	11.3	11.8	13.0	13.5	15.0	16.7	18.7	22.0	

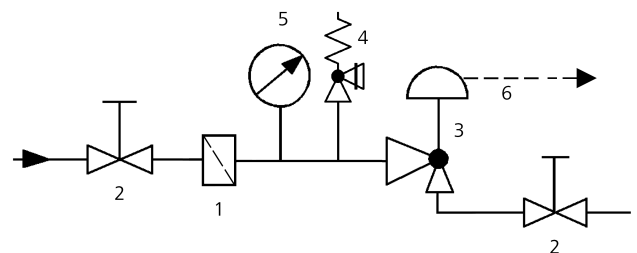
Weights [kg]					
nominal diameter G					
1/2	3/4	1	1 1/4	1 1/2	2
8	8.2	8.5	8.8	9	9.4

Customs tariff number	
84814010	



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) |



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.

Authorised Distributor:

46, Jalan SS 22/21, Damansara Jaya,
47400 Petaling Jaya,
Selangor Darul Ehsan, Malaysia.
Email: ampmech@ampmech.com
Website: www.ampmech.com