

Safety Valves

Type 06810, Type 06815 - Sealing plate



Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. S/G/L

Standard safety valve
with soft valve seal, "cleaned and degreased"
closed bonnet, gastight cap or lifting device
Inlet / Outlet: male / female thread type G (BSPP) acc. to ISO 228/1

Pmax 150.0 bar (S/G/L): Vespel seal, max. Temp. -270°C (3K) up to +300°C (573K)

Part No. 06810.10XX.000001L with cap

Part No. 06815.10XX.000001L with lifting device

Pmax 800.0 bar (S/G): PEEK seal, max. Temp. -60°C (213K) up to +85°C (358K)

Part No. 06810.04X3.000001W with cap

Part No. 06810.0423.503001W with inlet 13/16"-16 UN

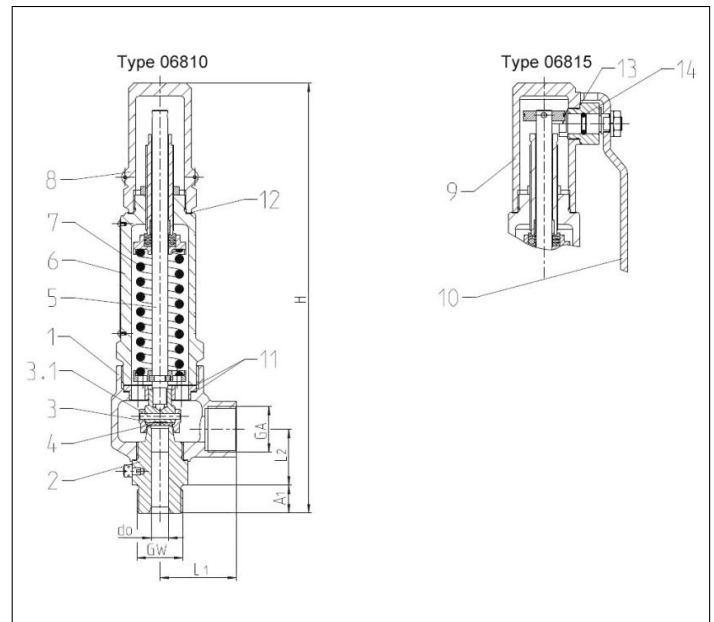
Available options - on request only:
· NPT- connection for in- and outlet



Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases, vapours and liquids. Pressure-temperature must be observed, suitable for horizontal installation from 20 bar

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4408	A 351 CF8M
2 Inlet body	1.4404	A 276 Grade 316L
3 Disc	1.4571	A 276 Grade 316Ti
4 Sealing plate	VESPEL / PEEK	
5 Stem	1.4404	A 276 Grade 316L
6 Bonnet	1.4408	A 351 CF8M
7 Spring	1.4571	A 313 Grade 316Ti
8 Cap	1.4408	A 351 CF8M
9 Lifting cap	1.4408	A 351 CF8M
10 Lever	1.4301	A 276 Grade 304
Spare Parts		
2 Inlet body	1.4404	316L
3.1 Split pin	1.4571	316Ti
4 Sealing plate	VESPEL / PEEK	
11 Gasket	1.4404 Graphite	316L Graphite
12 Gasket	PTFE	
13 Gasket	PTFE	
14 O-ring	FPM (VITON)	



Type 06810, 06815	Technical data							
	Nominal size	GW	1/2	3/4	13/16" - 16 UN	1/2	1/2	3/4
Orifice	d ₀	4.0	4.0	4.0	10.0	10.0	10.0	10.0
Dimension code	.X.	0423	0433	0423	1022	1023	1023	1033
Set pressure range	bar	260-400	260-800	260-800	1.5-150	1.5-150	1.5-150	1.5-150
Outlet	GA	3/4	3/4	3/4	1/2	3/4	3/4	3/4
Height	H1	247	247	247	245	245	245	245
Length	L1	45	45	45	44	44	44	44
Length	L2	29	29	29	32	32	32	32
Length	A1	16	16	16	14	14	14	16
Weight 06810	ca. kg	1.9	1.9	1.9	1.8	1.8	1.8	1.8
Weight 06815	ca. kg	2.1	2.1	2.1	2.0	2.0	2.0	2.0
Coeff. of discharge gases/vapours	α _w	0.66	0.66	0.66	0.50	0.50	0.50	0.50
Coeff. of discharge fluids	α _w	-	-	-	0.50	0.50	0.50	0.50

Dimensions in mm.

