

Safety Valves

Type 06C02

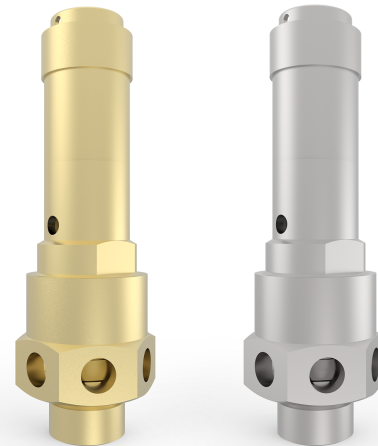


**Safety Valves, brass or stainless steel,
type tested TÜV-SV.1090 S/G**

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.X.EFGH - definition see end of the data sheet

- Available options - on request only:
- Inlet NPT, M or R male thread
 - EPDM cone sealing (-40°C / -40°F up to +150°C / 320°F)
 - PTFE cone sealing (-60°C / -76°F up to +160°C / 320°F) from 2.5 bar

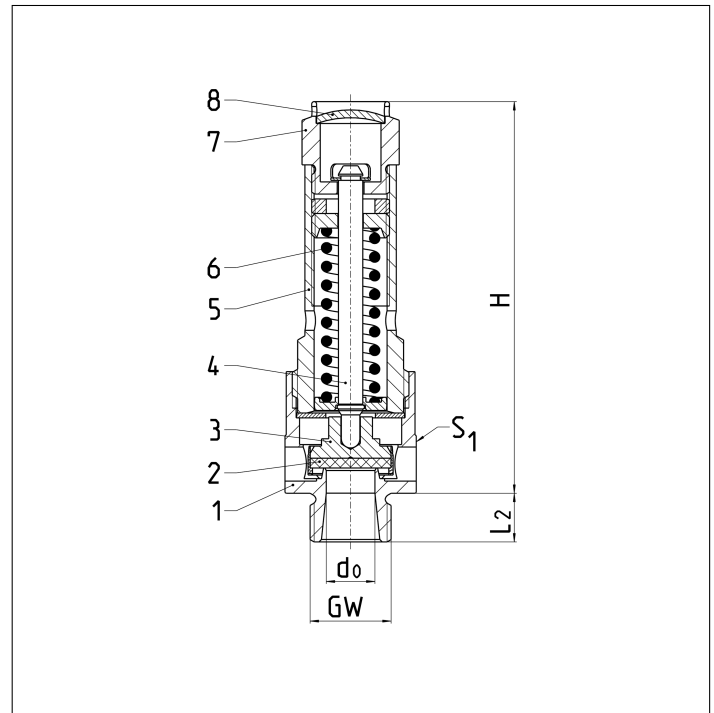


Applications:

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), horizontal installation from 2.5 bar. All sealings are FDA conform.

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	
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	
7 Lifting device	1.4401	SS316
8 Closing cap	1.4401	SS316



Type 06C02	Technical data						
Nominal size	GW	1/4	3/8	1/2	3/4	3/4	1
Orifice	d ₀	8	10	10	10	15	18
Dimension code	.X.	0800	1002	1004	1006	1506	1810
Set pressure range	bar	0.2-50	0.2-50	0.2-50	0.2-50	0.2-16	0.2-20
Height	H	79	80	80	80	92	110
Length	L ₂	10	10	12	15	15	18
Wrench size across flats	S ₁	21	21	24	30	32	41
Weight	ca. kg	0.14	0.15	0.17	0.23	0.31	0.53
Coeff. of discharge from 3.0 bar*	α _w	0.74	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.

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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	1/4	3/8, 1/2, 3/4	3/4	1
	d_0 (mm)	8.0	10.0	15.0	18.0
	A_0 (mm ²)	50.24	78.5	176.7	254.5
	Medium	Air			
0.2		20	23	55	83
0.4		29	33	80	120
0.6		37	42	101	151
0.8		43	50	120	179
1.0		49	58	137	205
2.0		79	98	228	334
3.0		109	141	312	450
4.0		137	177	392	564
5.0		165	213	472	680
6.0		193	249	552	795
7.0		221	285	632	910
8.0		250	322	714	1028
9.0		278	358	794	1143
10.0		306	394	876	1261
12.0		362	467	1036	1492
14.0		418	539	1197	1723
16.0		474	611	1357	1954
18.0		530	683	-	2185
20.0		592	762	-	2439
22.0		648	835	-	-
24.0		705	908	-	-
26.0		761	980	-	-
28.0		818	1053	-	-
30.0		874	1126	-	-
32.0		931	1199	-	-
34.0		987	1272	-	-
36.0		1044	1345	-	-
38.0		1100	1417	-	-
40.0		1157	1490	-	-
42.0		1214	1563	-	-
45.0		1298	1672	-	-
50.0		1471	1895	-	-

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Definition of material numbers of the safety valves 06C02 06C02.ABCD.EFGH

Basic:	lifting screw Material spring 1.4571
AB: do of SV	08 = 8mm 10 = 10mm 15 = 15mm 18 = 18mm
CD: Threads	00 = 1/4" 02 = 3/8" 04 = 1/2" 06 = 3/4" 10 = 1" 16 = M16 18 = M18
E: Inlet	0 = male BSP (ISO228-1) (Standard) 1 = male metric x1,5 (DIN13-6) 2 = male R (ISO7-1) 5 = male NPT (ANSI B1.20.1) 9 = Special design
F: Sealing	0 = FKM / FPM (Standard) 3 = PTFE 6 = EPDM
G: Material Body	0 = CW614N (Brass) (Standard) 1 = 1.4404 (V2A/ stainless steel)
H: Additional parts	0 = without (Standard)

e.g. **06C02.0800.0000**

06C02.	AB	CD.	E	F	G	H
06C02.	08	00.	0	0	0	0
06C02	d08	1/4"	male BSP	FKM	CW614N	without accesories