

# Safety Valves

## Type 06C02



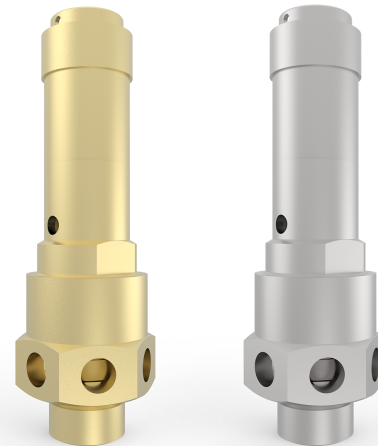
**Safety Valves, brass or stainless steel,  
type tested TÜV-SV.1090 S/G**

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

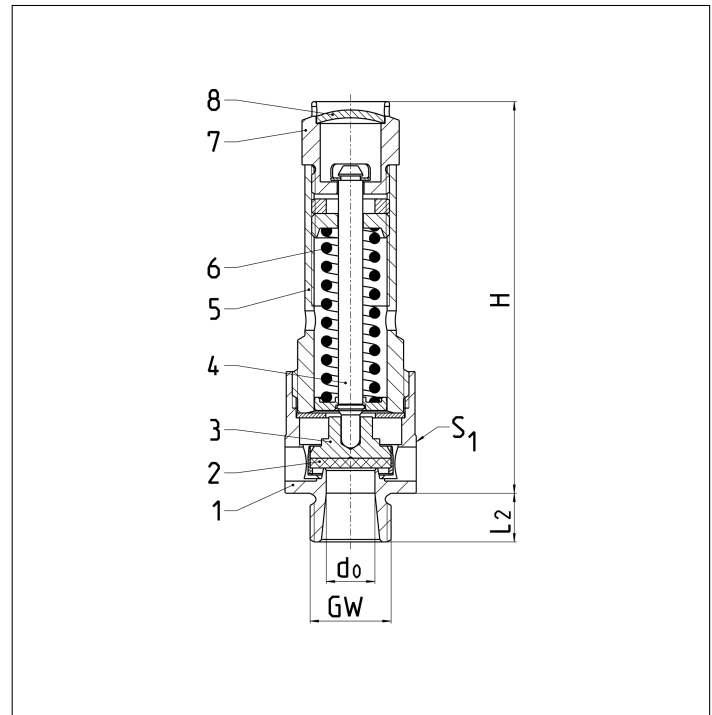


### Applications:

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 <sub>0</sub>	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 <sub>2</sub>	10	10	12	15	15	18
Wrench size across flats	S <sub>1</sub>	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 <sub>w</sub>	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 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	1/4	3/8, 1/2, 3/4	3/4	1
	$d_0$ (mm)	8.0	10.0	15.0	18.0
	$A_0$ (mm <sup>2</sup> )	50.24	78.5	176.7	254.5
	Medium	<b>Air</b>			
<b>0.2</b>		20	23	55	83
<b>0.4</b>		29	33	80	120
<b>0.6</b>		37	42	101	151
<b>0.8</b>		43	50	120	179
<b>1.0</b>		49	58	137	205
<b>2.0</b>		79	98	228	334
<b>3.0</b>		109	141	312	450
<b>4.0</b>		137	177	392	564
<b>5.0</b>		165	213	472	680
<b>6.0</b>		193	249	552	795
<b>7.0</b>		221	285	632	910
<b>8.0</b>		250	322	714	1028
<b>9.0</b>		278	358	794	1143
<b>10.0</b>		306	394	876	1261
<b>12.0</b>		362	467	1036	1492
<b>14.0</b>		418	539	1197	1723
<b>16.0</b>		474	611	1357	1954
<b>18.0</b>		530	683	-	2185
<b>20.0</b>		592	762	-	2439
<b>22.0</b>		648	835	-	-
<b>24.0</b>		705	908	-	-
<b>26.0</b>		761	980	-	-
<b>28.0</b>		818	1053	-	-
<b>30.0</b>		874	1126	-	-
<b>32.0</b>		931	1199	-	-
<b>34.0</b>		987	1272	-	-
<b>36.0</b>		1044	1345	-	-
<b>38.0</b>		1100	1417	-	-
<b>40.0</b>		1157	1490	-	-
<b>42.0</b>		1214	1563	-	-
<b>45.0</b>		1298	1672	-	-
<b>50.0</b>		1471	1895	-	-

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

<b>Basic:</b>	lifting screw Material spring 1.4571
<b>AB: do of SV</b>	08 = 8mm 10 = 10mm 15 = 15mm 18 = 18mm
<b>CD: Threads</b>	00 = 1/4" 02 = 3/8" 04 = 1/2" 06 = 3/4" 10 = 1" 16 = M16 18 = M18
<b>E: Inlet</b>	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
<b>F: Sealing</b>	0 = FKM / FPM (Standard) 3 = PTFE 6 = EPDM
<b>G: Material Body</b>	0 = CW614N (Brass) (Standard) 1 = 1.4404 (V2A/ stainless steel)
<b>H: Additional parts</b>	0 = without (Standard) 1 = protection cap

e.g.            **06C02.0800.0000**

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