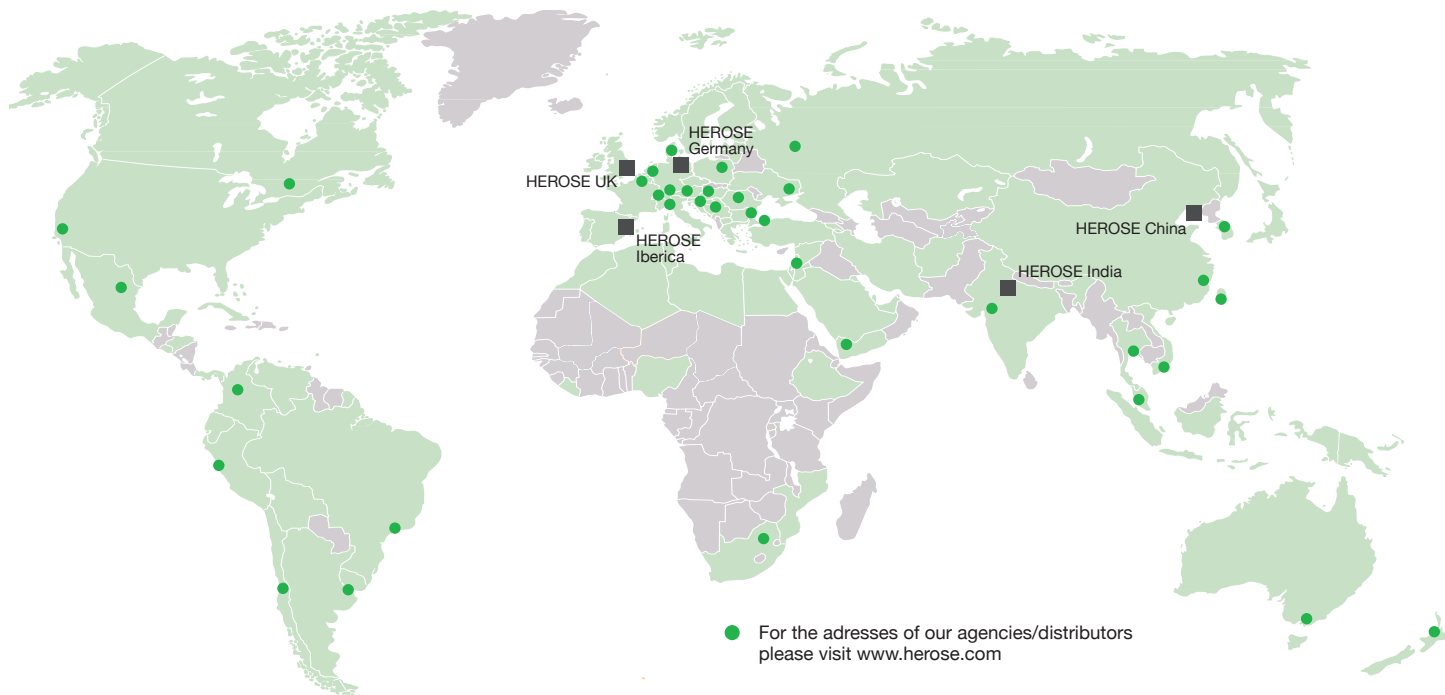


**INDUSTRY  
2016**

## Safety Valves and DIN EN Valves for Industrial Applications





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## Company

Throughout the world, HEROSE provides its customers with safety for handling technical gases, vapours and liquids in cryogenic applications and pressure vessels. With more than 140 years experience in the development, manufacture and sale of valves with a high level of innovation and modern production with certified quality management, HEROSE is one of the world's leading manufacturers of valves for industry and cryogenic applications. HEROSE employs around 200 employees and supplies to over 80 countries worldwide.



## Products

HEROSE offers a complete product range of globe, check and control valves as well as safety valves for cryogenic liquefied industrial gases like oxygen, nitrogen, hydrogen at temperatures down to  $-270^{\circ}\text{C}$  (3K) and for liquefied natural gas (LNG).

Additional HEROSE offers a large range of nonferrous safety valves for general industrial applications and DIN EN standard valves for engineering and plant construction industries.

## High Quality

No compromise on material selection, production and functional testing guarantee a hundred percent consistently high quality „Made in Germany“.





Headquarter in Bad Oldesloe – on more than 10,000 m<sup>2</sup> production and office area nearly 400,000 valves are produced every year



Frequently HEROSE offers trainings with integrated test lab demonstrations



HEROSE supplies valves for a wide range of industrial gas storage vessels from 180 to 500,000 litres and for larger LNG-vessels built on site



HEROSE-industrial safety valves are also used in the air supply unit of the braking system for the high speed train Velaro RUS



HEROSE-valves for oil cooled transformers are proved to be used under the extreme climatic conditions for power generation at offshore sites



Material analysis and identification during the incoming goods check



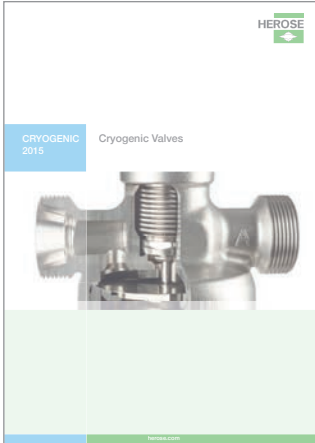
100 % tightness test of the valves at design pressure



Continuous quality checks within the scope of the operator self check

# Product Catalogues at a glance

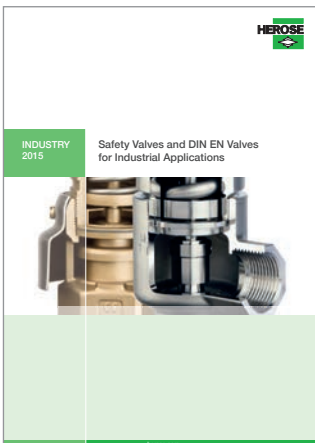
## CRYOGENIC



Valves and Safety Valves for

- Storage and Transportation of Cryogenic Gases
- Firesafe and Offshore Applications

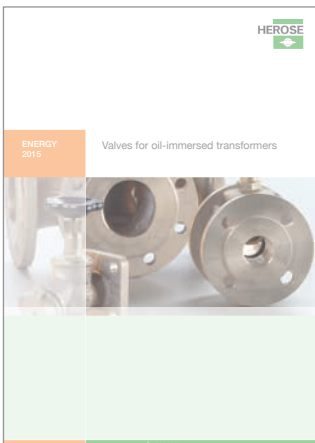
## INDUSTRY



Valves for Industrial Applications

- Safety Valves and Overflow Valves
- DIN EN Valves

## ENERGY



Valves for oil-immersed Transformers for

- Onshore Applications
- Offshore Applications
- Low Temperature Applications

# Safety and Overflow Valves

## Content



**Abbreviations:** in column Medium - type tested for  
**S** = Steams, **G** = Gases, **L** = Liquids

### Threaded Safety Valves with discharge holes, spring loaded

Type	Inlet	Medium	Temperature	Set pressure range	Approval		Page
					TÜV-SV	ASME	
<b>06205</b>	Male thread 1/4" up to 1-1/4"	S/G	-20°C - +160°C 253K - 433K	0.2 - 43.0 bar 2.9 - 623.6 PSI	1090		14/15
<b>06216,</b> <b>06217</b>	Male thread 1/2" up to 2"	S/G	-40°C - +200°C 233K - 473K	0.2 - 30.0 bar 2.9 - 435.1 PSI	1090	✓	16/17
<b>06216,</b> <b>06217</b>	Male thread 1/2" up to 2"	S/G	-30°C - +130°C 243K - 403K	0.2 - 30.0 bar 2.9 - 435.1 PSI	1090	✓	18/19
<b>55177</b>	1/2" up to 2"	S/G	-30°C - +130°C 243K - 403K	0.2 - 30.0 bar 2.9 - 435.1 PSI	1090		20
<b>06218,</b> <b>06219</b>	Male thread 1/4" up to 3/4"	S/G	-60°C - +150°C 213K - 423K	3.0 - 17.0 bar 43.5 - 246.5 PSI	1090		22/23
<b>06505</b>	Male thread 1" up to 2"	Liquid Granu- late Powder	-40°C - +200°C 233K - 473K	0.5 - 6.0 bar 7.3 - 87.0 PSI	948		24/25
<b>06506</b>	Male thread 1" up to 1-1/2"	Liquid Granu- late Powder	-40°C - +200°C 233K - 473K	0.5 - 6.0 bar 7.3 - 87.0 PSI	948		26/27

### Threaded Safety Valves, angle type, spring loaded

Type	Inlet	Medium	Temperature	Set pressure range	Approval		Page
					TÜV-SV	ASME	
<b>06310</b>	Male thread 3/4" up to 1"	S/G/L	-10°C - +300°C 263K - 573K	0.2 - 250.0 bar 2.9 - 3625.7 PSI	909	✓	72/73
<b>06311</b>	Male thread 3/4" up to 1"	S/G/L	-196°C - +300°C 77K - 573K	0.2 - 250.0 bar 2.9 - 3625.7 PSI	909	✓	74/75
<b>06315</b>	Male thread 1/2" up to 3/4"	S/G/L	-10°C - +220°C 263K - 493K	0.1 - 180.0 bar 1.5 - 2610.7 PSI	980	✓	76/77
<b>06316</b>	Male thread 1/2" up to 3/4"	S/G/L	-270°C - +280°C 3K - 553K	0.1 - 330.0 bar 1.5 - 4786.2 PSI	980	✓	78/79
<b>06317</b>	Male thread 3/8" up to 1-1/4"	S/G/L	-60°C - +280°C 213K - 553K	0.1 - 500.0 bar 1.5 - 7251.9 PSI	847/878		80/81
<b>06318</b>	Male thread 3/8" up to 1-1/4"	S/G/L	-10°C - +200°C 263K - 473K	0.1 - 200.0 bar 1.5 - 2900.6 PSI	847/878		82/83
<b>06319</b>	Male thread 3/8" up to 1-1/4"	S/G/L	-200°C - +280°C 73K - 553K	0.1 - 200.0 bar 1.5 - 2900.6 PSI	847/878		84/85
<b>06370</b>	Female thread 1-1/2" up to 2"	L	-10°C - +110°C 263K - 383K	1.0 - 16.0 bar 14.5 - 232.0 PSI	749		28/29
<b>06372</b>	Female thread 3/4"	S/G	-10°C - +120°C 263K - 393K	0.8 - 1.0 bar 11.6 - 14.5 PSI	749		30/31
<b>06376</b>	Female thread 1/2" up to 1-1/4"	L	-10°C - +110°C 263K - 383K	1.0 - 16.0 bar 14.5 - 232.0 PSI	749		32/33
<b>06380</b>	Female thread 1/2" up to 2"	S/G	-10°C - +185°C 263K - 458K	0.2 - 20.0 bar 2.9 - 290.0 PSI	749		34/35
<b>06601</b>	Female thread 1/2"	S/G	-10°C - +185°C 263K - 458K	5.0 - 10.0 bar 72.5 - 145.0 PSI	1080		36/37

