

# Safety Valves

## Type 06380



### Safety Valves, angle type, bronze, type tested TÜV-SV.749. S/G

Standard safety valve

with soft valve seal, open bonnet, with lifting device

In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

#### Part No. 06380.X.0000

with FPM valve seal for air and similar gases

Working temperature: -10°C / +14°F (263K) up to +185°C / +365°F (458K)

#### Part No. 06380.X.0300

with PTFE valve seal for air and similar gases

and saturated steam from 2.0 up to 10.0 bar.

Working temperature: -10°C / +14°F (263K) up to +185°C / +365°F (458K)

#### Part No. 06380.X.0600

with EPDM valve seal for air and similar gases

and steam from 0.2 up to 8 bar. (saturated steam only up to 3.7 bar)

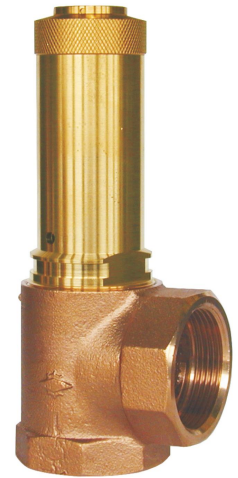
Working temperature: -10°C / +14°F (263K) up to +150°C / +302°F (423K)

Available options - on request only:

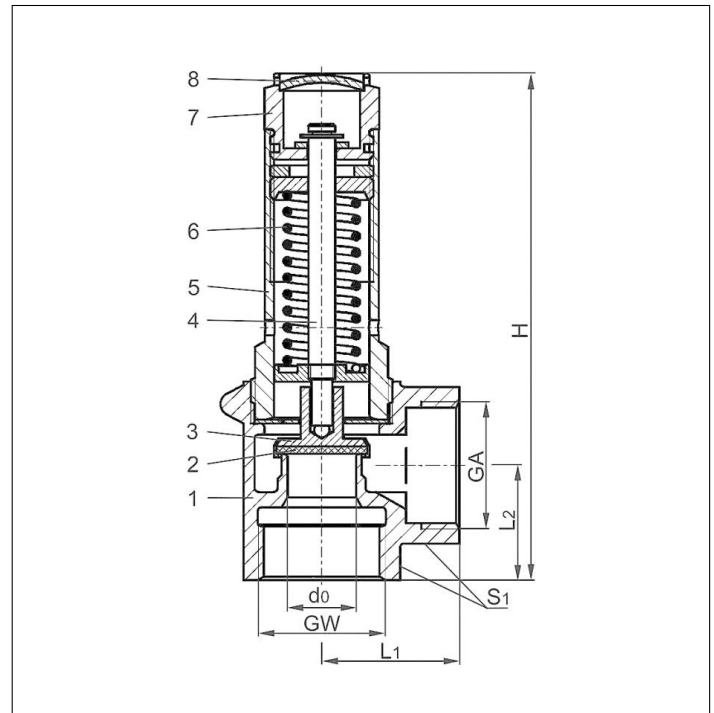
- stainless steel spring - material 1.4571, external parts nickel plated

### Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels.



Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	FPM, PTFE or EPDM	
3 Disc	CW614N	B 249 UNS C38500
4 Stem	CW614N	B 249 UNS C38500
5 Bonnet	CW614N	B 249 UNS C38500
6 Spring	1.1200	A 227
7 Lifting device	CW614N	B 249 UNS C38500
8 Closing cap	CW507L	B 36 UNS C26800



Type 06380	Technical data						
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Orifice	d <sub>0</sub>	12	15	18	20	24	28
Dimension code	.X.	0400	0600	1000	1200	1400	2000
Set pressure range FPM seal	bar	0.2-20	0.2-20	0.2-20	0.2-20	0.2-16	0.2-16
Set pressure range PTFE seal	bar	0.2-20	0.5-20	0.2-20	0.4-20	0.2-16	1.0-16
Set pressure range EPDM seal	bar	0.2-8	0.2-8	0.2-9	0.2-9	0.2-8	0.2-8
Outlet	GA	1/2	3/4	1	1-1/4	1-1/2	2
Height	H	99	111	132	152	175	200
Length	L <sub>1</sub>	25	30	36	40	48	56
Length	L <sub>2</sub>	22	25	30	35	40	48
Wrench size across flats	S <sub>1</sub>	27	32	41	50	58	70
Weight	ca. kg	0.24	0.40	0.70	1.07	1.65	2.65
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.47	0.37	0.52	0.57	0.52	0.50

Dimensions in mm.

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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

**Saturated steam** 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 (g)	GW	1/2	3/4	1	1-1/4	1-1/2	2	1/2	3/4	1	1-1/4	1-1/2	2
	d <sub>0</sub> (mm)	12.0	15.0	18.0	20.0	24.0	28.0	12.0	15.0	18.0	20.0	24.0	28.0
	A <sub>0</sub> (mm <sup>2</sup> )	113.1	176.7	254.5	314.2	452.4	615.8	113.1	176.7	254.5	314.2	452.2	615.8
	Medium	Air						Saturated steam					
<b>0.2</b>		28	38	69	96	123	159	27	36	65	90	116	150
<b>0.4</b>		41	55	101	138	180	237	35	47	87	118	154	203
<b>0.5</b>		46	61	115	155	204	271	39	51	96	129	171	227
<b>1.0</b>		68	89	172	231	306	408	54	70	136	182	242	322
<b>2.0</b>		114	141	284	392	505	660	90	111	223	308	397	519
<b>3.0</b>		157	193	390	527	693	907	122	150	304	412	541	708
<b>4.0</b>		196	242	489	662	869	1138	153	188	380	514	675	884
<b>5.0</b>		237	291	590	798	1048	1372	183	225	455	616	809	1058
<b>6.0</b>		277	341	689	933	1225	1604	213	262	530	717	941	1232
<b>7.0</b>		317	390	789	1067	1402	1835	243	298	604	817	1073	1405
<b>8.0</b>		358	440	891	1206	1584	2073	272	335	678	917	1205	1577
<b>9.0</b>		398	490	991	1341	1762	2306	302	371	751	1017	1335	1748
<b>10.0</b>		439	540	1093	1479	1943	2543	331	407	824	1116	1466	1918
<b>12.0</b>		519	639	1293	1750	2299	3009	-	-	-	-	-	-
<b>14.0</b>		600	738	1493	2021	2655	3475	-	-	-	-	-	-
<b>16.0</b>		680	837	1693	2292	3011	3940	-	-	-	-	-	-
<b>18.0</b>		761	936	1894	2563	-	-	-	-	-	-	-	-
<b>20.0</b>		849	1044	2114	2861	-	-	-	-	-	-	-	-