

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

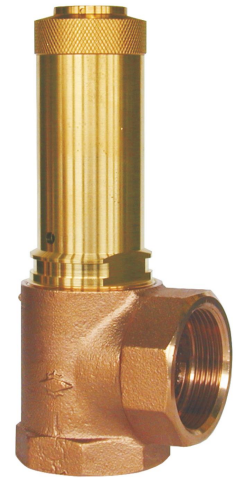
with PTFE valve seal for air and similar gases
and saturated steam from 2.0 bar (1/2" suitable for horizontal installation)
Working temperature: -10°C / +14°F (263K) up to +225°C / +437°F (498K)

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:

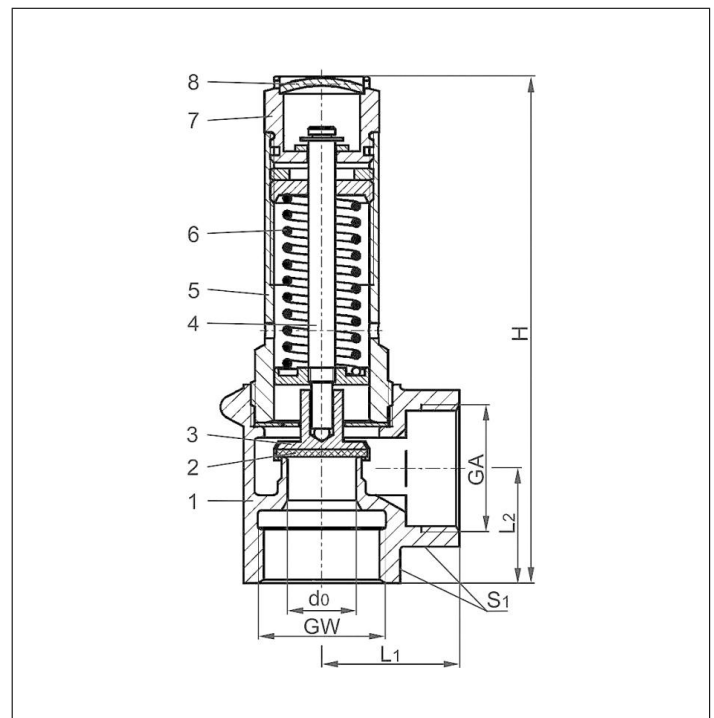
- stainless steel spring - material 1.4571, external parts nickel plated
- male inlet connection



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 ₀	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 ₁	25	30	36	40	48	56
Length	L ₂	22	25	30	35	40	48
Wrench size across flats	S ₁	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 _w	0.47	0.37	0.52	0.57	0.52	0.50

Dimensions in mm.

Safety Valves

Type 06380



Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

Air in m³/h at 0°C and 1013.25 mbar

Saturated steam in kg/h

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	1-1/4	1-1/2	2	1/2	3/4	1	1-1/4	1-1/2	2
	d ₀ (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 ₀ (mm ²)	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					
0.2		28	38	69	96	123	159	27	36	65	90	116	150
0.4		41	55	101	138	180	237	35	47	87	118	154	203
0.5		46	61	115	155	204	271	39	51	96	129	171	227
1.0		68	89	172	231	306	408	54	70	136	182	242	322
2.0		114	141	284	392	505	660	90	111	223	308	397	519
3.0		157	193	390	527	693	907	122	150	304	412	541	708
4.0		196	242	489	662	869	1138	153	188	380	514	675	884
5.0		237	291	590	798	1048	1372	183	225	455	616	809	1058
6.0		277	341	689	933	1225	1604	213	262	530	717	941	1232
7.0		317	390	789	1067	1402	1835	243	298	604	817	1073	1405
8.0		358	440	891	1206	1584	2073	272	335	678	917	1205	1577
9.0		398	490	991	1341	1762	2306	302	371	751	1017	1335	1748
10.0		439	540	1093	1479	1943	2543	331	407	824	1116	1466	1918
12.0		519	639	1293	1750	2299	3009	390	480	971	1313	1725	2258
14.0		600	738	1493	2021	2655	3475	448	552	1116	1511	1984	2597
16.0		680	837	1693	2292	3011	3940	507	623	1262	1707	2243	2936
18.0		761	936	1894	2563	-	-	564	695	1407	1904	-	-
20.0		849	1044	2114	2861	-	-	624	767	1553	2101	-	-