

Safety Valves

Type 06316



Safety Valves, angle type, stainless steel, type tested, TÜV-SV.980. D/G/F

Standard safety valve

metal to metal seated, closed bonnet

Inlet: male thread type G (BSPP) acc. to ISO 228/1

Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06316.X.N000 (0.1 - 68.0 bar)

Part No. 06316.X.L000 (68.0 - 330.0 bar)

with lifting device - head A

Part No. 06316.X.N020 (0.1 - 68.0 bar)

Part No. 06316.X.L020 (68.0 - 330.0 bar)

with gastight cap - head C

Available options - on request only:

- Threads NPT acc. to ANSI B 1.20.1
- Disc with soft sealing (NBR, CR, EPDM, FKM, FFKM, PCTFE, PTFE-FDA)

Applications:

Provided as safety device for protection against excessive pressure in pressure vessels. Approved for gases, vapours and fluids.

Working temperature (pay attention to AD-Merkblatt W10: Temperature-Pressure-Overview): -270°C / -454°F (6K) up to +280°C / +536°F (553K)



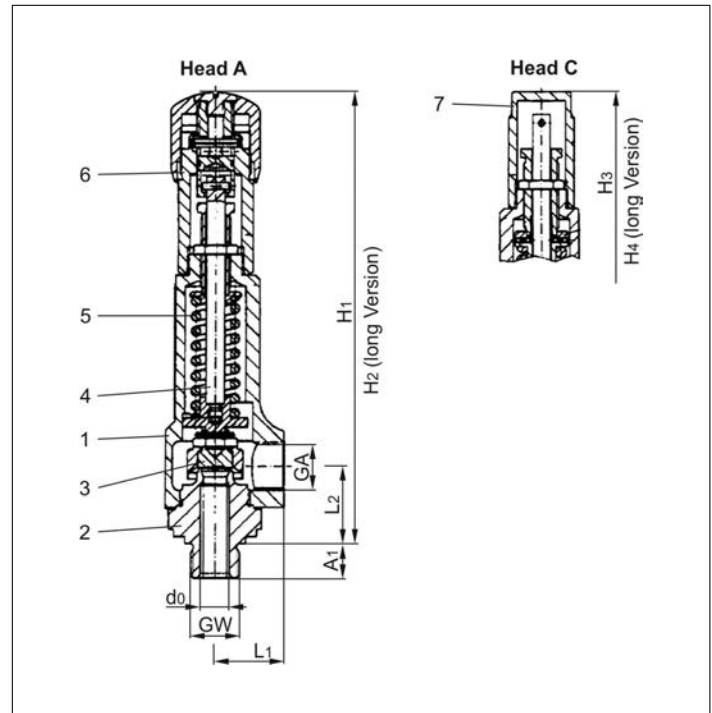
Materials	DIN EN	ASTM
1 Outlet body	1.4404	A 276 Grade 316L
2 Inlet body	1.4404	A 276 Grade 316L
3 Disc	1.4404	A 276 Grade 316L
4 Stem	1.4404	A 276 Grade 316L
5 Spring	1.4310	A 313 Grade 301
6 Lifting device	1.4404	A 276 Grade 316L
7 Cap	1.4404	A 276 Grade 316L

Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Marking acc. to ASME Code Section VIII.



Technical data	Type 06316.X.N000/N020		Type 06316.X.L000/L020				
	GW	1/2	3/4	1/2	3/4	1/2	3/4
Nominal size	GW	1/2	3/4	1/2	3/4	1/2	3/4
Orifice	d ₀	10	10	6	6	10	10
Dimension code	.X.	1004	1006	0604	0606	1004	1006
Set pressure range	bar	0.1-68	0.1-68	180-330	180-330	68-180	68-180
Outlet	GA	1/2	1/2	1/2	1/2	1/2	1/2
Height	H ₁	195	195	-	-	-	-
Height	H ₂	-	-	201	201	216	216
Height	H ₃	180	180	-	-	-	-
Height	H ₄	-	-	191	191	191	191
Length	L ₁	30	30	30	30	30	30
Length	L ₂	33	33	33	33	33	33
Length	A ₁	15	16	15	16	15	16
Weight	ca. kg	1.2	1.2	1.4	1.4	1.4	1.4
Coeff. of discharge gases, vapours	α _w	0.50	0.50	0.72	0.72	0.50	0.50
Coeff. of discharge fluids	α _w	0.35	0.35	-	-	0.35	0.35

Dimensions in mm.

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Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:

A = Saturated steam in kg/h

B = Air in m³/h at 0°C and 1013.25 mbar

C = Water in kg/h at 20°C

The capacity indicated below is for a fully opened valve.

d_0 - orifice

A_0 - flow area

Set pressure in bar (g)	GW		1/2 & 3/4			
	d_0 (mm)	6	10			
	A_0 (mm ²)	28.3	78.5			
	Medium	B	A	B	C	
0.1	-	-	12	14	630	
0.5	-	-	29	34	1080	
1.0	-	-	43	51	1470	
2.0	-	-	70	84	2070	
3.0	-	-	94	115	2540	
4.0	-	-	118	145	2930	
5.0	-	-	141	174	3280	
6.0	-	-	164	204	3590	
8.0	-	-	209	262	4150	
10.0	-	-	255	321	4640	
15.0	-	-	369	468	5680	
20.0	-	-	483	615	6560	
25.0	-	-	596	762	7330	
30.0	-	-	712	909	8030	
40.0	-	-	943	1204	9270	
50.0	-	-	1181	1498	10400	
60.0	-	-	1421	1792	11400	
70.0	-	-	1670	2086	12300	
80.0	-	-	1921	2380	13100	
100.0	-	-	2451	2969	14700	
150.0	-	-	4044	4439	18000	
180.0	-	2759	-	5322	19700	
200.0	-	3064	-	-	-	
250.0	-	3826	-	-	-	
300.0	-	4589	-	-	-	
330.0	-	5046	-	-	-	