Safety Valves
Type 06319

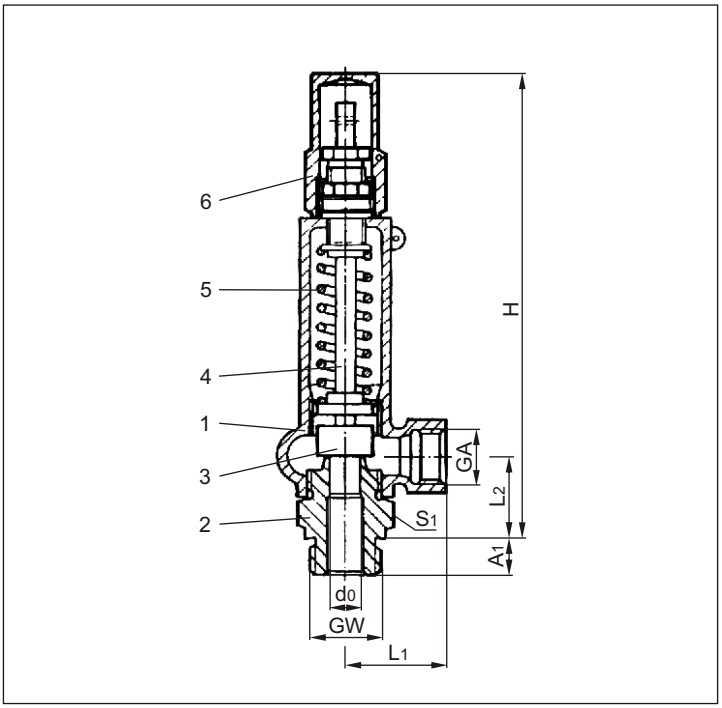
Safety Valves, angle type, stainless steel,
type tested, TÜV.SV.847. D/G/F (G 3/8 - G 1/2)
type tested, TÜV.SV.878. D/G/F (G 3/4 - G 1-1/4)

metal to metal seated, closed bonnet,
Inlet: male thread type G (BSPP) acc. to ISO 228/1
Outlet: femaile thread type G (BSPP) acc. to ISO 228/1

Part No. 06319.X.0020
with gastight cap

Applications:
Provided as safety device for protection against excessive pressure in pressure vessels.
Approved for gases, vapours and fluids.
Working temperatures: -200°C / -328°F (73K) up to +280°C / +536°F (553K)

Materials		DIN EN	ASTM
1	Body + bonnet	1.4308	A 351 CF8
2	Inlet body	1.4571	A 276 Grade 316Ti
3	Disc	1.4571	A 276 Grade 316Ti
4	Stem	1.4571	A 276 Grade 316Ti
5	Spring	1.4310	A 313 Grade 302
6	Cap	1.4571	A 276 Grade 316Ti



Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).

CE

Type 06319	Technical data										
Nominal size	**GW**	**3/8**	**1/2**	**1/2**	**1/2**	**3/4**	**3/4**	**1**	**1**	**1-1/4**	**1-1/4**
Orifice	d_0	10	8	10	12.5	12.5	16	12.5	16	16	20
Dimension code	.X.	1003	0804	1004	1204	1206	1606	1210	1610	1612	2012
Set pressure range	bar	0.1-140	20-200	0.1-140	0.1-70	32-70	0.1-32	32-70	0.1-32	0.1-32	0.1-20
Outlet	GA	1/2	1/2	1/2	1/2	1	1	1	1	1	1
Height	H	185	185	185	185	215	215	215	215	215	215
Length	L_1	40	40	40	40	50	50	50	50	50	50
Length	L_2	34	34	34	34	40	40	40	40	40	40
Length	A_1	12	12	14	14	16	16	18	18	20	20
Wrench size across flats	S_1	32	32	32	32	41	41	41	41	50	50
Weight	ca. kg	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6	1.8	1.8
Coeff. of discharge gases, vapours	α_w	0.35	0.42	0.35	0.27	0.37	0.29	0.37	0.29	0.29	0.11
Coeff. of discharge fluids	α_w	0.27	0.30	0.27	0.19	0.29	0.23	0.29	0.23	0.23	0.08

Dimensions in mm.

