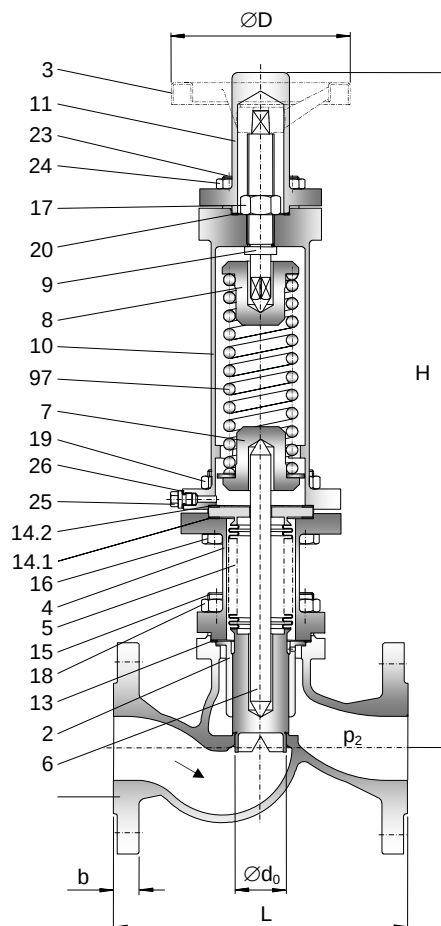




1607

Overflow valve

Bellow sealed

PN 10-40 DN 15-150

Top part

Closed spring hood with compression spring and adjusting spindle, Gas cap

Setting ranges in bar

When using separate springs

1 - 2,5
2,5 - 6,0
6,0 - 10,0
10,0 - 16,0
16,0 - 22,0
22,0 - 30,0
30,0 - 40,0

Stem sealing

Bellow

Obturator

Slot cone

Body seat

Integral seat

Valve ends

Flanges acc. to EN 1092-1 (DIN 2501 Part 1)

Pos.	Denomination	Material	1.0619	1.4408	Pos.	Denomination	Material	1.0619	1.4408
1	Body		1.0619	1.4408	14	Gasket		Graphite / 1.4401	Graphite / 1.4401
2	Cone guide bush		1.4021	1.4571	15	Stud bolt		5.6	A4 - 70
3	Handwheel (loose)		0.6020	0.6020	16	Stud bolt		5.6	A4 - 70
4	Interim piece		Stahl	1.4571	17	Hex. Nut		5	A4
5	Bellow insert		1.4541	1.4571	18	Hex. Nut		5	A4
6	Stem		1.4021	1.4021	19	Hex. Nut		5	A4
7	Spring cup		Stahl	Stahl	20	Gasket		Graphite / 1.4401	Graphite / 1.4401
8	Spring cup		Stahl	Stahl	23	Stud bolt		1.1181	A4 - 70
9	Adjusting spindle		1.4021	1.4021	24	Hex. Nut		1.0501	A4
10	Spring hood		Stahl	Stahl	25	Drain plug		A4	A4
11	Gas cap		Stahl	Stahl	97	Spring		Steel	Steel
13	Gasket		Graphite / 1.4401	Graphite / 1.4401	¹ further materials are shown in the technical part				

Requirements and tests

Tightness test with max. 6 bar (Air), Strength test with $p_{2max.}$ (Water,) Function test with set pressure p_0 (Air)

Marking

Nominal size DN
Setting range
Max. back pressure p_2
Body material
Manufacturer brand
Flow direction arrow

Face-to-face dimension acc. to EN 558-1 series 1 (DIN 3202-F1)

DN	15	20	25	32	40	50	65	80	100	125	150
L	130	150	160	180	200	230	290	310	350	400	480
H	430	450	450	450	515	525	585	790	810	940	980
Ød ₀	16	20	25	32	40	40	50	65	80	100	125
ØD	120	120	120	120	140	140	140	180	180	225	225
PN	b	use PN 16									
10	kg	18 20 20 22 22									
PN	b	use PN 40									
16	kg	18 20 20 22 22									
PN	b	use PN 40									
25	kg	18 20 20 22 22									
PN	b	16	18	18	18	18	20	22	24	24	26
40	kg	7,8	8,1	9,7	12,5	18,6	22,8	26,9	40,7	57,8	
p ₂		17	18	18	18	11	11	9	9	9	6

p_2 = max. back pressure at the outlet side

Pressure/Temperature ratings in bar g at Temperature in °C

Material	PN	50°C	100°C	120°C	150°C	200°C	250°C	300°C	350°C	400°C			
»1.0619« GP240GH EN 10213	10	10,0	8,7	8,7	8,0	7,2	6,6	6,0	5,6	5,4			
	16	16,0	14,0	14,0	12,8	11,6	10,6	9,6	9,0	8,6			
	25	25,0	21,8	21,8	20,0	18,2	16,6	15,1	14,0	13,5			
	40	40,0	35,0	35,0	32,0	29,1	26,6	24,1	22,5	21,6			
»1.4408« GX6CrNiMo18-10-2 EN 10213	10	10,0	8,2	8,2	7,2	6,2	5,7	7,5					
	16	16,0	13,2	13,2	11,6	10,0	9,1	12,0					
	25	25,0	20,7	20,7	18,1	15,7	14,2	18,7					
	40	40,0	33,1	33,1	29,0	25,1	22,8	20,5					

Modifications

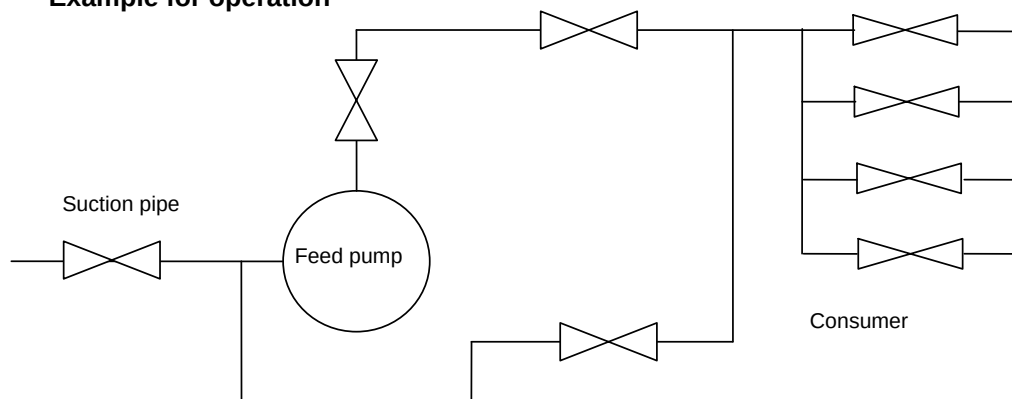
Heating jacket

Double walled bellow suitable for back pressure $p_{2max.} = 25$ bar

Operation

The overflow valve is used for the limitation of the pressure within a pipe system. When exceeding the set pressure the overflow valve opens. The set pressure must be calculated with the process data. The overflow valve with bellow is independent from the back pressure.

Example for operation



Installation

The above plan shows a typical case of operation for the overflow valve. The plan contains the feed pump with several consumers and the overflow valve in the by-pass. If the required discharge flow will be reduced by closing the consumer, the system pressure rises up. When exceeding the set pressure the overflow valve opens and the flow-rate can be repatriated to the suction pipe or to the tank. Thus a constant system pressure can be ensured. Piping is to be in such a manner that injurious thrust and bending forces are kept away from the valve casings.