

# Safety Valves

## Type 06001



### Cryogenic Safety Valves, angle type, brass, PN45, type tested TÜV-SV. 1030. D/G/F

Standard safety valve,  
complete with carbon filled PTFE valve seal, closed bonnet  
Outlet: female thread Rc 3/8 acc. to ISO 7/1  
"cleaned and degreased for oxygen service"

**Part No. 06001.X.0000**

Inlet: male thread type R (BSPT) acc. to ISO 7/1

**Part No. 06001.X.2000**

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

**Part No. 06001.X.5000**

Inlet: male thread NPT acc. to ANSI B 1.20.1

Available options - on request only:

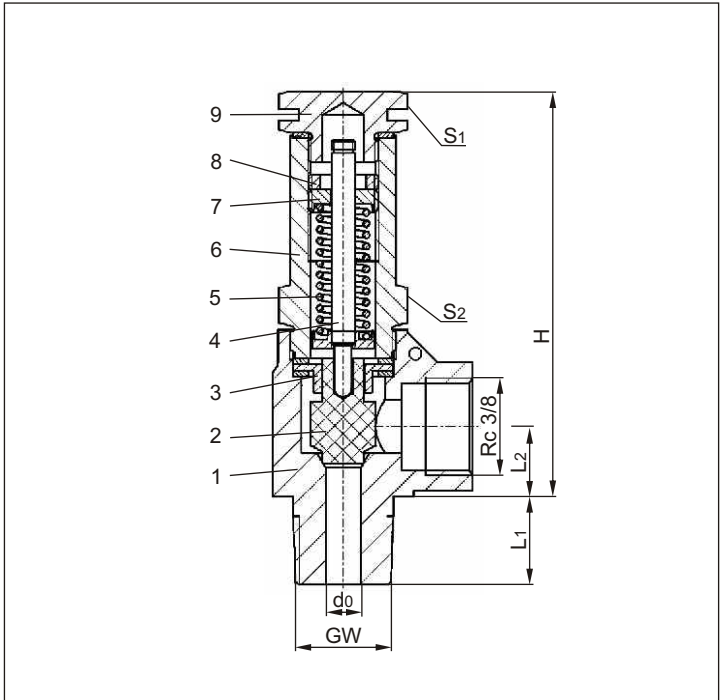
- with installed elbow at the outlet



**Applications:**

Provided as safety device for protection against thermal expansion in pipeworks and parts of facilities.  
Approved for air gases and cryogenic liquefied gases such as oxygen, nitrogen, krypton, carbon dioxide, argon, dinitrogen monoxide, trifluormethan, carbon oxide, methane, ethane and ethylene.  
Working temperature: -196°C / -321°F (77K) up to +65°C / +149°F (338K)

Materials	DIN EN	ASTM
1 Body	CW610N	B 111 UNS C28000
2 Disc	PTFE / Carbon filled (25%)	
3 Guide plate	CW612N	B 283 UNS C37700
4 Stem	CW612N	B 283 UNS C37700
5 Spring	1.4571	A 276 Grade 316Ti
6 Bonnet	CW612N	B 283 UNS C37700
7 Spring clamp	CW612N	B 283 UNS C37700
8 Thread ring	CW612N	B 283 UNS C37700
9 Cap	CW612N	B 283 UNS C37700



**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 06001	Technical data			
Nominal size	GW	1/4	3/8	1/2
Orifice	d <sub>0</sub>	6.0	6.0	6.0
Dimension code	.X.	0200	0300	0400
Set pressure range	bar	5.0-45.0	5.0-45.0	5.0-45.0
Height	H	70	70	70
Length	L <sub>1</sub>	13	15	17
Length	L <sub>2</sub>	13	13	13
Wrench size across flats	S <sub>1</sub>	19	19	19
Wrench size across flats	S <sub>2</sub>	19	19	19
Weight	ca. kg	0.18	0.195	0.21
Coefficient of discharge	α <sub>w</sub>	0.09	0.09	0.09

Dimensions in mm.

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### Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:

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

**Water** in kg/h

The capacity indicated below is for a fully opened valve.

d<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (ü)	GW	1/4	3/8	1/2	1/4	3/8	1/2
	d <sub>0</sub> (mm)	6.0	6.0	6.0	6.0	6.0	6.0
	A <sub>0</sub> (mm <sup>2</sup> )	28.3	28.3	28.3	28.3	28.3	28.3
	Medium	<b>Air</b>			<b>Water</b>		
<b>5.0</b>		11.3	11.3	11.3	304	304	304
<b>6.0</b>		13.2	13.2	13.2	333	333	333
<b>7.0</b>		15.0	15.0	15.0	359	359	359
<b>8.0</b>		16.9	16.9	16.9	384	384	384
<b>9.0</b>		18.9	18.9	18.9	408	408	408
<b>10.0</b>		20.8	20.8	20.8	430	430	430
<b>12.0</b>		24.7	24.7	24.7	471	471	471
<b>14.0</b>		28.4	28.4	28.4	509	509	509
<b>16.0</b>		32.2	32.2	32.2	544	544	544
<b>18.0</b>		36.1	36.1	36.1	577	577	577
<b>20.0</b>		39.8	39.8	39.8	608	608	608
<b>22.0</b>		43.7	43.7	43.7	638	638	638
<b>24.0</b>		47.6	47.6	47.6	666	666	666
<b>26.0</b>		51.3	51.3	51.3	694	694	694
<b>28.0</b>		55.1	55.1	55.1	720	720	720
<b>30.0</b>		59.0	59.0	59.0	745	745	745
<b>32.0</b>		62.7	62.7	62.7	769	769	769
<b>34.0</b>		66.6	66.6	66.6	793	793	793
<b>36.0</b>		70.4	70.4	70.4	816	816	816
<b>38.0</b>		74.2	74.2	74.2	838	838	838
<b>40.0</b>		78.0	78.0	78.0	860	860	860
<b>42.0</b>		81.8	81.8	81.8	881	881	881
<b>45.0</b>		87.6	87.6	87.6	912	912	912