### Threaded Safety Valves, angle type, spring loaded

Type	Inlet	Medium	Temperature	Set pressure range	Approval		Page
					TÜV-SV	ASME	
06602	Female thread 1/2"	S/G	-10°C - +130°C 263K - 403K	1.2 - 1.3 bar 17.4 - 18.8 PSI	1080		38/39
06603	Female thread 1/2"	S/G	-10°C - +180°C 263K - 453K	0.2 - 5.0 bar 2.9 - 72.5 PSI	1080		40/41
06604	Female thread 1/2"	S/G	-50°C - +150°C 223K - 423K	14.0 - 30.0 bar 203.0 - 435.1 PSI	1080		42/43
06605	Male thread 1/2"	S/G	-50°C - +150°C 223K - 423K	14.0 - 30.0 bar 203.0 - 435.1 PSI	1080		44/45
06395	Female thread 1/2" up to 1-1/4"	S/G	-50°C - +225°C 263K - 498K	0.5 - 25.0 bar 7.2 - 362.6 PSI	910		46-49
06395	Male thread 1/2" up to 1-1/4"	S/G	-50°C - +225°C 263K - 498K	0.5 - 25.0 bar 7.2 - 362.6 PSI	910		50-55
06810, 06815	Male thread 3/4"	S/G/L	-270°C - +400°C 3K - 673K	0.5 - 180.0 bar 7.2 - 2610.7 PSI	1130		56-60
06850, 06855	Male thread 1/2" up to 1-1/2"	S/G/L	-270°C - +400°C 3K - 673K	0.2 - 250.0 bar 2.9 - 3625.7 PSI	1130		61-66
50051.0004	Male thread 1/2"	S/G/L	-10°C - +160°C 263K - 403K	6.0 - 15.0 bar 87.0 - 217.5 PSI			68/69
50051.0011	Male thread 3/8"	S/G	-10°C - +160°C 263K - 403K	1.5 - 5.0 bar 21.8 - 72.5 PSI	1009		70/71

### Threaded Overflow Valves, angle type, spring loaded

Type	Inlet	Medium	Temperature	Set pressure range	Approval		Page
					TÜV-SV	ASME	
50051.0012	Male thread 1/4"	S/G	-10°C - +65°C 263K - 338	0.7 - 2.0 bar 10.2 - 29.0 PSI			98/99
06195	Female thread 1/2" up to 2"	S/G/L	-10°C - +165°C 263K - 438K	0.2 - 25.0 bar 2.9 - 362.6 PSI			100/101
06196	Female thread 1/2" up to 2"	S/G/L	-10°C - +185°C 263K - 458K	0.2 - 25.0 bar 2.9 - 362.6 PSI			102/103
06198	Female thread 1/2" up to 2"	S/G	-10°C - +185°C 263K - 458K	2.0 - 25.0 bar 29.0 - 362.6 PSI			104/105
06321	Female thread 3/8" up to 1-1/2"	S/G/L	-10°C - +280°C 263K - 553K	0.1 - 200.0 bar 1.5 - 2900.6 PSI			106/107
06322	Female thread 3/8" up to 1-1/2"	S/G/L	-60°C - +280°C 213K - 553K	0.1 - 250.0 bar 1.5 - 3625.7 PSI			108/109



### Flanged Safety Valves, angle type, spring loaded

Type	Inlet	Medium	Temperature	Set pressure range	Approval		Page
					TÜV-SV	ASME	
<b>06120,</b> <b>06121</b>	DN15-DN100, PN16	S/G/L	-10°C - +200°C 263K - 473K	0.2 - 16.0 bar 2.9 - 232.0 PSI	577		86/87
<b>06125,</b> <b>06126</b>	DN15-DN125, PN40	S/G/L	-10°C - +350°C 263K - 623K	0.2 - 40.0 bar 2.9 - 580.0 PSI	577		88/89
<b>06127</b>	DN15-DN100, PN40	S/G/L	-270°C - +450°C 3K - 723K	0.2 - 40.0 bar 2.9 - 580.0 PSI	577		90/91
<b>06340,</b> <b>06341</b>	DN25-DN150, PN16	S/G/L	-10°C - +300°C 263K - 573K	0.2 - 16.0 bar 2.9 - 232.0 PSI	576		92/93
<b>06345,</b> <b>06346</b>	DN25-DN150, PN40	S/G/L	-10°C - +300°C 263K - 573K	0.2 - 40.0 bar 2.9 - 580.0 PSI	576	✓	94/95
<b>06347</b>	DN25-DN150, PN40	S/G/L	-270°C - +400°C 3K - 673K	0.2 - 40.0 bar 2.9 - 580.0 PSI	576	✓	96/97

### Globe Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
01021	DN8-DN50	Thread type G	max. PN16	-10°C - +160°C 263K - 433K	112
03021	DN20 - DN50	Flanged	max. PN16	-10°C - +160°C 263K - 433K	113
03050	DN25 - DN150	Flanged	max. PN16	-10°C - +225°C 263K - 489K	114
03080	DN15 - DN150	Flanged	max. PN16	-10°C - +225°C 263K - 489K	115
03090	DN15 - DN150	Flanged	max. PN40	-10°C - +400°C 263K - 673K	116

### Gate Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
09010	DN15 - DN50	Thread type G	max. PN16	-10°C - +200°C 263K - 473K	117
09012	DN15 - DN50	Thread type G	max. PN16	-10°C - +180°C 263K - 453K	118
09061	DN20 - DN80	Flanged	max. PN16	-10°C - +200°C 263K - 473K	119
09420	DN25 - DN100	Flanged	max. PN16	-25°C - +120°C 248K - 393K	120
09420	DN25 - DN100	Flanged	max. PN16	-25°C - +120°C 248K - 393K	121

### Angle Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
01131	DN15 - DN50	Thread type G	max. PN16	-10°C - +185°C 263K - 458K	122

### Needle Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
04010	DN8 - DN32	Thread type G	max. PN40	-10°C - +100°C 263K - 373K	123

### Self Closing Globe Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
01028	DN15 - DN25	Thread type G	max. PN16	-10°C - +165°C 263K - 438K	124

### Control Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
04020	DN10 - DN50	Thread type G	max. PN16	-10°C - +160°C 263K - 433K	125
04041	DN15 - DN50	Flanged	max. PN16	-10°C - +160°C 263K - 433K	126

### Check Valves

Type	Nominal size	Connections	Working pressure	Temperature	Page
05011, 05012	DN10 - DN50	Thread type G	max. PN16	-10°C - +160°C 263K - 433K	127
05083	DN20 - DN50	Flanged	max. PN16	-10°C - +160°C 263K - 433K	128
05082	DN20 - DN150	Flanged	max. PN16	-10°C - +160°C 263K - 433K	129
05110	DN15 - DN150	Flanged	max. PN16	-10°C - +225°C 263K - 498K	130
05115	DN15 - DN150	Flanged	max. PN40	-10°C - +400°C 263K - 673K	131
05040	DN15 - DN65	Thread type G	max. PN16	-10°C - +160°C 263K - 433K	132
05338	DN15 - DN100		max. PN40	-200°C - +500°C 73K - 773K	133

### Pressure Reducing Valves

Type	Nominal size	Connections	Inlet pressure	Outlet pressure	Working pressure	Temperature	Page
08010	DN8 - DN50	Thread type G	max. 25 bar	1,5-8,0 bar		-10°C - +75°C 263K - 348K	134
08011	DN8 - DN50	Thread type G	max. 40 bar	1,5-20,0 bar		-10°C - +75°C 263K - 348K	135
08012	DN8 - DN50	Thread type G	max. 25 bar	0,2-2,0 bar		-10°C - +75°C 263K - 348K	136
08015	DN8 - DN50	Thread type G	max. 40 bar	1,0-10,0 bar		-10°C - +70°C 263K - 343K	137
08023	DN15 - DN50	Union type connection	max. 25 bar	0,6-7,0 bar		-10°C - +90°C 263K - 368K	138

### Strainer

Type	Nominal size	Connections	Inlet pressure	Outlet pressure	Working pressure	Temperature	Page
08180, 08181	DN8 - DN50	Thread type G			max. PN16	-10°C - +200°C 263K - 473K	139
08161	DN15 - DN150	Flanged			max. PN16	-10°C - +200°C 263K - 473K	140
08170	DN15 - DN150	Flanged			max. PN40	-10°C - +400°C 263K - 673K	141



## Safety and Overflow Valves for General Industrial Use



Open discharge safety valve installed on a silo trailer application

# Safety Valves

## Type 06205



Safety Valves, brass,  
type tested TÜV-SV.1090 S/G

Standard safety valve  
with FPM valve seal, open bonnet,  
with discharge holes, with lifting device  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 06205.X.0000**

Available options - on request only:

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

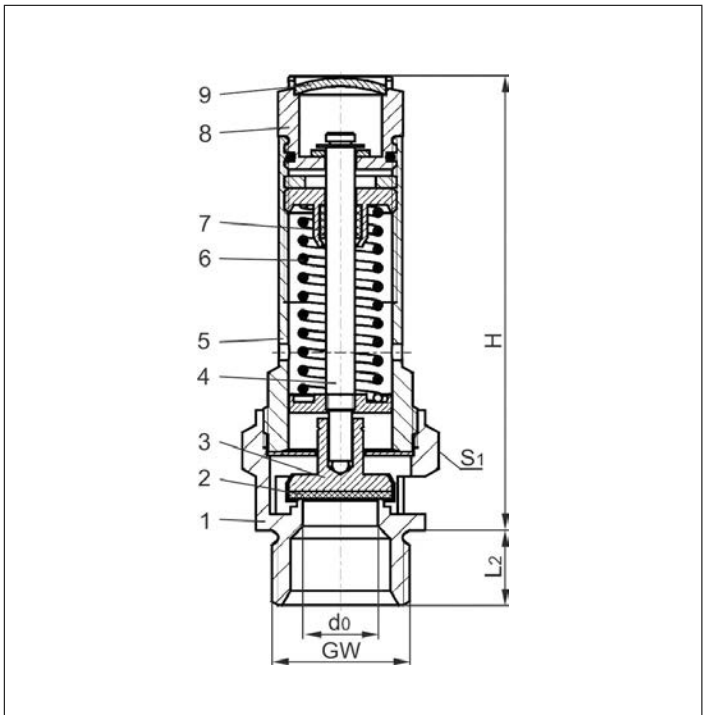


### Applications:

Provided as safety device for protection against excessive pressure in stationary and moveable gas cylinders and pressure vessels. Approved for air and similar gases.

