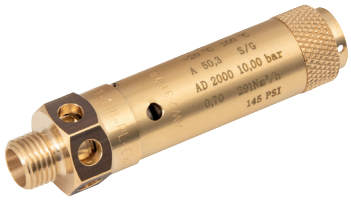
Pressure Relief Valves

Safety Valves, brass or stainless steel, type tested
TÜV-SV.1090 S/G

Standard safety valve with FPM valve seal, open bonnet, free discharge with lifting device
Inlet: male thread type G (BSPP) acc. to ISO 228/1

Part No. 06C02.A001.X - brass
Part No. 06C02.A002.X - stainless steel

Available options - on request only:
• Inlet NPT male thread
• EPDM cone sealing (-40°C / -40°F up to +150°C / 320°F)

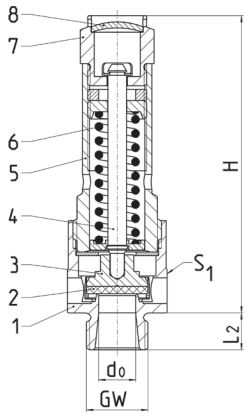


Applications:
Provided as safety device for protection against excessive pressure in stationary and moveable gas cylinders and pressure vessels. Approved for air and similar gases.

Working temperature with FPM sealing:
-20°C / -4°F (253K) up to +160°C / +320°F (433K)

Materials		DIN EN	ASME/ASTM
1	Body	CW614N	B 249 UNS C38500
2	Valve seal	FPM (Viton)	
3	Disc	CW614N	B 249 UNS C38500
4	Stem	1.4301	SS304
5	Bonnet	CW614N	B 249 UNS C38500
6	Spring	1.4571/1.1200	SS316L/A 227
7	Lifting device	CW614N	B 249 UNS C38500
8	Closing cap	CW507L	B 36 UNS C26800

Materials		DIN EN	ASME/ASTM
1	Body	1.4404	SS316L
2	Valve seal	FPM (Viton)	
3	Disc	1.4404	SS316L
4	Stem	1.4301	SS304
5	Bonnet	1.4404	SS316L
6	Spring	1.4571/1.1200	SS316L/A 227
7	Lifting device	1.4401	SS316
8	Closing cap	1.4401	SS316



Type 06C02	Technical data								
Nominal	**GW**	**1/4**	**3/8**	**1/2**	**3/8**	**1/2**	**3/4**	**3/4**	**1**
Orifice	d0	8	8	8	10	10	10	15	18
Set pressure range	bar	0.2-50	0.2-50	0.2-50	0.2-42	0.2-42	0.2-42	0.2-16	0.2-20
Height	H	78	78	78	81	81	81	92	110
Length	L2	10	10	12	10	12	15	15	18
Wrench size across flats	S1	21	21	27	27	27	32	32	41
Weight	ca. kg	0.14	0.15	0.18	0.18	0.2	0.25	0.31	0.53
Coeff. of discharge from 3.0 bar*	αw	0.7	0.7	0.7	0.61	0.61	0.61	0.6	0.6

Dimensions in mm. * Below 3 bar the coefficient may be lower. Please pay attention to the capacity chart.

Safety Valves Type 06C05

Discharge capacities
Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:
Air in m3/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 d_0(mm) A_0(mm²)	1/4, 3/8 & 1/2 8.0 50.24	3/8, 1/2, 3/4 10.0 78.5	3/4 15.0 176.7	1 18.0 254.5
	Medium	Air			
0.2		20	24	55	83
0.4		28	35	80	120
0.6		35	44	101	151
0.8		42	51	120	179
1		48	59	137	205
2		76	98	228	334
3		104	141	312	450
4		130	177	392	564
5		157	213	472	680
6		183	250	552	795
7		210	286	632	910
8		237	323	714	1028
9		263	359	794	1143
10		291	396	876	1261
12		344	468	1036	1492
14		397	541	1197	1723
16		450	613	1357	1954
18		504	686	-	2185
20		562	765	-	2439
22		616	838	-	-
24		670	912	-	-
26		723	985	-	-
28		777	1058	-	-
30		839	1142	-	-
32		893	1216	-	-
34		947	1289	-	-
36		1001	1363	-	-
38		1056	1437	-	-
40		1119	1524	-	-
42		1174	1599	-	-
45		1256	-	-	-
50		1405	-	-	-