

# Safety Valves

## Type 06820



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

**Part No. 06820.X.000000H (Pmax 550.0 bar) stellite version**  
 with gastight cap

Available options - on request only:

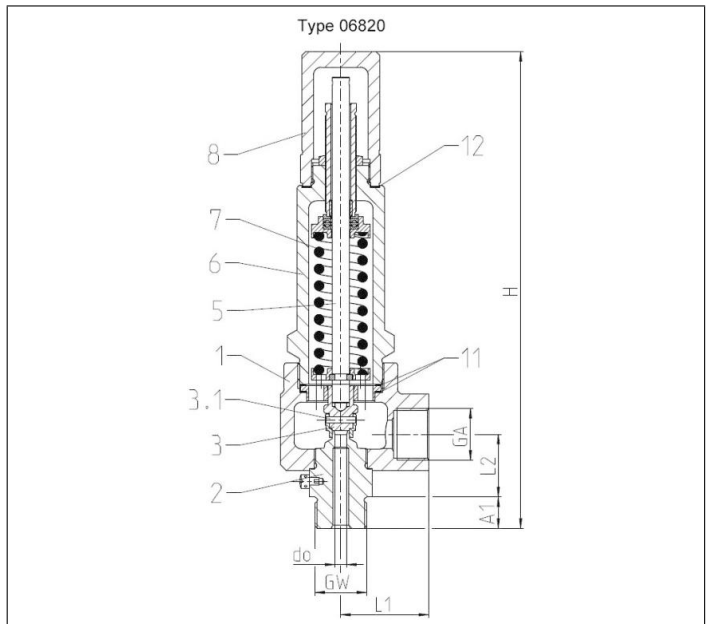
- Flange- or NPT- connection for in- and outlet
- Special materials such as Monel, Hastelloy or Duplex for medium wetted parts



### Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases, vapours and liquids. Working temperature: -270°C / -454°F (3K) up to +400°C / +752°F (673K)  
 Pressure-temperature must be observed, suitable for horizontal installation up to 300 bar

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4404	A 276 Grade 316L
2 Inlet body	1.4571	A 276 Grade 316Ti
3 Disc	1.4571	A 276 Grade 316Ti
5 Stem	1.4404	A 276 Grade 316L
6 Bonnet	1.4404	A 276 Grade 316L
7 Spring	1.4571	A 313 Grade 316Ti
8 Cap	1.4404	A 276 Grade 316L
Spare Parts		
2 Inlet body	1.4571	316Ti
3 Disc	1.4571	316Ti
3.1 Split pin	1.4310	301
11 Gasket	Graphite	
12 Gasket	Graphite	



**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 2014/68/EU (PED).



Type 06820	Technical data	
Nominal size	<b>GW</b>	<b>3/4</b>
Orifice	d <sub>0</sub>	6.0
Dimension code	.X.	0633
Set pressure range	bar	180-550
Outlet	GA	3/4
Height	H <sub>1</sub>	247
Length	L <sub>1</sub>	45
Length	L <sub>2</sub>	29
Length	A <sub>1</sub>	16
Weight 06820	ca. kg	2.9
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.52
Coeff. of discharge fluids	α <sub>w</sub>	0.42

Dimensions in mm.

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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 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	3/4		
	$d_0$ (mm)	6.0		
	$A_0$ (mm <sup>2</sup> )	28.27		
	Medium	A	B	C
180.0		1688	2194	8508
200.0		2215	2429	8968
220.0		-	2659	9406
240.0		-	2893	9824
260.0		-	3133	10225
280.0		-	3374	10611
300.0		-	3614	10983
320.0		-	3854	11344
340.0		-	4094	11693
360.0		-	4334	12032
380.0		-	4575	12361
400.0		-	4815	12683
420.0		-	5055	12996
440.0		-	5295	13302
460.0		-	5535	13601
480.0		-	5776	13893
500.0		-	6016	14180
520.0		-	6256	14460
550.0		-	6616	14872

### Pressure-Temperature Rating

Maximum allowable set pressure safety valve type 06820

