

Safety Valves

Type 06389



Cryogenic Safety Valve, angle type, bronze, PN40, type tested TÜV-SV.780. S/G

Standard safety valve with carbon filled PTFE valve seal,
orifice $d_0=10\text{mm}$ with PTFE seal, closed bonnet
"cleaned and degreased for oxygen service"

Part No. 06389.X.0000

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

Part No. 06389.X.2000

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

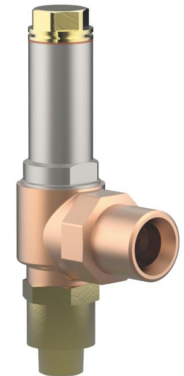
Part No. 06389.X.5000

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

Available options - on request only:

· external parts nickel plated

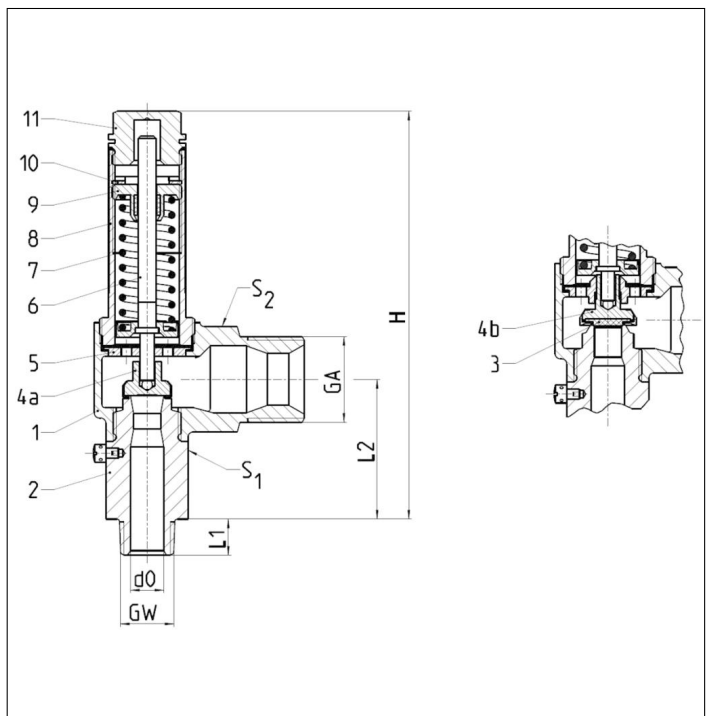
Connection size	D_0	Setting range	Seal	Alpha value
1/2"-3/4"	7	20.00 - 25.00 bar	PTFE - Carbon	0.64
1/2"-3/4"	10.5	1.80 - 5.99 bar	Sintimid	0.64
1/2"-3/4"	10.5	6.00 - 40.00 bar	PTFE - Carbon	0.54



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: $-196^\circ\text{C} / -321^\circ\text{F} (77\text{K})$ up to $+185^\circ\text{C} / +365^\circ\text{F} (458\text{K})$, suitable for horizontal installation

Materials	DIN EN	ASME/ASTM
1 Outlet body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 455 UNS C38500
3 Valve seal	PTFE / Carbon filled (25%)	
4a Disc set pressure range 1.8-5.99 bar	Tecasint 1021	
4b Disc set pressure range 6.0-40.0 bar	CC493K	B 505 UNS C93200
5 Guide plate	CW453K	B 103 UNS C52100
6 Stem	CW453K	B 103 UNS C52100
7 Spring	1.4571	A 313 Grade 316Ti
8 Bonnet	1.4308	A 351 CF 8
9 Spring clamp	CW614N	B 455 UNS C38500
10 Thread ring	CW614N	B 455 UNS C38500
11 Cap	CW614N	B 455 UNS C38500



Type 06389	Technical data				
Nominal size	GW	1/2	3/4	1/2	3/4
Orifice	d_0	7.0	7.0	10.5	10.5
Dimension code	.X.	0704	0706	1004	1006
Set pressure range	bar	1.8-40.0	1.8-40.0	1.8-40.0	1.8-40.0
Outlet	GA	1	1	1	1
Height	H	158	158	158	158
Length	L_1	14	16	14	16
Length	L_2	54	54	54	54
Wrench size across flats	S_1	32	32	32	32
Wrench size across flats	S_2	41	41	41	41
Weight	ca. kg	1.00	1.00	1.00	1.00
Coefficient of discharge	α_w	0.64	0.64	0.54	0.54
Coefficient of discharge	rated slope	0.862	0.862	1.517	1.517

Dimensions in mm.

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Discharge capacities

Medium:

Air in m³/h at 0°C and 1013.25 mbar

The capacity indicated below is for a fully opened valve.

d₀ - orifice

A₀ - flow area

Set pressure in bar (g)	GW	1/2 & 3/4	1/2 & 3/4
	d ₀ (mm)	7.0	10.5
	A ₀ (mm ²)	38.48	86.59
	Medium	Air in m ³ /h	
2.0		-	-
2.9		-	139
3.0		-	143
3.3		96	154
4.0		112	179
5.0		135	215
6.0		158	251
7.0		181	287
8.0		204	324
9.0		227	361
10.0		250	398
12.0		295	470
14.0		341	543
16.0		387	615
18.0		432	688
20.0		482	767
22.0		528	841
24.0		574	914
26.0		620	987
28.0		666	1060
30.0		719	1144
32.0		765	1218
34.0		812	1292
36.0		858	1366
38.0		905	1440
40.0		959	1527