

Pressure Control Valves

Safety Valves SV 29V

Full Lift Threaded Valve



Technical Data

Connection G	1/2 - 1 1/2
Nominal Pressure PN	40 - 250
Set Pressure	0.3 - 250 bar
Temperature	400 °C
Medium	liquids, gases, steam

Description

Safety valves are the ultimate protection device for tanks and pipelines. They prevent pressure limits being exceeded once all automatic control and monitoring equipment has failed.

SV29V is a spring-loaded full-stroke safety valve with tested components provided with threaded connection and closed spring cap.

Full lift safety valves open instantly up to maximum lift within a pressure rise of 5 %. Because of their instant opening they are used where suddenly larger flow volumes or fast pressure rises may occur. They are mainly used for relieving pressure in vapours and gases.

Pressure rise:
 above 1 bar set pressure:.....5 % up to the max. valve lift;
 below 1 bar set pressure:0.1 bar.

Options

- » special connections: DIN or ANSI flanges, NPT, other connections on request
- » special versions on request

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



Available Versions

H2	without lifting device, gastight cap
H3	with lifting device, not gastight
H4	with lifting device, gastight cap

Lieferbare Anschlussgrößen G

d ₀ [mm]	nominal diameter (inlet x outlet) G				
9	1/2 x 1	3/4 x 1	1 x 1	-	-
13	1/2 x 1	3/4 x 1	1 x 1	-	-
17,5	-	3/4 x 1 1/2	1 x 1 1/2	1 1/4 x 1 1/2	1 1/2 x 1 1/2

Pressure Control Valves

Safety Valves SV 29V

Full Lift Threaded Valve



Materials

Temperature	300 °C	400 °C
Body (Base)	1.4104	1.4404
Outlet Body	0.7043	1.4404
Guide	1.4104 tenifer	1.4404
Bonnet	0.7043	1.4404
Spindle	1.4021	1.4404
Spring Plate	1.0718	1.4404
Adjusting Screw with Bush	1.4104 with PTFE	1.4404 tenifer with PTFE
Spring	spring steel C	1.4310

Dimensions A, B [mm] + Weights [kg]

G inlet	1/2 - 1 A	1/2 - 1 A	3/4 - 1 1/2 A
G outlet	1	1	1 1/2
do	9	13	17,5
A	75	75	75
B	52	56	56
weight	2.6	2.6	3

Dimensions C, D [mm]

G inlet	1/2 A	3/4 A	1 A	1 1/4 A	1 1/2 A
C max.	296	298	301	303	305
D	14	16	18	20	22

Customs Tariff Number

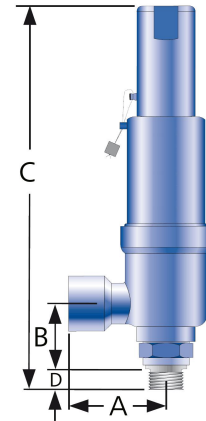
84814010

Special designs on request.

The pressure has always been indicated as overpressure.

Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

Dimensional Drawing



Pressure Control Valves

Safety Valves SV 29V

Full Lift Threaded Valve



Seat Diameter		
inlet	G 1/2 - 1 A	G 3/4 - 1 1/2 A
outlet	G 1	G 1 1/2
seat ø	9 mm, 13 mm	17.5 mm

Flow Rate									
set pressure [bar]	saturated steam[kg/h]			air [Nm³/h]			water [m³/h]		
	9 mm	13 mm	17.5 mm	9 mm	13 mm	17.5 mm	9 mm	13 mm	17.5 mm
0,2	-	53	85	-	61	98	-	1.96	3.48
0,5	-	84	134	-	98	157	-	2.77	4.93
1	-	120	200	-	143	238	-	3.75	6.67
2	93	190	331	113	229	400	2.93	5.31	9.44
3	127	258	456	155	316	558	3.59	6.50	11.60
4	158	322	569	195	396	700	4.14	7.51	13.30
5	189	386	681	234	477	842	4.63	8.39	14.90
6	220	449	793	247	557	985	5.07	9.19	16.30
8	282	573	1013	353	718	1269	5.86	10.60	18.90
10	343	699	1235	432	879	1554	6.55	11.90	21.10
16	527	1027	1895	669	1363	2408	8.28	15.00	26.70
20	650	1323	2338	827	1685	2977	9.26	16.80	29.80
26	833	1696	2997	1065	2168	3831	10.60	19.10	34.00
30	957	1949	3445	1223	2490	4401	11.30	20.60	36.50
40	1268	2582	4564	1618	3295	5824	13.10	23.70	42.20
50	1588	3234	5715	2014	4101	7247	14.60	26.50	47.20
60	1910	3889	8079	2409	4906	8671	16.00	29.10	51.70
80	2583	5259	9294	3201	6517	11518	18.50	33.60	59.70
100	3296	6711	11862	3992	8127	14364	20.70	37.50	66.70
160	5977	12171	-	6365	23959	-	26.20	47.5	-
200	8989	18303	-	7947	16181	-	29.30	53.10	-
220	-	-	-	8738	-	-	30.70	-	-
240	-	-	-	9529	-	-	32.10	-	-
250	-	-	-	9924	-	-	32.70	-	-

Special designs on request.

The pressure has always been indicated as overpressure.

Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.