

Safety Valves

Type 06810, Type 06815



Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. D/G/F

Standard safety valve

metal to metal seated, "cleaned and degreased for oxygen service"

closed bonnet, gastight cap or lifting device

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

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

Part No. 06810.X.000000M (0.50 up to 15.99 bar)

Part No. 06810.X.000000H (16.00 up to 180.00 bar) seat & disc stellited

with gastight cap

Part No. 06815.X.000000M (0.50 up to 15.99 bar)

Part No. 06815.X.000000H (16.00 up to 180.00 bar) seat & disc stellited

with lifting device

Available options - on request only:

· Flange-, NPT- or Tri-Clamp connection for in- and outlet



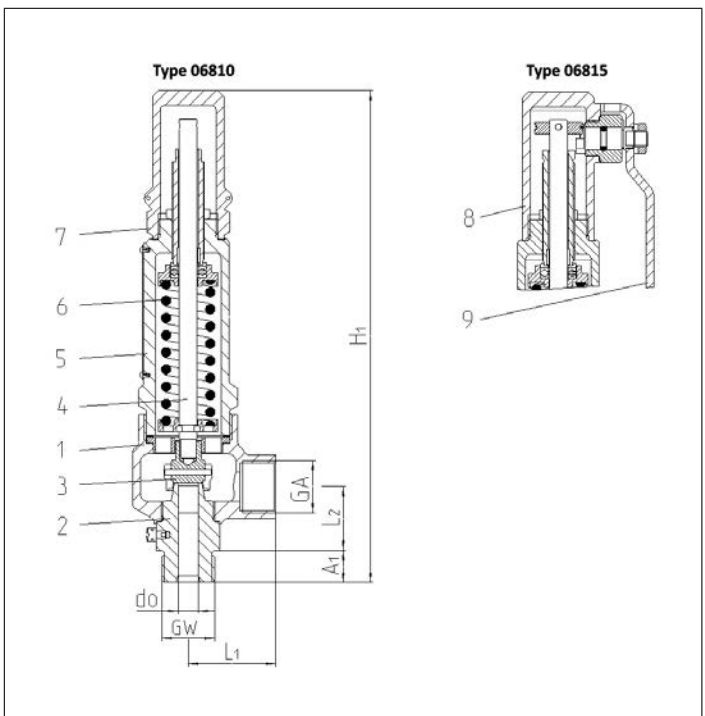
Applications:

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

Working temperature: -270°C / -454°F (3K) up to +400°C / +752°F (673K)

Pressure-temperature must be observed, suitable for horizontal installation from 20 bar

Materials	DIN EN	ASTM
1 Outlet body	1.4408	A 351 CF 8M
2 Inlet body	1.4571	A 276 Grade 316Ti
3 Disc	1.4571	A 276 Grade 316Ti
4 Stem	1.4404	A 276 Grade 316L
5 Bonnet	1.4404	A 276 Grade 316L
6 Spring	1.4571	A 313 Grade 316Ti
7 Cap	1.4404	A 276 Grade 316L
8 Lifting cap	1.4404	A 276 Grade 316L
9 Lever	1.4408	A 351 CF 8M



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).



Type 06810, 06815	Technical data			
Nominal size	GW	1/2	1/2	3/4
Orifice	d ₀	10.0	10.0	10.0
Dimension code	.X.	1022	1023	1033
Set pressure range	bar	0.5-180	0.5-180	0.5-180
Outlet	GA	1/2	3/4	3/4
Height	H ₁	230	230	230
Length	L ₁	44	44	44
Length	L ₂	29	29	29
Length	A ₁	14	14	16
Weight 06810	ca. kg	1.8	1.8	1.8
Weight 06815	ca. kg	2.0	2.0	2.0
Coeff. of discharge gases, vapours	α _w	0.5	0.5	0.5
Coeff. of discharge fluids	α _w	0.5	0.5	0.5

Dimensions in mm.

Safety Valves

Type 06810, Type 06815



Discharge capacities

Calculation of mass flow 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

The capacity indicated below is for a fully opened valve.

d_0 - orifice

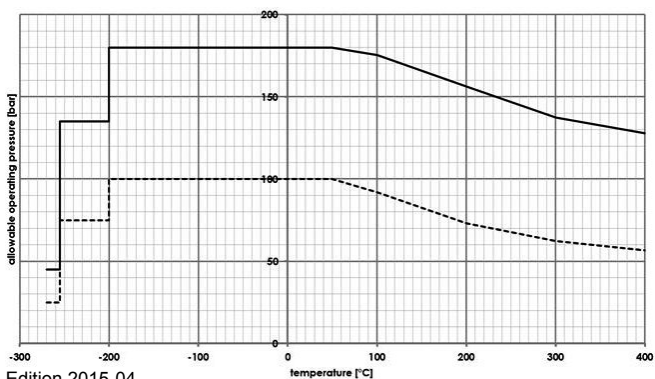
A_0 - flow area

Set pressure in bar (g)	GW	1/2 & 3/4		
	d_0 (mm)	10.0		
	A_0 (mm ²)	78.5		
Medium	A	B	C	
0.5	32	39	1548	
1.0	44	55	2096	
2.0	67	85	2965	
3.0	90	115	3632	
4.0	112	145	4193	
5.0	134	174	4688	
6.0	156	204	5136	
7.0	178	234	5548	
8.0	200	264	5931	
9.0	222	294	6290	
10.0	244	324	6631	
12.0	288	383	7264	
14.0	331	443	7846	
16.0	375	502	8387	
18.0	418	561	8896	
20.0	462	627	9377	
25.0	570	777	10484	
30.0	680	935	11485	
35.0	788	1087	12405	
40.0	897	1249	13262	
45.0	1008	1401	14066	
50.0	1118	1567	14827	
60.0	1341	1889	16243	
70.0	1562	2216	17544	
80.0	1788	2545	18755	
90.0	2013	2878	19893	
100.0	2244	3212	20969	
120.0	2723	3876	22971	
130.0	2972	4197	23909	
140.0	-	4548	24811	
160.0	-	5213	26524	
180.0	-	5861	28133	

Pressure-Temperature Rating

Allowable operating pressure at the valve inlet and outlet
Safety valve type 06810.10 and 06815.10

--- allowable pressure / outlet PN 100 — allowable temperature / inlet PN 180



Edition 2015-04