Working temperature: -20°C / -4°F (253K) up to +160°C / +320°F (433K), size d<sub>0</sub>7 suitable for horizontal installation

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	CW614N	B 249 UNS C38500
5 Bonnet	CW614N	B 249 UNS C38500
6 Spring	1.1200	A 227
7 Stem guide	PTFE	
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06205	Technical data							
Nominal size	GW	1/4	3/8	1/2	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	7	7	7	12	15	18	20
Dimension code	.X.	0200	0300	0704	0400	0600	1000	1200
Set pressure range	bar	0.4-43	0.4-43	0.4-43	0.2-22	0.2-16	0.2-18	0.2-16
Height	H	60	60	67	78	92	110	125
Length	L <sub>2</sub>	10	10	12	12	15	18	20
Wrench size across flats	S <sub>1</sub>	21	21	24	27	32	41	48
Weight	ca. kg	0.07	0.07	0.17	0.17	0.27	0.48	0.75
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.60	0.60	0.60	0.47	0.63	0.63	0.63

Dimensions in mm.

\* with FPM seal up to 35 bar, with PTFE seal up to 43 bar

# Safety Valves

## Type 06205



### 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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	1/4	3/8	1/2	1/2	3/4	1	1-1/4
	d <sub>0</sub> (mm)	7.0	7.0	7.0	12.0	15.0	18.0	20.0
A <sub>0</sub> (mm <sup>2</sup> )	38.48	38.48	38.48	113.1	176.7	254.5	314.2	
Medium	Air							
0.2	-	-	-	30	60	86	106	
0.4	19	19	19	42	84	121	150	
0.6	23	23	23	52	104	150	186	
0.8	28	28	28	61	124	178	220	
1.0	32	32	32	70	142	205	253	
2.0	50	50	50	113	239	345	426	
3.0	67	67	67	156	327	472	582	
4.0	85	85	85	196	411	592	731	
5.0	102	102	102	236	496	714	881	
6.0	120	120	120	276	579	834	1030	
7.0	137	137	137	316	663	955	1179	
8.0	155	155	155	357	749	1079	1332	
9.0	172	172	172	398	833	1200	1482	
10.0	190	190	190	439	919	1324	1634	
11.0	206	206	206	475	994	1432	1768	
12.0	225	225	225	519	1087	1566	1934	
14.0	260	260	260	599	1256	1809	2233	
16.0	295	295	295	680	1424	2051	2532	
18.0	330	330	330	760	-	2294	-	
20.0	368	368	368	849	-	-	-	
22.0	404	404	404	930	-	-	-	
25.0	457	457	457	-	-	-	-	
27.0	492	492	492	-	-	-	-	
30.0	550	550	550	-	-	-	-	
32.0	585	585	585					
34.0	621	621	621					
36.0	657	657	657					
38.0	692	692	692					
40.0	734	734	734					
42.0	770	770	770					
43.0	788	788	788					

# Safety Valves

## Type 06216, Type 06217



Safety Valves, brass,  
type tested TÜV-SV.1090 S/G

Standard safety valve  
with FPM valve seal, open bonnet, with discharge holes  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 06216.X.0000**

**Part No. 06217.X.0000**

with lifting device

Available options - on request only:

- discharge holes with protection cap
- stainless steel spring - material 1.4571
- external parts nickel plated



### 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: -40°C / -40°F (233K) up to +200°C / +392°F (473K), suitable for horizontal installation

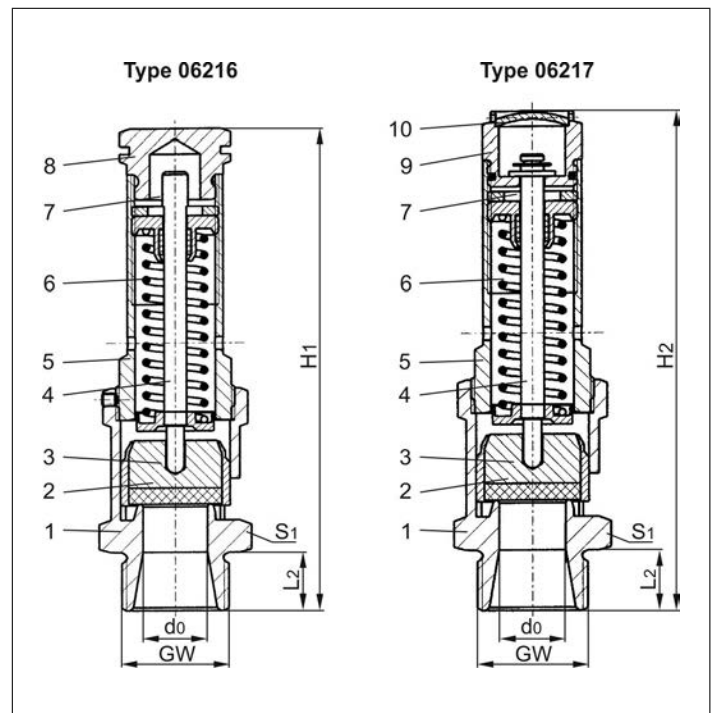
Materials	DIN EN	ASME/ASTM
1 Body	CW617N	B 283 UNS C37700
2 Valve seal	FPM (Viton-GLT)	
3 Disc	CW614N	B 455 UNS C38500
4 Stem	CW614N	B 455 UNS C38500
5 Bonnet	CW614N	B 455 UNS C38500
6 Spring	1.1200	A 227
7 Stem guide	PTFE	
8 Cap	CW614N	B 455 UNS C38500
9 Lifting device	CW614N	B 455 UNS C38500
10 Closing cap	CW507L	B 36 UNS C26800

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Type 06216, Type 06217	Technical data							
	Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Orifice	d <sub>0</sub>	12	15	20	25	32	40	
Dimension code	.X.	0400	0600	1000	1200	1400	2000	
Set pressure range	bar	0.2-25	0.2-30	0.2-30	0.2-22	0.2-16	0.2-12	
Height	H <sub>1</sub>	103	122	149	169	198	224	
Height	H <sub>2</sub>	107	126	150	172	200	228	
Length	L <sub>2</sub>	14	16	18	20	22	25	
Wrench size across flats	S <sub>1</sub>	27	32	41	50	55	70	
Weight	ca. kg	0.25	0.41	0.72	1.23	1.73	3.09	
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.83	0.83	0.73	0.71	0.69	0.66	
Coeff. of discharge from 3.0 bar	rated slope	2.59	4.10	6.79	10.15	16.50	24.80	

Dimensions in mm.



# Safety Valves

## Type 06216, Type 06217



### Discharge capacities

Medium:

Air in m<sup>3</sup>/h at 0°C and 1013.25 mbar

Air in SCFM at 60°F (15.6°C) and 14.7 psia (1013.25 mbar)

The capacity indicated below is for a fully opened valve.

d<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Calculation of discharge capacity acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1 resp. ASME Code Sec. VIII.  
The safety valve is marked with the lower capacity of both calculations.

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1-1/2	2
	d <sub>0</sub> (mm) A <sub>0</sub> (mm <sup>2</sup> ) Medium	12.0 113.1	15.0 176.7	20.0 314.2	25.0 490.9	32.0 804.2	40.0 1256.6
Air in m <sup>3</sup> /h							
0.2		46	74	121	183	299	411
0.5		81	130	205	300	503	691
1.0		124	196	307	459	775	1085
2.0		195	307	495	752	1214	1760
3.0		260	412	674	1021	1630	2436
4.0		326	518	845	1282	2046	3057
5.0		394	622	1017	1542	2461	3679
6.0		460	728	1189	1803	2877	4300
7.0		526	833	1361	2063	3293	4921
8.0		593	939	1533	2324	3709	5543
9.0		659	1044	1704	2584	4124	6164
10.0		725	1148	1876	2843	4540	6785
11.0		846	1322	2067	3142	5003	7478
12.0		859	1359	2220	3364	5371	8028
14.0		992	1569	2563	3885	6203	-
16.0		1124	1780	2907	4406	7034	-
18.0		1257	1991	3251	4927	-	-
20.0		1389	2200	3594	5448	-	-
22.0		1523	2410	3938	5969	-	-
25.0		1722	2726	4453	-	-	-
26.0		-	2832	4625	-	-	-
28.0		-	3042	4969	-	-	-
30.0		-	3253	5312	-	-	-