HEROSE

Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:
A = Saturated steam in kg/h
B = Air in m^3/h at 0°C and 1013.25 mbar
C = Water in kg/h at 20°C

The capacity indicated below is for a fully opened valve.

d_0 - orifice

A_0 - flow area

Set pressure in bar (ü)	GW	3/8 & 3/4			3/8			1/2. 3/4 & 1			3/4 & 1		
	d_0 (mm)	8			10			12.5			16		
	A_0 (mm^2)	50.3			78.5			122.7			201.1		
	Medium	**A**	**B**	**C**	**A**	**B**	**C**	**A**	**B**	**C**	**A**	**B**	**C**
0.1		-	-	-	-	1.8	63	-	2.9	99	-	4.6	161
0.4		-	-	-	3.3	4.0	126	5.2	6.3	197	8.3	10.1	323
1.0		-	-	-	5.6	7.1	200	8.9	11.2	312	14.1	17.9	511
2.0		-	-	-	9.4	12.1	282	14.5	18.6	441	23.7	30.4	723
3.0		-	-	-	13.3	17.2	346	20.7	26.9	540	34.0	44.0	885
4.0		-	-	-	16.5	21.5	399	25.7	33.6	624	42.2	55.0	1020
6.0		-	-	-	22.8	30.1	489	35.7	47.0	764	58.8	77.0	1250
8.0		-	-	-	29.2	38.7	565	45.6	60.4	882	74.7	99.0	1440
10.0		-	-	-	35.4	47.3	631	55.4	73.9	987	90.8	121	1610
20.0		-	-	-	66.8	90.4	893	104	141	1390	171	231	2280
30.0		-	-	-	114	134	1090	153	209	1710	251	342	2800
40.0		-	-	-	130	177	1260	203	277	1970	332	453	3230
50.0		103	141	904	162	221	1410	253	345	2200	414	565	3610
60.0		124	169	990	194	264	1550	303	413	2420	497	676	3960
70.0		147	197	1070	229	308	1670	358	481	2610	587	788	4280
80.0		167	225	1140	261	351	1780	408	549	2790	668	899	4570
90.0		189	252	1210	295	395	1890	462	617	2960	756	1010	4850
100.0		212	280	1280	331	438	2000	517	684	3120	-	-	-
120.0		259	335	1400	404	524	2190	632	819	3420	-	-	-
140.0		309	390	1510	484	609	2360	756	951	3690	-	-	-
160.0		367	443	1610	-	-	-	896	1080	3950	-	-	-
180.0		434	496	1710	-	-	-	-	-	-	-	-	-
200.0		517	547	1810	-	-	-	-	-	-	-	-	-
220.0		-	598	1890	-	-	-	-	-	-	-	-	-
240.0		-	648	1980	-	-	-	-	-	-	-	-	-
250.0		-	672	2020	-	-	-	-	-	-	-	-	-

Set pressure in bar (ü)	GW	1-1/4			1-1/2		
	d_0 (mm)	22			27		
	A_0 (mm^2)	380.2			572.6		
	Medium	**A**	**B**	**C**	**A**	**B**	**C**
0.05		-	6.1	216	-	9.2	325
0.1		-	8.8	305	-	13.3	460
0.4		16.0	19.4	611	24.1	29.2	921
1.0		27.3	34.6	966	41.1	52.1	1450
2.0		45.6	58.5	1370	68.7	88.2	2060
3.0		64.3	83.2	1670	96.8	125	2520
4.0		79.8	104	1930	120	156	2910
6.0		110	145	2370	166	219	3560
8.0		141	187	2730	212	282	4120
10.0		171	229	3050	258	344	4600
20.0		323	437	4320	487	659	6510
30.0		475	647	5290	716	975	7970
40.0		628	857	6110	946	1290	9210
45.0		705	963	6480	1060	1450	9770
50.0		783	1070	6830	-	-	-
55.0		861	1175	7160	-	-	-