

# Safety Valves

## Type 06850, Type 06855



**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. 06850.X.000000M (0.50 up to 19.99 bar)**

**Part No. 06850.X.000000H (20.00 up to 250.00 bar) seat & disc stellited with gastight cap**

**Part No. 06855.X.000000M (0.50 up to 19.99 bar)**

**Part No. 06855.X.000000H (20.00 up to 250.00 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.

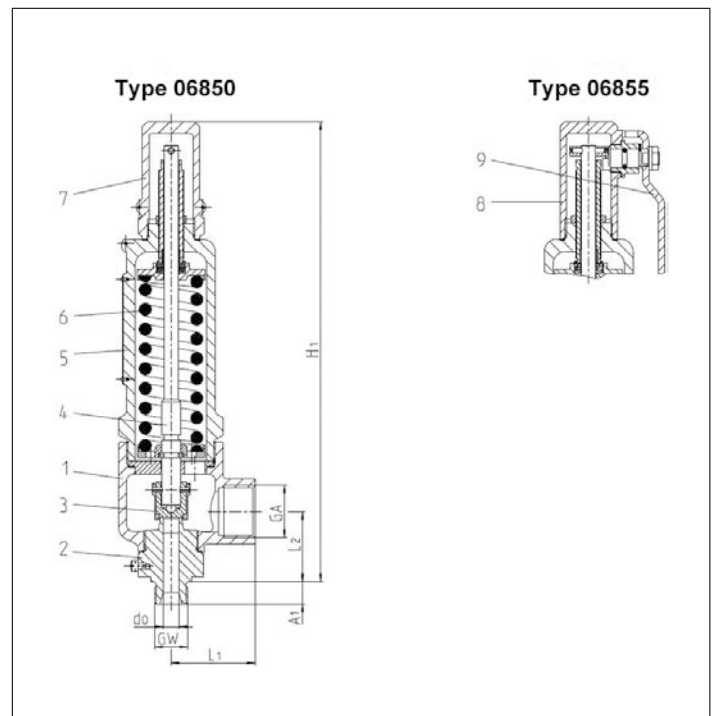
Working temperature: -270°C / -454°F (3K) up to +400°C / +752°F (673K)

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 06850, 06855	Technical data			
Nominal size	GW	1/2	3/4	1
Orifice	d <sub>0</sub>	10.0	10.0	10.0
Dimension code	.X.	1024	1034	1044
Set pressure range	bar	0.5-250	0.5-250	0.5-250
Outlet	GA	1	1	1
Height	H <sub>1</sub>	291	291	291
Length	L <sub>1</sub>	53	53	53
Length	L <sub>2</sub>	44.5	44.5	44.5
Length	A <sub>1</sub>	14	16	18
Weight 06850	ca. kg	3.2	3.2	3.2
Weight 06855	ca. kg	3.4	3.4	3.4
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.84	0.84	0.84
Coeff. of discharge fluids	α <sub>w</sub>	0.68	0.68	0.68

Dimensions in mm.

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### 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 m<sup>3</sup>/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 & 1		
	$d_0$ (mm)	10.0		
	$A_0$ (mm <sup>2</sup> )	78.5		
	Medium	A	B	C
0.5		46	56	2075
1.0		70	88	2851
2.0		112	142	4033
3.0		151	194	4939
4.0		189	243	5703
5.0		226	293	6377
6.0		263	343	6985
7.0		300	393	7545
8.0		337	444	8066
9.0		374	494	8555
10.0		411	544	9018
15.0		594	794	11045
20.0		776	1053	12754
30.0		1142	1572	15620
40.0		1508	2098	18036
50.0		1879	2633	20165
60.0		2253	3175	22090
70.0		2625	3723	23860
80.0		3004	4276	25508
90.0		3382	4835	27055
100.0		3770	5396	28518
120.0		4576	6512	31240
140.0		5428	7642	33744
160.0		6324	8758	36073
180.0		7287	9846	38262
200.0		-	10898	40331
220.0		-	11930	42300
240.0		-	12982	44181
250.0		-	13521	45092

### Pressure-Temperature Rating