Set pressure in psig	GW	1/2	3/4	1	1-1/4	1-1/2	2
	d <sub>0</sub> (inch) A <sub>0</sub> (in <sup>2</sup> ) Medium	0.472 0.175	0.591 0.274	0.787 0.487	0.984 0.761	1.260 1.247	1.575 1.948
Air in SCFM							
15		78	124	194	290	490	687
30		127	195	315	479	773	1123
50		191	285	466	710	1130	1688
60		221	330	540	822	1308	1955
70		251	375	614	933	1486	2222
80		281	421	688	1045	1665	2488
90		312	466	762	1157	1843	2755
100		341	511	835	1269	2022	3022
120		402	601	981	1492	2376	3551
130		432	646	1055	1604	2554	3818
140		462	691	1129	1716	2733	4084
150		492	736	1203	1828	2911	4351
160		522	781	1277	1940	3090	4618
174		565	845	1380	2098	3340	4992
180		583	872	1424	2164	3446	-
190		613	917	1498	2276	3624	-
200		643	962	1572	2388	3803	-
220		703	1052	1719	2613	4160	-
232		739	1106	1807	2747	4374	-
240		764	1142	1866	2836	-	-
260		824	1232	2014	3060	-	-
280		884	1323	2161	3284	-	-
300		945	1413	2308	3509	-	-
319		1002	1498	2448	3721	-	-
340		1065	1593	2603	-	-	-
363		1134	1697	2772	-	-	-
380		-	1774	2897	-	-	-
400		-	1864	3045	-	-	-
420		-	1954	3192	-	-	-
435		-	2022	3302	-	-	-

# Safety Valves

## Type 06216, Type 06217 with protection cap



Safety Valves, brass,  
type tested TÜV-SV.1090 S/G

Standard safety valve  
with FPM valve seal, open bonnet, with discharge holes  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

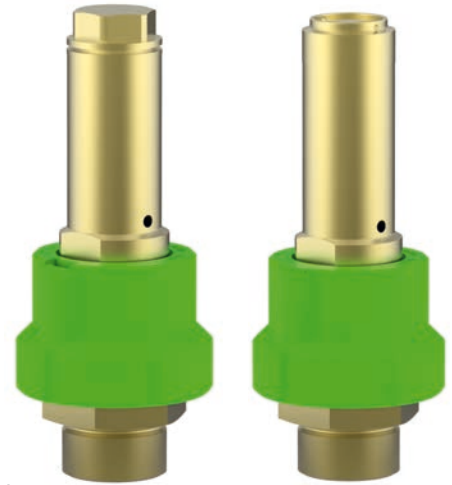
**Part No. 06216.X.0001**

**Part No. 06217.X.0001**

with lifting device and protection cap (polycarbonate)

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 stationary and moveable gas cylinders and pressure vessels. Approved for air and similar gases.

Working temperature: -30°C / -22°F (243K) up to +130°C / +266°F (403K), suitable for horizontal installation

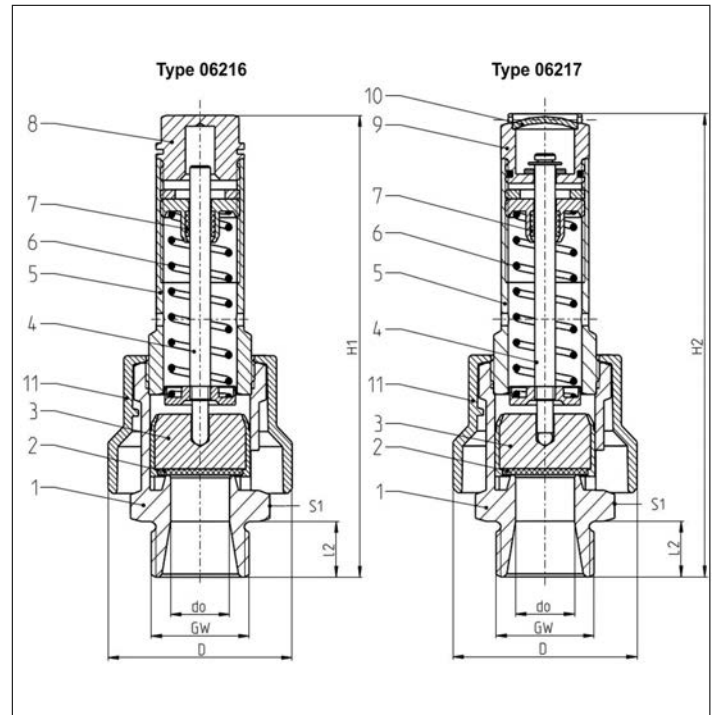
Materials	DIN EN	ASME/ASTM
1 Body	CW617N	B 283 UNS C37700
2 Valve seal	FPM (Viton-GLT)	
3 Disc	CW614N	B 455 UNS C38500
4 Stem	CW614N	B 455 UNS C38500
5 Bonnet	CW614N	B 455 UNS C38500
6 Spring	1.1200	A 227
7 Stem guide	PTFE	
8 Cap	CW614N	B 455 UNS C38500
9 Lifting device	CW614N	B 455 UNS C38500
10 Closing cap	CW507L	B 36 UNS C26800
11 Protection cap		

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Type 06216, Type 06217	Technical data							
	Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Orifice	d <sub>0</sub>	12	15	20	25	32	40	
Dimension code	.X.	0400	0600	1000	1200	1400	2000	
Set pressure range	bar	0.2-25	0.2-30	0.2-30	0.2-22	0.2-16	0.2-12	
Height	H <sub>1</sub>	103	122	149	169	198	224	
Height	H <sub>2</sub>	107	126	150	172	200	228	
Length	L <sub>2</sub>	14	16	18	20	22	25	
Diameter	D	41.4	49.0	62.5	74.8	86.0	109.0	
Wrench size across flats	S <sub>1</sub>	27	32	41	50	55	70	
Weight	ca. kg	0.25	0.41	0.72	1.23	1.73	3.09	
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.83	0.83	0.73	0.71	0.69	0.66	
Coeff. of discharge from 3.0 bar	rated slope	2.59	4.10	6.79	10.15	16.50	24.80	

Dimensions in mm.

# Safety Valves

## Type 06216, Type 06217 with protection cap



### Discharge capacities

Medium:

Air in m<sup>3</sup>/h at 0°C and 1013.25 mbar

Air in SCFM at 60°F (15.6°C) and 14.7 psia (1013.25 mbar)

The capacity indicated below is for a fully opened valve.

$d_0$  - orifice

$A_0$  - flow area

Calculation of discharge capacity acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1 resp. ASME Code Sec. VIII.

The safety valve is marked with the lower capacity of both calculations.

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1-1/2	2
	$d_0$ (mm) $A_0$ (mm <sup>2</sup> ) Medium	12.0 113.1	15.0 176.7	20.0 314.2	25.0 490.9	32.0 804.2	40.0 1256.6
Air in m <sup>3</sup> /h							
0.2		46	74	121	183	299	411
0.5		81	130	205	300	503	691
1.0		124	196	307	459	775	1085
2.0		195	307	495	752	1214	1760
3.0		260	412	674	1021	1630	2436
4.0		326	518	845	1282	2046	3057
5.0		394	622	1017	1542	2461	3679
6.0		460	728	1189	1803	2877	4300
7.0		526	833	1361	2063	3293	4921
8.0		593	939	1533	2324	3709	5543
9.0		659	1044	1704	2584	4124	6164
10.0		725	1148	1876	2843	4540	6785
11.0		846	1322	2067	3142	5003	7478
12.0		859	1359	2220	3364	5371	8028
14.0		992	1569	2563	3885	6203	-
16.0		1124	1780	2907	4406	7034	-
18.0		1257	1991	3251	4927	-	-
20.0		1389	2200	3594	5448	-	-
22.0		1523	2410	3938	5969	-	-
25.0		1722	2726	4453	-	-	-
26.0		-	2832	4625	-	-	-
28.0		-	3042	4969	-	-	-
30.0		-	3253	5312	-	-	-

Set pressure in psig	GW	1/2	3/4	1	1-1/4	1-1/2	2
	$d_0$ (inch) $A_0$ (in <sup>2</sup> ) Medium	0.472 0.175	0.591 0.274	0.787 0.487	0.984 0.761	1.260 1.247	1.575 1.948
Air in SCFM							
15		78	124	194	290	490	687
30		127	195	315	479	773	1123
50		191	285	466	710	1130	1688
60		221	330	540	822	1308	1955
70		251	375	614	933	1486	2222
80		281	421	688	1045	1665	2488
90		312	466	762	1157	1843	2755
100		341	511	835	1269	2022	3022
120		402	601	981	1492	2376	3551
130		432	646	1055	1604	2554	3818
140		462	691	1129	1716	2733	4084
150		492	736	1203	1828	2911	4351
160		522	781	1277	1940	3090	4618
174		565	845	1380	2098	3340	4992
180		583	872	1424	2164	3446	-
190		613	917	1498	2276	3624	-
200		643	962	1572	2388	3803	-
220		703	1052	1719	2613	4160	-
232		739	1106	1807	2747	4374	-
240		764	1142	1866	2836	-	-
260		824	1232	2014	3060	-	-
280		884	1323	2161	3284	-	-
300		945	1413	2308	3509	-	-
319		1002	1498	2448	3721	-	-
340		1065	1593	2603	-	-	-
363		1134	1697	2772	-	-	-
380		-	1774	2897	-	-	-
400		-	1864	3045	-	-	-
420		-	1954	3192	-	-	-
435		-	2022	3302	-	-	-

## Safety Valves

### Typ 55177 - Protection cap



for Safety valves type 06216, 06217

Valve protection cap made of polycarbonate (PC)  
Valveoutlet completely surrounded - for environmental  
and personal protection against sudden blowing off  
Conformable for the types 06216, 06217 (with discharge hole)

Temperature: -30°C/ -22°F (243K) bis +130°C/ +266°F (403K)

**Part-No. 55177.0087.0874G**

for nominal size 1/2"

**Part-No. 55177.0088.0874G**

for nominal size 3/4"

**Part-No. 55177.0089.0874G**

for nominal size 1"

**Part-No. 55177.0090.0874G**

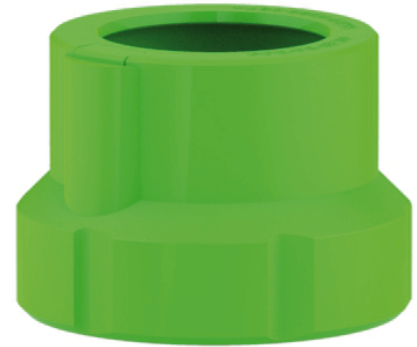
for nominal size 1-1/4"

