



Overflow valve for liquids and gases
up to 130 °C

Technical Data

Connection	G 1/2 -2 DN 15 - 50
Nominal Pressure	PN 1 - 16
Inlet Pressure	0.02 - 12 bar in 7 setting ranges
K _{VS} -value	3.2 - 18 m ³ /h
Tightness	acc. VDI/VDE-guideline 2174 (leakage rate ≤ 0.05 % of K _{VS} -value)

Description

Medium-controlled overflow valves 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 5.1 overflow valve is a spring-loaded diaphragm-controlled and balanced proportional control valve for universal application. This bypass valve is manufactured from deep-drawn stainless steel featuring excellent corrosion resistance. The valve cone is fitted with a soft seal.

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 inlet pressure to be controlled is balanced across the seat by the force of the valve spring (set pressure). When the inlet pressure falls below the pressure set using the setting spindle, the valve cone moves towards the seat and the volume of medium is reduced. When the inlet pressure rises the valve control orifice increases; when the pipeline is depressurised the valve is closed. Rotating the setting spindle clockwise increases the inlet pressure.

STANDARD EQUIPMENT

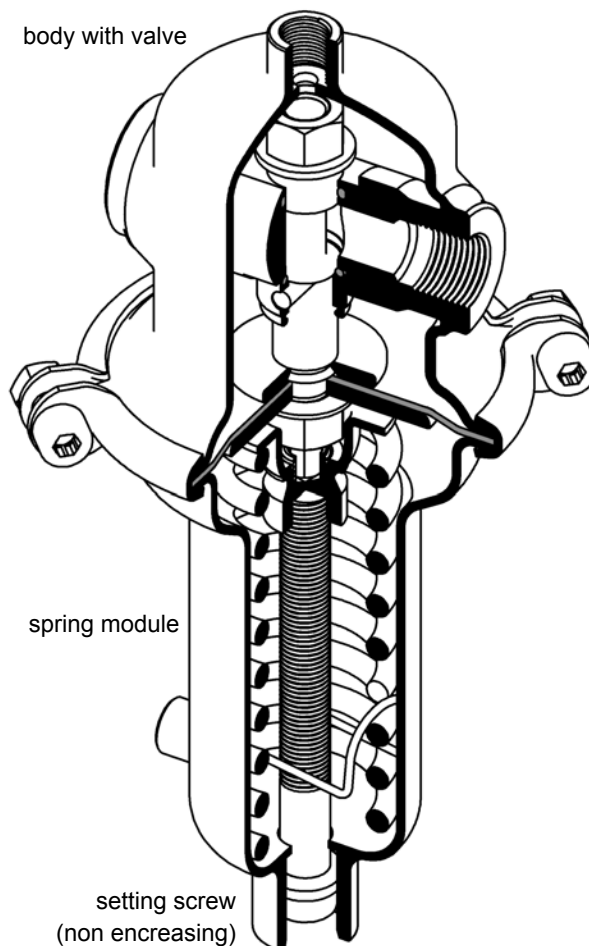
- All stainless steel construction
- Quick-release body clamp ring

OPTIONS

- 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	15	20	25	32	40	50
	G	1/2	3/4	1	1 1/4	1 1/2	2
K _{VS} -value	m ³ /h	3.2	3.5	3.6	12	16	18

Setting Ranges [bar], Nominal Pressure				
setting range	6 - 12	4 - 8	2 - 5	0.8 - 2.5
nominal pressure	PN 16	PN 16	PN 10	PN 6

Setting Ranges [bar], Nominal Pressure			
setting range	0.3 - 1.1	0.1 - 0.5	0.02 - 0.12
nominal pressure	PN 2.5	PN 1	PN 1

Pressure Control Valves

UV 5.1

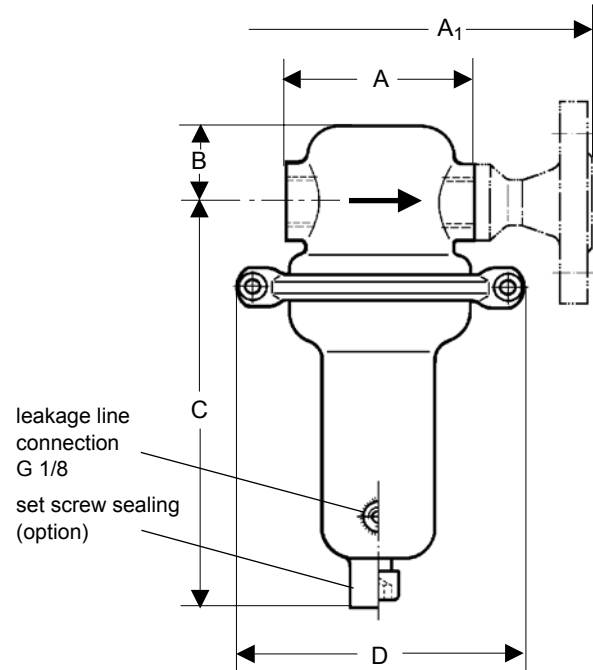
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Materials	
Temperature	130 °C
Body	CrNiMo-steel
Spring Cap	CrNiMo-steel
Internals	CrNiMo-steel
Screws	CrNiMo-steel
Set Screw	CrNiMo-steel
Valve Sealing	EPDM optional GFPM or PTFE
Spring	CrNi-steel
Diaphragm	EPDM optional FPM
Protection Foil for diaphragm	PTFE (Option)

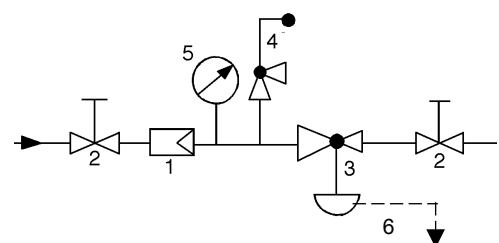
Dimensions [mm]							
pressure range bar	size	nominal diameter					
		G 1/2 DN 15	G 3/4 DN 20	G 1 DN 25	G 1 1/4 DN 32	G 1 1/2 DN 40	G 2 DN 50
all ranges	A	90	90	136	130	145	185
	A ₁	200	200	200	180	200	230
	B	40	40	40	110	110	110
0.02-0.12	C	270	270	270	285	285	285
	D	360	360	360	360	360	360
0.1 - 0.5	C	270	270	270	285	285	285
	D	264	264	264	264	264	264
0.3 - 1.1	C	270	270	270	285	285	285
	D	200	200	200	200	200	200
0.8 - 12	C	205	205	205	220	220	220
	D	138	138	138	138	138	138

Weights [kg]				
pressure range bar	nominal diameter			
	G 1/2 - 1	G 1 1/4 - 2	DN 15 - 25	DN 32 - 50
0.02 - 0.12	13	14.4	14	16.4
0.1 - 0.5	6.5	8	7.5	10
0.3 - 1.1	5.5	7	6.5	9
0.8 - 12	2.5	4	3.5	6



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

Recommended Installation



- 1 Strainer
- 2 Shutoff Valves
- 3 Overflow Valves
- 4 Safety Valve
- 5 Pressure Gauge
- 6 Leakage Line G 1/8 (option)

