Overflow Valves
Type 06321

Overflow Valve, angle type, ductile casting GGG-40.3, not type tested

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

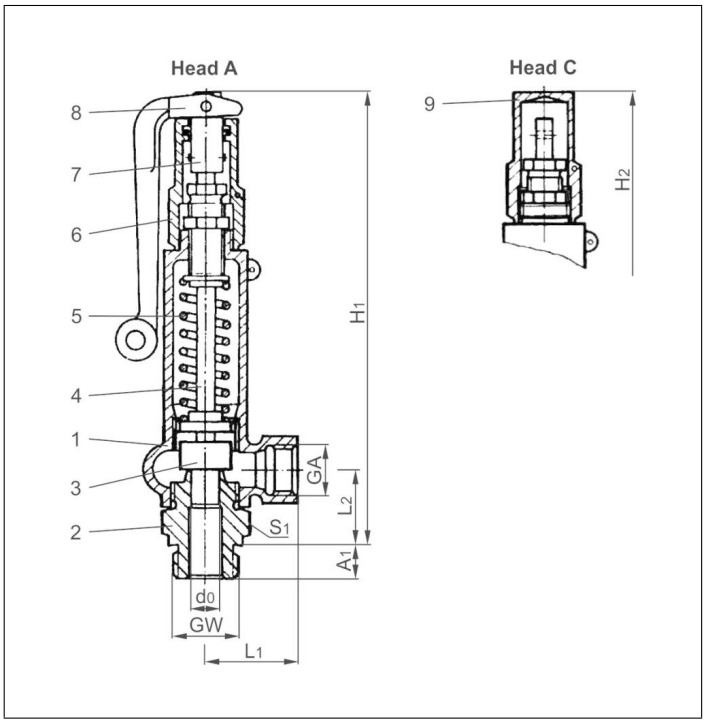
Part No. 06321.X.0000
with lifting device - head A

Part No. 06321.X.0020
with gastight cap - head C

Available options - on request only:
· Disc with soft sealing (EPDM, FKM, PTFE)

Applications:
Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.
Working temperatures: -10°C / +14°F (263K) up to +280°C / +536°F (553K)

Materials		DIN EN	ASTM
1	Body + Bonnet	0.7043	A 395
2	Inlet body	1.4104	A 276 Grade 430F
3	Disc	1.4571	A 276 Grade 316Ti
4	Stem	1.4104	A 276 Grade 430F
5	Spring	1.4310	A 313 Grade 301
6	Lifting cap	1.4104	A 276 Grade 430F
7	Lifting stem	1.4305	A 276 Grade 303
8	Lever	3.2581	no reference
9	Cap	1.0718	A 108



Not to use as equipment with safety function acc. to Pressure Equipment Directive 2014/68/EU (PED) (No CE marking).

Type 06321	Technical data										
Nominal size	**GW**	**3/8**	**3/8**	**1/2**	**3/4**	**3/4**	**3/4**	**1**	**1**	**1-1/4**	**1-1/2**
Orifice	d_0	8	10	12.5	8	12.5	16	12.5	16	22	27
Dimension code	.X.	0803	1003	1204	0806	1206	1606	1210	1610	2212	2714
Set pressure range	bar	50-200	0.1-140	0.1-120	50-200	50-170	0.1-90	50-170	0.1-90	0.05-55	0.05-45
Outlet	GA	1/2	1/2	1/2	1	1	1	1	1	1	1
Height	H_1	200	200	200	200	230	230	230	230	230	230
Height	H_2	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	16	16	16	18	18	20	20
Wrench size across flats	S_1	32	32	32	32	41	41	41	41	41	41
Weight	ca. kg	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6	1.8	1.8

Dimensions in mm.

Overflow Valves
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Discharge capacities
Calculation of flow rate 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 (g)	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	-	-	-	-	-	-	-	-	-

Set pressure in bar (g)	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	-	-	-