**Part-No. 55177.0091.0874G**

for nominal size 1-1/2"

**Part-No. 55177.0092.0874G**

for nominal size 2"





# Safety Valves

## Type 06218, Type 06219



Safety Valves, brass,  
type tested TÜV-SV.1090. S/G

Full lift safety valve  
with PTFE O-Ring valve seal,  
open bonnet, with discharge holes  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

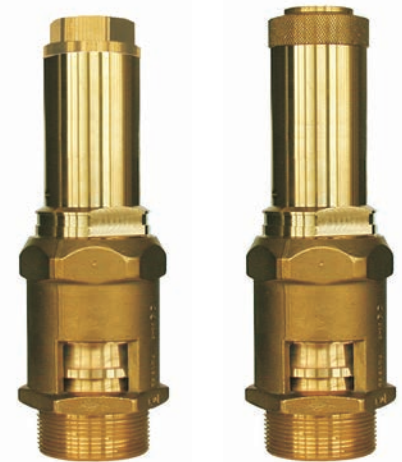
**Part No. 06218.X.0000**

**Part No. 06219.X.0000**

with lifting device

Available options - on request only:

- external parts nickel plated

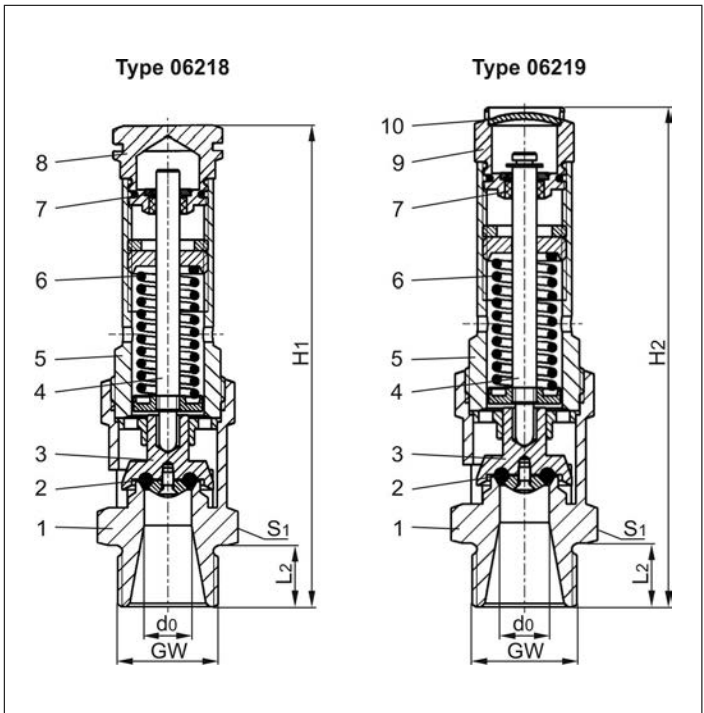


### Applications:

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: -60°C / -76°F (213K) up to +150°C / +302°F (423K), suitable for horizontal installation

Materials	DIN EN	ASME/ASTM
1 Body	CW617N	EN 12165
2 Valve seal	PTFE O-Ring	
3 Disc	CW614N	EN 12164
4 Stem	CW614N	EN 12164
5 Bonnet	CW614N	EN 12164
6 Spring	1.4571	A 313 Grade 316Ti
7 Stem guide	PTFE	
8 Cap	CW614N	EN 12164
9 Lifting device	CW614N	EN 12164
10 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06218 & 06219	Technical data		
Nominal size	<b>GW</b>	<b>1/2</b>	<b>3/4</b>
Orifice	d <sub>0</sub>	12.5	12.5
Dimension code	.X.	0400	0600
Set pressure range	bar	3.0-16.0	3.5-17.0
Height	H <sub>1</sub>	102	121.5
Height	H <sub>2</sub>	106	126
Length	L <sub>2</sub>	14	16
Wrench size across flats	S <sub>1</sub>	27	32
Weight	ca. kg	0.25	0.40
Coeff. of discharge	α <sub>w</sub>	0.26	0.75

Dimensions in mm.

# Safety Valves

## Type 06218, Type 06219



### 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	1/2	3/4
	$d_0$ (mm)	12.5	12.5
	$A_0$ (mm <sup>2</sup> )	122.7	122.7
	Medium	<b>Air</b>	
0.5	-	-	
1.0	-	-	
2.0	-	-	
3.0	90	-	
3.5	102	305	
4.0	113	340	
5.0	136	410	
6.0	159	479	
7.0	182	548	
8.0	206	619	
9.0	229	689	
10.0	252	760	
11.0	275	829	
12.0	298	899	
13.0	321	969	
14.0	344	10389	
15.0	367	1108	
16.0	390	1177	
17.0	-	1247	
18.0	-	-	
20.0	-	-	
22.0	-	-	

# Safety Valves

## Type 06505



**Safety Valves, brass,  
type tested TÜV-SV.948 Liquid/ Granular/ Powder**

Standard safety valve  
with FPM valve seal, closed bonnet,  
with diaphragm for protection of the spring, with lifting device,  
discharge holes with protection cap  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 06505.X.1000**

Available options - on request only:  
· external parts nickel plated

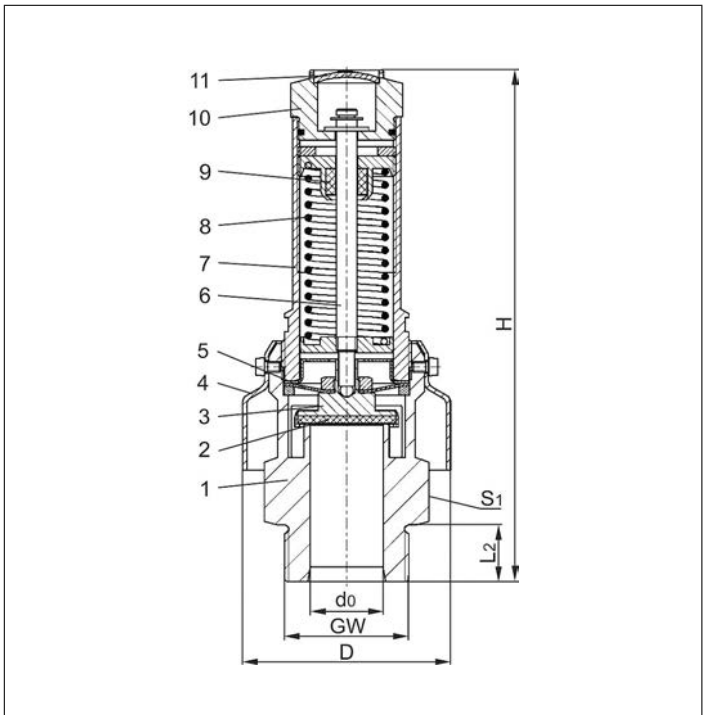


### Applications:

Provided as safety device for protection against excessive pressure in vehicle containers and pressure vessels. Approved for liquid, granular and powdery goods.

Working temperature: -40°C / -40°F (233K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASME/ASTM
1 Body	CW614N	B 249 UNS C38500
2 Valve seal	FPM (Viton-GLT)	
3 Disc	CW614N	B 249 UNS C38500
4 Protection cap	1.4301	A 240 Grade 304
5 Diaphragm	Silicon	
6 Stem	CW614N	B 249 UNS C38500
7 Bonnet	CW614N	B 249 UNS C38500
8 Spring	1.4571	A 313 Grade 316Ti
9 Stem guide	PTFE	
10 Lifting device	CW614N	B 249 UNS C38500
11 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06505	Technical data						
Nominal size	GW	1	1-1/4	1-1/2	1-1/4	1-1/2	2
Orifice	d <sub>0</sub>	24	28	28	31	31	48
Dimension code	.X.	1000	2812	2814	3112	3114	2000
Set pressure range	bar	0.5-6.0	0.5-4.5	0.5-4.5	0.5-6.0	0.5-6.0	0.5-3.5
Height	H	194	198	198	191	191	232
Length	L <sub>2</sub>	18	22	22	22	22	25
Protection cap diameter	D	80	80	80	80	80	115
Wrench size across flats	S <sub>1</sub>	55	55	55	55	55	85
Weight	ca. kg	1.75	1.85	1.90	2.00	2.30	4.5
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.62	0.58	0.58	0.68	0.68	0.52
Coeff. of discharge from 3.5 bar	α <sub>w</sub>	-	-	-	0.65	0.65	-
Coeff. of discharge from 4.5 bar	α <sub>w</sub>	0.57	-	-	-	-	-

Dimensions in mm.



# Safety Valves

## Type 06505



### 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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	1	1-1/4	1-1/2	1-1/4	1-1/2	2
	d <sub>0</sub> (mm)	24.0	28.0	28.0	31.0	31.0	48.0
	A <sub>0</sub> (mm <sup>2</sup> )	452.4	615.8	615.8	754.8	754.8	1810.0
Medium							
Air							
0.5		237	297	297	435	435	835
0.6		268	326	326	482	482	949
0.7		299	354	354	535	535	1063
0.8		329	392	392	579	579	1153
0.9		353	422	422	631	631	1240
1.0		372	449	449	673	673	1250
1.2		414	508	508	759	759	1390
1.4		456	578	578	848	848	1531
1.6		504	639	639	941	941	1675
1.8		553	703	703	1031	1031	1863
2.0		604	768	768	1123	1123	2059
2.2		648	825	825	1200	1200	2243
2.4		694	883	883	1277	1277	2431
2.6		740	942	942	1354	1354	2546
2.8		782	995	995	1431	1431	2657
3.0		825	1051	1051	1511	1511	2770
3.2		868	1105	1105	1588	1588	3024
3.4		910	1158	1158	1665	1665	3170
3.5		931	1185	1185	1628	1628	3244
3.6		952	1212	1212	1665	1665	-
3.8		994	1266	1266	1739	1739	-
4.0		1036	1319	1319	1812	1812	-
4.2		1078	1373	1373	1886	1886	-
4.4		1120	1427	1427	1960	1960	-
4.5		1049	1453	1453	1997	1997	-
4.6		1069	-	-	2034	2034	-
4.8		1107	-	-	2107	2107	-
5.0		1148	-	-	2185	2185	-
5.2		1187	-	-	2259	2259	-
5.4		1226	-	-	2333	2333	-
5.6		1265	-	-	2407	2407	-
5.8		1304	-	-	2481	2481	-
6.0		1343	-	-	2555	2555	-

