

Safety Valves

Type 06381



Cryogenic Safety Valves, angle type, stainless steel, PN40, type tested TÜV-SV.780. S/G

Standard safety valve

Metal to metal seated, closed bonnet

"cleaned and degreased for oxygen service"

Part No. 06381.X.0000

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

Part No. 06381.X.2000

Inlet: male thread type R (BSPT) acc. to ISO 7/1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06381.X.5000

Inlet: male thread NPT acc. to ANSI B 1.20.1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06381.X.6000

Inlet: male thread NPT acc. to ANSI B 1.20.1, Outlet: female thread NPT acc. to ANSI B 1.20.1

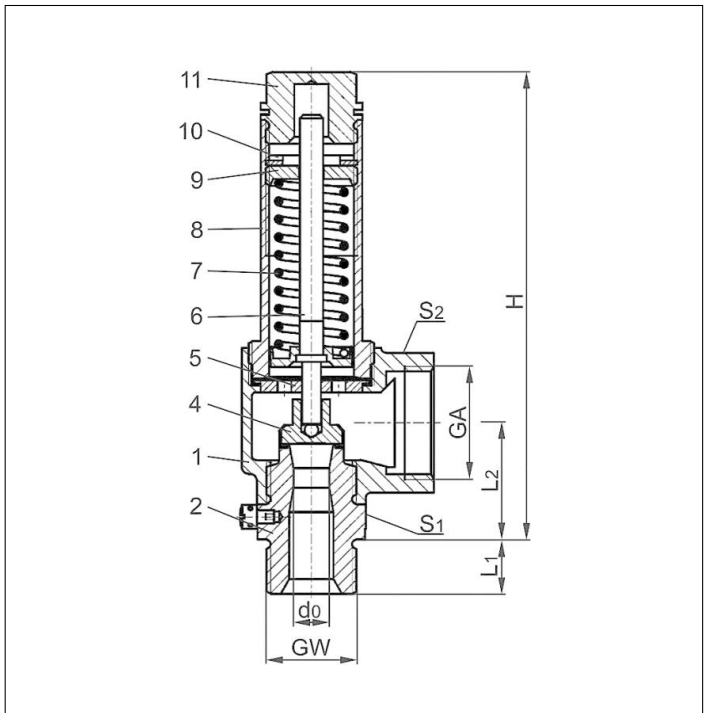


Applications:

Provided as safety device for protection against excessive pressure in stationary and moveable gas cylinders and pressure vessels. Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +185°C / +365°F (458K)

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4308	A 351 CF8
2 Inlet body	1.4301	A 276 Grade 304
4 Disc	1.4541	A 276 Grade 321
5 Guide plate	1.4301	A 276 Grade 304
6 Stem	1.4301	A 276 Grade 304
7 Spring	1.4571	A 313 Grade 316Ti
8 Bonnet	1.4308	A 351 CF8
9 Spring clamp	1.4301	A 276 Grade 304
10 Thread ring	1.4301	A 276 Grade 304
11 Cap	1.4301	A 276 Grade 304



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) and ASME Code Section VIII.



Type 06381	Technical data		
Nominal size	GW	1/2	3/4
Orifice	d ₀	10.5	10.5
Dimension code	.X.	1004	1006
Set pressure range	bar	0.2-25.0	0.2-25.0
Outlet	GA	1	1
Height	H	140	140
Length	L ₁	14	16
Length	L ₂	36	36
Wrench size across flats	S ₁	30	30
Wrench size across flats	S ₂	41	41
Weight	ca. kg	0.75	0.78
Coeff. of discharge from 3.0 bar	α _w	0.67	0.67

Dimensions in mm.

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Discharge capacities

Medium:

Air in m³/h at 0°C and 1013.25 mbar

Air in SCFM at 60°F (15.6°C) and 14.7 psia (1013.25 mbar)

The capacity indicated below is for a fully opened valve.

d₀ - orifice

A₀ - flow area

Calculation of discharge capacity acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1 resp. ASME Code Sec. VIII.

Set pressure in bar (g)	GW	1/2 & 3/4
	d ₀ (mm)	10.5
	A ₀ (mm ²)	86.6
	Medium	Air in m ³ /h
0.2		25
0.5		48
1.0		75
1.5		100
2.0		124
3.0		171
4.0		214
5.0		259
6.0		302
7.0		346
8.0		391
9.0		434
10.0		479
12.0		567
14.0		655
16.0		742
18.0		830
20.0		927
22.0		1015
24.0		1104
25.0		1148

Set pressure in psig	GW	1/2 & 3/4
	d ₀ (inch)	0.413
	A ₀ (in ²)	0.134
	Medium	Air in SCFM
30		81
40		100
50		118
60		137
70		156
80		175
90		193
100		212
120		249
140		287
160		324
180		362
200		399
220		436
240		474
260		511
280		549
300		586
320		623
340		661
363		704