

# 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

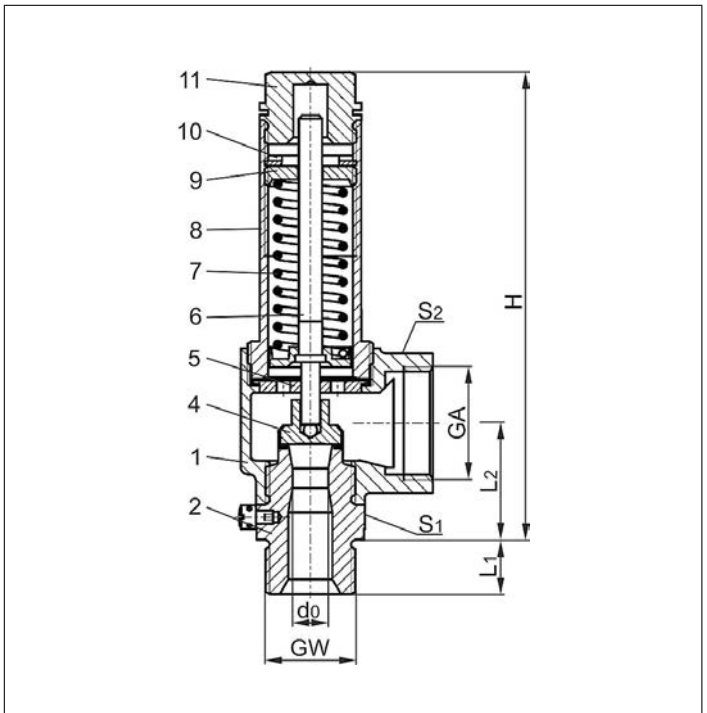


### Applications:

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	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 97/23/EC (PED).



Type 06381	Technical data		
<b>Nominal size</b>	<b>GW</b>	<b>1/2</b>	<b>3/4</b>
Orifice	d <sub>0</sub>	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 <sub>1</sub>	14	16
Length	L <sub>2</sub>	36	36
Wrench size across flats	S <sub>1</sub>	30	30
Wrench size across flats	S <sub>2</sub>	41	41
Weight	ca. kg	0.75	0.78
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.67	0.67

Dimensions in mm.

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### Discharge capacities

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

Medium:

**Air** in m<sup>3</sup>/h at 0°C and 1013.25 mbar

**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)	10.5	10.5
	$A_0$ (mm <sup>2</sup> )	86.6	86.6
	Medium	<b>Air</b>	
0.2		25	25
0.5		48	48
1.0		74	74
1.5		99	99
2.0		123	123
3.0		170	170
4.0		214	214
5.0		258	258
6.0		302	302
7.0		345	345
8.0		390	390
9.0		434	434
10.0		479	479
12.0		566	566
14.0		654	654
16.0		742	742
18.0		830	830
20.0		926	926
22.0		1015	1015
24.0		1103	1103
25.0		1148	1148
26.0		-	-
28.0		-	-
30.0		-	-
32.0		-	-
34.0		-	-
36.0		-	-
38.0		-	-
40.0		-	-