# Safety Valves

## Type 06506



**Safety Valves, stainless steel,  
type tested TÜV-SV.948. Liquid/ Granular/ Powder**

Standard safety valve  
with FPM valve seal, closed bonnet,  
with diaphragm for protection of the spring, with lifting device,  
discharge holes with protection cap  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 06506.X.1000**

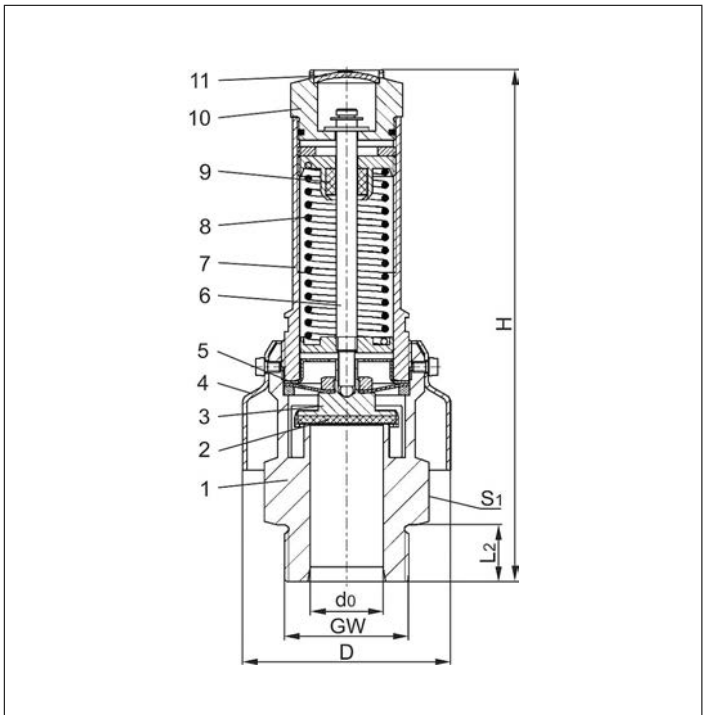


### Applications:

Provided as safety device for protection against excessive pressure in vehicle containers and pressure vessels. Approved for liquid, granular and powdery goods.

Working temperature: -40°C / -40°F (233K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASME/ASTM
1 Body	1.4408	A 351 CF8M
2 Valve seal	FPM (Viton-GLT)	
3 Disc	1.4401	A 479 Grade 316
4 Protection cap	1.4301	A 479 Grade 304
5 Diaphragm	Silicon	
6 Stem	1.4401	A 479 Grade 316
7 Bonnet	1.4401	A 479 Grade 316
8 Spring	1.4571	A 313 Grade 316Ti
9 Stem guide	PTFE	
10 Lifting device	1.4401	A 479 Grade 316
11 Closing cap	1.4401	A 479 Grade 316



**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 2014/68/EU (PED).



Type 06506	Technical data (GW 2 in preparation)				
		GW	1	1-1/4	1-1/2
Nominal size	d <sub>0</sub>	24	31	31	-
Dimension code	.X.	1000	3112	3114	-
Set pressure range	bar	0.5-6.0	0.5-6.0	0.5-6.0	-
Height	H	194	191	191	-
Length	L <sub>2</sub>	18	22	22	-
Protection cap diameter	D	80	80	80	-
Wrench size across flats	S <sub>1</sub>	55	55	55	-
Weight	ca. kg	1.75	2.00	2.30	-
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.62	0.68	0.68	-
Coeff. of discharge from 3.5 bar	α <sub>w</sub>	-	0.65	0.65	-
Coeff. of discharge from 4.5 bar	α <sub>w</sub>	0.57	-	-	-

Dimensions in mm.

# Safety Valves

## Type 06506



### 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	1-1/4	1-1/2	2
	$d_0$ (mm)	24.0	31.0	31.0	-
	$A_0$ (mm <sup>2</sup> )	452.4	754.8	754.8	-
	Medium	Air			
0.5		237	435	435	-
0.6		268	486	486	-
0.7		299	535	535	-
0.8		329	579	579	-
0.9		353	631	631	-
1.0		372	669	669	-
1.2		414	753	753	-
1.4		456	840	840	-
1.6		504	941	941	-
1.8		553	1031	1031	-
2.0		604	1123	1123	-
2.2		648	1200	1200	-
2.4		694	1277	1277	-
2.6		740	1354	1354	-
2.8		782	1431	1431	-
3.0		825	1511	1511	-
3.2		868	1588	1588	-
3.4		910	1665	1665	-
3.5		931	1628	1628	-
3.6		952	1665	1665	-
3.8		994	1739	1739	-
4.0		1036	1812	1812	-
4.2		1078	1886	1886	-
4.4		1120	1960	1960	-
4.5		1049	1997	1997	-
4.6		1069	2034	2034	-
4.8		1107	2107	2107	-
5.0		1148	2185	2185	-
5.2		1187	2259	2259	-
5.4		1226	2333	2333	-
5.6		1265	2407	2407	-
5.8		1304	2481	2481	-
6.0		1343	2555	2555	-

# Safety Valves

## Type 06370



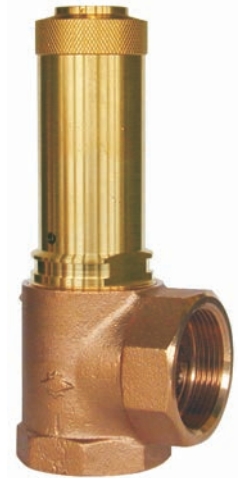
### Safety Valves, angle type, bronze, type tested TÜV-SV.749. L

Standard safety valve  
with soft valve seal for fluids, open bonnet,  
with diaphragm for protection of the spring, with lifting device  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06370.X.0000** with NBR valve seal

**Part No. 06370.X.0700** with FPM valve seal

Pressure range in bar:	NBR	FPM		NBR	FPM
<b>Nom. size 1/2":</b>	1.0 - 11.0	1.0 - 16.0	<b>Nom. size 3/4":</b>	1.0 - 10.5	1.0 - 16.0
<b>Nom. size 1":</b>	1.0 - 10.0	1.0 - 16.0	<b>Nom. size 1-1/4":</b>	1.0 - 9.0	1.0 - 16.0
<b>Nom. size 1-1/2":</b>	1.0 - 8.5	1.0 - 16.0	<b>Nom. size 2":</b>	1.0 - 9.0	1.0 - 16.0



Available options - on request only:

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

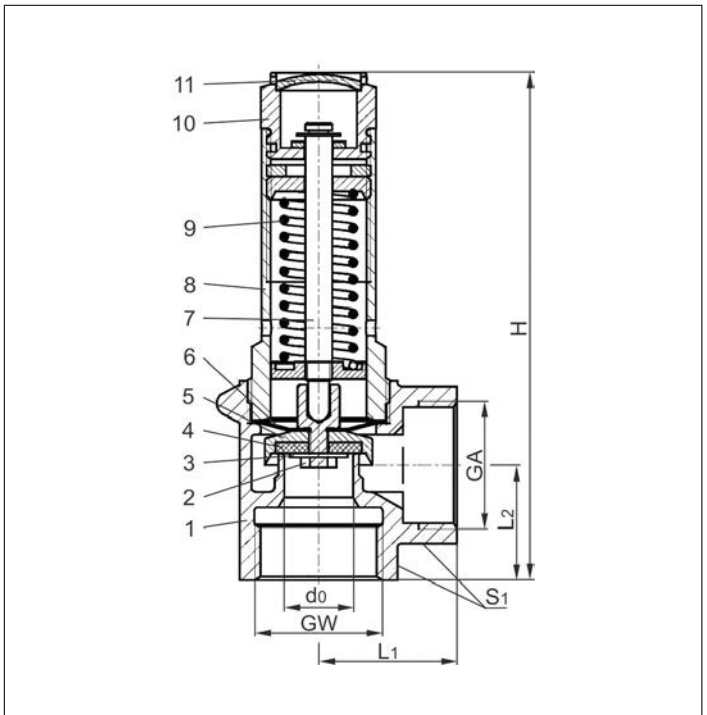
#### Applications:

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

Approved for non-adhesive fluids, which are not vaporized during blow off.

Working temperature: -10°C / +14°F (263K) up to +110°C / +230°F (383K), suitable for horizontal installation

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



**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 2014/68/EU (PED).



Type 06370	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	bar	1.0-16	1.0-16	1.0-16	1.0-16	1.0-16	1.0-16
Outlet	GA	1/2	3/4	1	1-1/4	1-1/2	2
Height	H	92	111	132	152	175	200
Length	L <sub>1</sub>	25	30	36	40	48	56
Length	L <sub>2</sub>	20	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	α <sub>w</sub>	0.20	0.25	0.31	0.39	0.42	0.38

Dimensions in mm.

# Safety Valves

## Type 06370



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**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	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
	$A_0$ (mm <sup>2</sup> )	113.1	176.7	254.5	314.2	452.4	615.8
	Medium	<b>Water</b>					
<b>1.0</b>		1207	2359	4212	6542	10146	12494
<b>2.0</b>		1708	3336	5957	9252	14348	17670
<b>3.0</b>		2092	4086	7296	11332	17573	21641
<b>4.0</b>		2415	4718	8424	13085	20292	24989
<b>5.0</b>		2700	5275	9419	14629	22687	27938
<b>6.0</b>		2958	5778	10318	16025	24852	30605
<b>7.0</b>		3195	6241	11145	17310	26843	33057
<b>8.0</b>		3416	6672	11914	18505	28697	35340
<b>9.0</b>		3623	7077	12637	19627	30438	37483
<b>10.0</b>		3819	7460	13320	20689	32084	39511
<b>12.0</b>		4184	8172	14592	22664	35146	43282
<b>14.0</b>		4519	8826	15761	24480	37962	46750
<b>16.0</b>		4831	9436	16849	26170	40584	49978

# Safety Valves

## Type 06372



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

Standard safety valve  
with soft valve seal for saturated steam, air and similar gases, open bonnet,  
with diaphragm for protection of the spring, with lifting device  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06372.X.0000**

with FPM valve seal (PTFE coated)

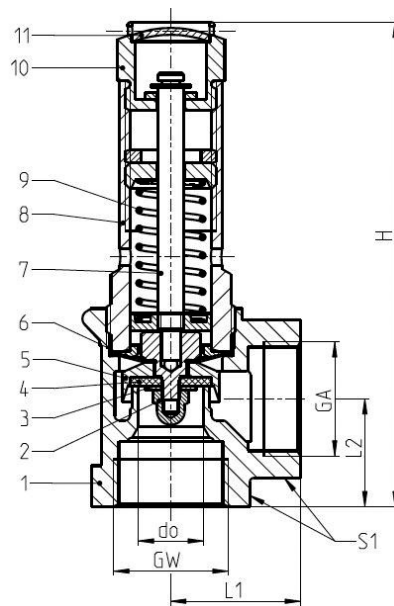


### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers.