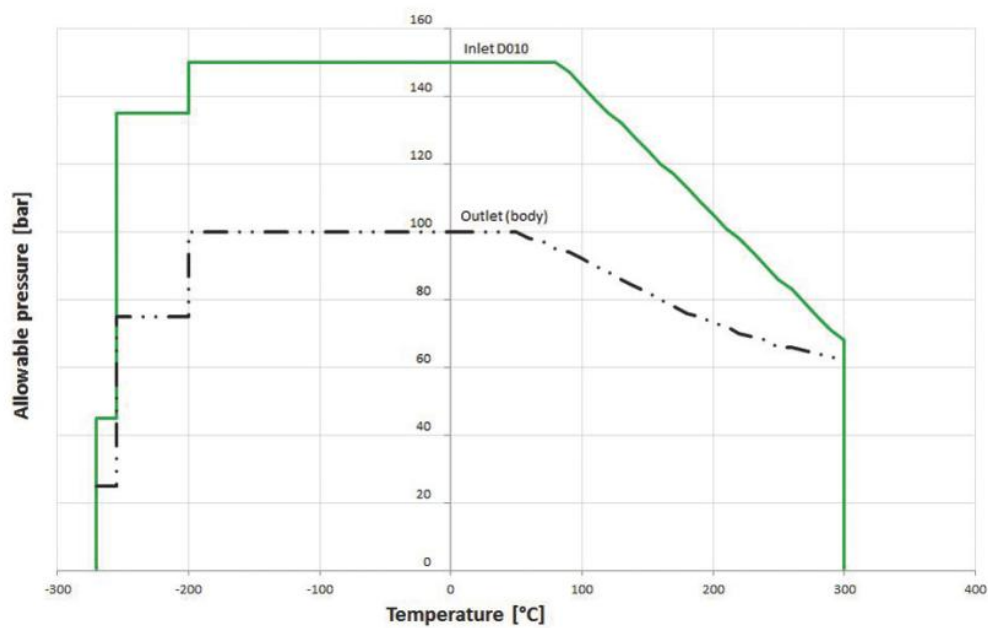
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Pressure-Temperature Rating

Maximum allowable set pressure safety valve type 0681X



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Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

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

D = Flow Hydrogen in m³/h at 20°C

E = Flow Hydrogen in kg/h at 20°C

The capacity indicated below is for a fully opened valve.

d₀ - orifice

A₀ - flow area

Set pressure in bar (g)	GW		1/2, 3/4 & 1		
	d ₀ (mm)	10.0			
	A ₀ (mm ²)	78.5			
	Medium	A	B	C	
0.2	-	-	-		
0.5	-	40	1549		
1.0	-	55	2097		
2.0	-	86	2966		
3.0	-	116	3632		
4.0	-	145	4194		
5.0	-	175	4689		
6.0	-	205	5137		
7.0	-	234	5548		
8.0	-	264	5931		
9.0	-	294	6291		
10.0	-	324	6631		
15.0	-	472	6947		
20.0	-	627	9378		
30.0	-	936	11485		
40.0	-	1249	13262		
50.0	-	1568	14828		
60.0	-	1890	16243		
65.0	-	2045	16906		
70.0	-	2216	-		
80.0	-	2546	-		
90.0	-	2878	-		
100.0	-	3212	-		
110.0	-	3544	-		
120.0	-	3877	-		
140.0	-	4549	-		
150.0	-	4872	-		

Set pressure in bar (g)	GW		1/2, 3/4, 13/16"		
	d ₀ (mm)	4,0			
	A ₀ (mm ²)	12,56			
	Medium	B	D	E	
260	1865	6044	543		
300	2157	6941	624		
400	2847	9142	822		
500	3481	11281	1014		
600	4065	13360	1201		
700	4609	15379	1382		
800	5119	17342	1559		