Working temperature: -10°C / +14°F (263K) up to +120°C / +230°F (393K), suitable for horizontal installation

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Disc nut	CW614N	B 249 UNS C38500
3 Plate	CW507L	B 36 UNS C26800
4 Valve seal	FPM (PTFE coated)	
5 Disc	CW614N	B 249 UNS C38500
6 Diaphragm	NBR	
7 Stem	CW614N	B 249 UNS C38500
8 Bonnet	CW614N	B 249 UNS C38500
9 Spring	1.4571	A 313 Grade 316Ti
10 Lifting device	CW614N	B 249 UNS C38500
11 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06370	Technical data	
<b>Nominal size</b>	<b>GW</b>	<b>3/4</b>
Orifice	d <sub>0</sub>	15
Dimension code	.X.	0600
Set pressure range	bar	0.8-1.0
Outlet	GA	3/4
Height	H	111
Length	L <sub>1</sub>	30
Length	L <sub>2</sub>	25
Wrench size across flats	S <sub>1</sub>	32
Weight	ca. kg	0.40
Coeff. of discharge	α <sub>w</sub>	0.27

Dimensions in mm.

# Safety Valves

## Type 06372



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated Steam** in kg/h

**B = 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	3/4	
	$d_0$ (mm)	15.0	
	$A_0$ (mm <sup>2</sup> )	176.7	
	Medium	A	B
0.8		49	62
0.9		52	65
1.0		54	68

# Safety Valves

## Type 06376



### Safety Valves, angle type, bronze, type tested TÜV-SV.749. L

Standard safety valve

with soft valve seal for fluids, open bonnet,

with diaphragm for protection of the spring, with lifting device

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

#### Part No. 06376.X.0000

with NBR valve seal for following pressure range

**Nom. size 1/2":** 1.0 - 11.50 bar,    **Nom. size 3/4":** 1.0 - 12.50 bar

**Nom. size 1":** 1.0 - 9.00 bar,    **Nom. size 1-1/4":** 1.0 - 10.50 bar

with FPM valve seal for following pressure range

**Nom. size 1/2":** 1.0 - 16.0 bar,    **Nom. size 3/4":** 1.0 - 16.0 bar

**Nom. size 1":** 1.0 - 16.0 bar,    **Nom. size 1-1/4":** 1.0 - 16.0 bar



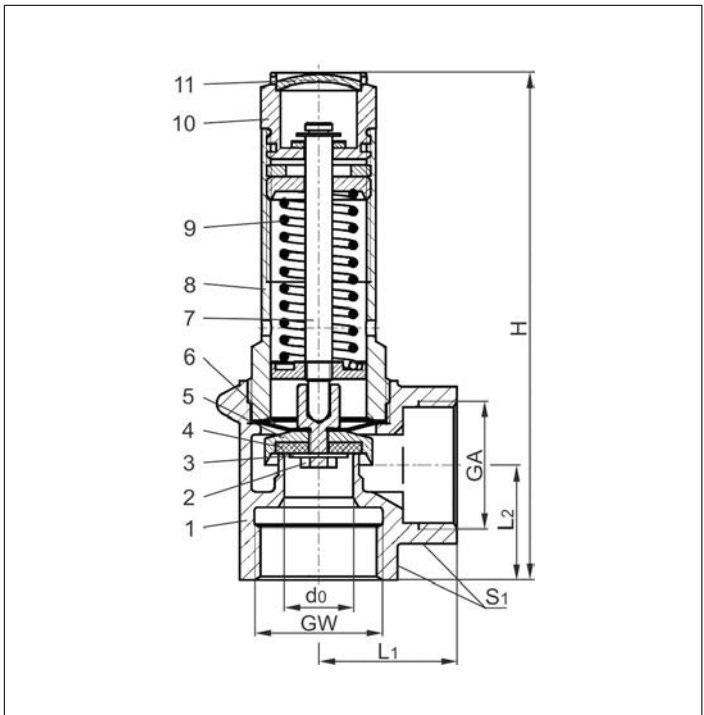
#### Applications:

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

Approved for non-toxic, non-inflammable fluids - medium contact parts are seawater resistant.

Working temperature: -10°C / +14°F (263K) up to +110°C / +230°F (383K), suitable for horizontal installation

Materials	DIN EN	ASME/ASTM
1 Body	CC480K	C90700
2 Disc nut	1.4571/A4	similar A 194
3 Plate	Copper	
4 Valve seal	NBR or FPM	
5 Disc	CW452K	B 159 UNS C51900
6 Diaphragm	NBR	
7 Stem	CW614N	B 249 UNS C38500
8 Bonnet	CW614N	B 249 UNS C38500
9 Spring	1.4571	A 313 Grade 316Ti
10 Lifting device	CW614N	B 249 UNS C38500
11 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06376	Technical data				
Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	12	15	18	20
Dimension code	.X.	0400	0600	1000	1200
Set pressure range	bar	1.0-16	1.0-16	1.0-16	1.0-16
Outlet	GA	1/2	3/4	1	1-1/4
Height	H	92	111	132	152
Length	L <sub>1</sub>	25	30	36	40
Length	L <sub>2</sub>	20	25	30	35
Wrench size across flats	S <sub>1</sub>	27	32	41	50
Weight	ca. kg	0.24	0.40	0.70	1.07
Coefficient of discharge	α <sub>w</sub>	0.20	0.25	0.31	0.39

Dimensions in mm.



# Safety Valves

## Type 06376



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**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	1/2	3/4	1	1-1/4
	$d_0$ (mm)	12.0	15.0	18.0	20.0
	$A_0$ (mm <sup>2</sup> )	113.1	176.7	254.5	314.2
	Medium	<b>Water</b>			
<b>1.0</b>		1207	2357	4213	6543
<b>2.0</b>		1706	3333	5958	9254
<b>3.0</b>		2090	4082	7297	11334
<b>4.0</b>		2413	4713	8426	13087
<b>5.0</b>		2698	5270	9420	14632
<b>6.0</b>		2956	5773	10320	16028
<b>7.0</b>		3193	6235	11146	17312
<b>8.0</b>		3413	6666	11916	18508
<b>9.0</b>		3620	7070	12639	19630
<b>10.0</b>		3816	7453	13322	20692
<b>12.0</b>		4180	8164	14594	22667
<b>14.0</b>		4515	8818	15763	24483
<b>16.0</b>		4827	9427	16852	26174

# 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 to 3 bar)

Working temperature: -10°C / +14°F (263K) up to +135°C / +275°F (408K)

Available options - on request only:

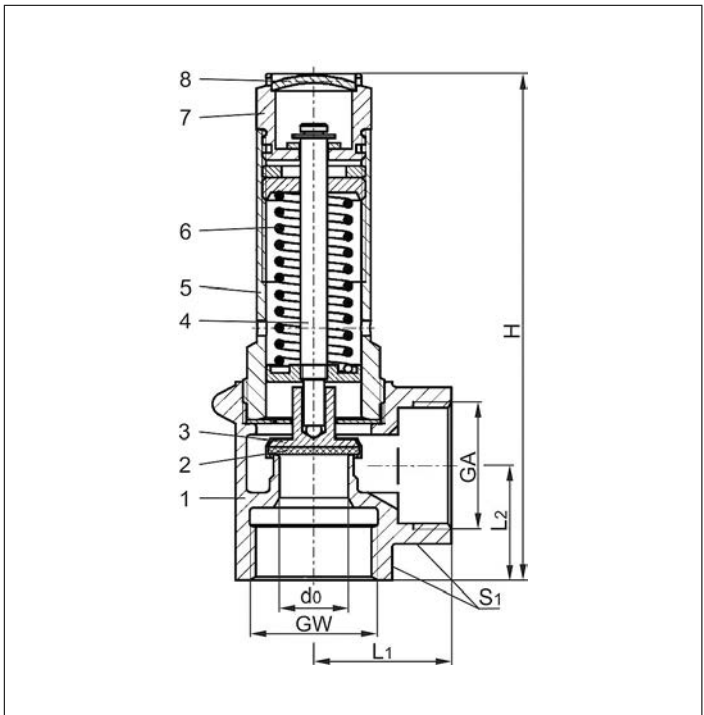
- stainless steel spring - material 1.4571, external parts nickel plated

### 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



**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 2014/68/EU (PED).



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.

# Safety Valves

## Type 06380

**HEROSE**



### 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	24	33	59	82	105	136
<b>0.4</b>		40	54	101	137	179	236	34	45	84	115	150	198
<b>0.5</b>		46	61	114	154	204	271	38	50	94	128	168	224
<b>1.0</b>		68	89	172	230	306	407	54	71	137	184	244	326
<b>2.0</b>		113	140	284	391	505	660	89	110	224	309	398	521
<b>3.0</b>		156	192	389	527	692	906	122	150	304	411	541	708
<b>4.0</b>		196	241	488	661	869	1137	152	187	379	513	674	883
<b>5.0</b>		236	291	589	797	1048	1371	182	224	454	615	808	1057
<b>6.0</b>		276	340	689	932	1225	1603	212	261	528	715	940	1230
<b>7.0</b>		316	389	788	1067	1402	1835	242	297	603	816	1072	1403
<b>8.0</b>		357	440	891	1205	1584	2073	271	334	677	916	1203	1575
<b>9.0</b>		398	489	990	1340	1761	2305	301	371	750	1016	1334	1747
<b>10.0</b>		439	540	1093	1479	1943	2543	331	407	824	1115	1465	1918
<b>12.0</b>		519	638	1293	1750	2298	3008	-	-	-	-	-	-
<b>14.0</b>		599	737	1493	2020	2654	3474	-	-	-	-	-	-
<b>16.0</b>		680	836	1693	2291	3010	3940	-	-	-	-	-	-
<b>18.0</b>		760	935	1893	2562	-	-	-	-	-	-	-	-
<b>20.0</b>		849	1044	2113	2860	-	-	-	-	-	-	-	-

# Safety Valves

## Type 06601



Safety Valves, angle type, bronze, type tested TÜV-SV.1080. S/G

Standard safety valve  
with O-ring valve seal,  
closed bonnet, with lifting device  
with enlarged outlet  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06601.1204.0000**

Available options - on request only:

- external parts nickel plated



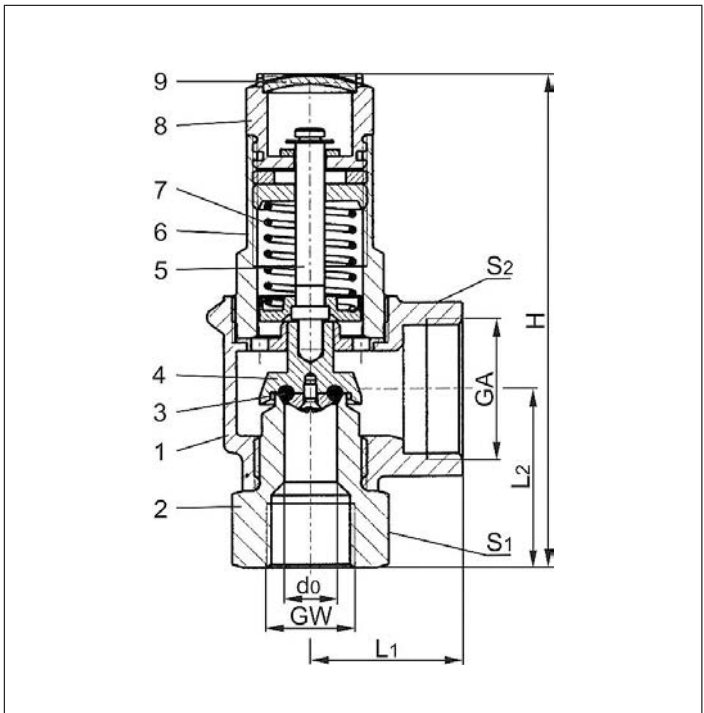
### Applications:

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

Approved for non-toxic gases and vapours.

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

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 O-ring	PTFE	
4 Disc	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06601	Technical data	
Nominal size	<b>GW</b>	1/2
Orifice	d <sub>0</sub>	12.5
Set pressure range	bar	5.0-10
Outlet	GA	1
Height	H	117
Length	L <sub>1</sub>	36
Length	L <sub>2</sub>	42
Wrench size across flats	S <sub>1</sub>	32
Wrench size across flats	S <sub>2</sub>	41
Weight	ca. kg	0.65
Coefficient of discharge	α <sub>w</sub>	0.42

Dimensions in mm.

# Safety Valves

## Type 06601



### 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	1/2
	$d_0$ (mm)	12.5
	$A_0$ (mm <sup>2</sup> )	122.7
	Medium	<b>Air</b>
5.0		229
5.5		249
6.0		268
6.5		287
7.0		307
7.5		326
8.0		347
8.5		366
9.0		385
9.5		405
10.0		425

# Safety Valves

## Type 06602



Safety Valves, angle type, bronze, type tested TÜV-SV.1080. S/G

Standard safety valve  
with O-ring valve seal,  
closed bonnet, with lifting device,  
with enlarged outlet  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06602.1204.0000**

Available options - on request only:

- external parts nickel plated

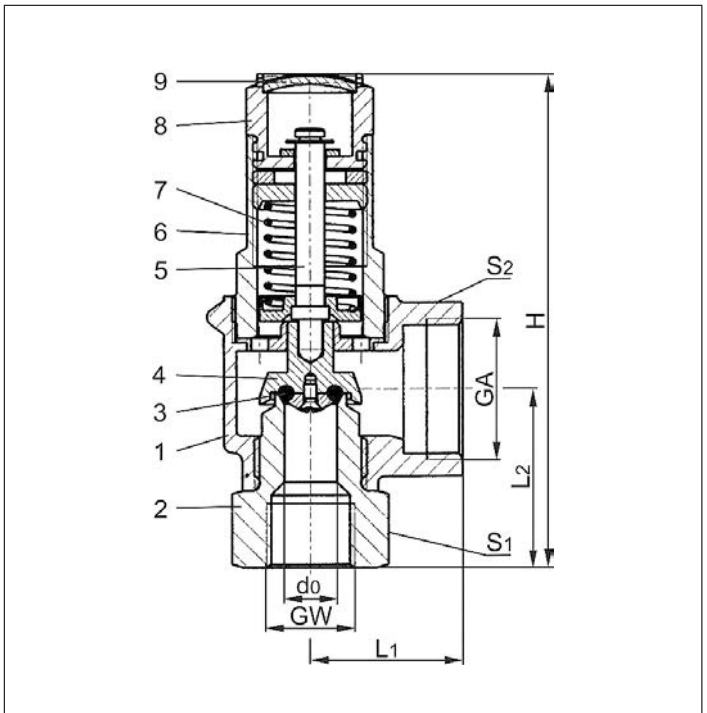


### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers. Approved for non-toxic gases, vapours and for saturated steam.

Working temperature: -10°C / +14°F (263K) up to +130°C / +266°F (403K)

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 O-ring	EPDM	
4 Disc	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06602	Technical data	
Nominal size	<b>GW</b>	1/2
Orifice	$d_0$	12.5
Set pressure range	bar	1.2-1.3
Outlet	GA	1
Height	H	117
Length	$L_1$	36
Length	$L_2$	42
Wrench size across flats	$S_1$	32
Wrench size across flats	$S_2$	41
Weight	ca. kg	0.65
Coefficient of discharge	$\alpha_w$	0.82

Dimensions in mm.

# Safety Valves

## Type 06602



### 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.**

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	1/2
	$d_0$ (mm)	12.5	12.5
	$A_0$ (mm <sup>2</sup> )	122.7	122.7
	Medium	Air	Saturated steam
1.2		159	127
1.3		167	133

# Safety Valves

## Type 06603



**Safety Valves, angle type, bronze, type tested TÜV-SV.1080. S/G**

Standard safety valve  
with O-ring valve seal,  
closed bonnet, with lifting device,  
with enlarged outlet  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06603.1204.0000**

Available options - on request only:

- external parts nickel plated



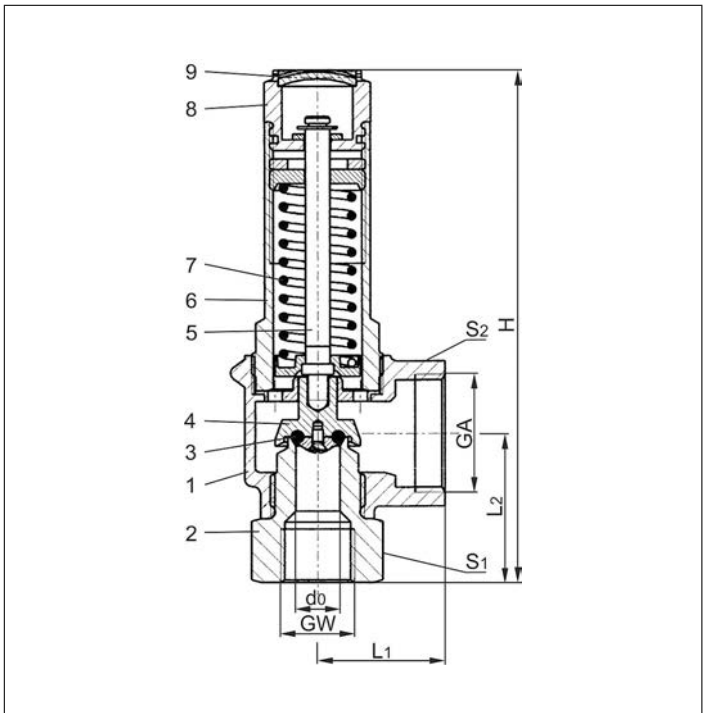
### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers. Approved for non-toxic gases, vapours and for saturated steam.

Working temperature: -10°C / +14°F (263K) up to +180°C / +356°F (453K)

For saturated steam use only up to 3 bar and +135°C / +275°F (408K)

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 O-ring	EPDM	
4 Disc	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06603	Technical data	
<b>Nominal size</b>	<b>GW</b>	<b>1/2</b>
Orifice	d <sub>0</sub>	12.5
Set pressure range	bar	0.2-5
Outlet	GA	1
Height	H	145
Length	L <sub>1</sub>	36
Length	L <sub>2</sub>	42
Wrench size across flats	S <sub>1</sub>	32
Wrench size across flats	S <sub>2</sub>	41
Weight	ca. kg	0.7
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.74

Dimensions in mm.



# Safety Valves

## Type 06603



### 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.**

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	1/2
	$d_0$ (mm)	12.5	12.5
	$A_0$ (mm <sup>2</sup> )	122.7	122.7
	Medium	Air	Saturated steam
0.2		50	43
0.5		79	66
1.0		120	96
1.5		160	128
2.0		196	154
2.5		231	182
3.0		267	208
3.5		301	-
4.0		335	-
4.5		369	-
5.0		404	-

# Safety Valves

## Type 06604



**Safety Valves, angle type, bronze, type tested TÜV-SV.1080. S/G**

Standard safety valve  
with O-ring valve seal,  
closed bonnet, with lifting device,  
with enlarged outlet  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06604.1204.0000**

Available options - on request only:

- external parts nickel plated



### Applications:

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

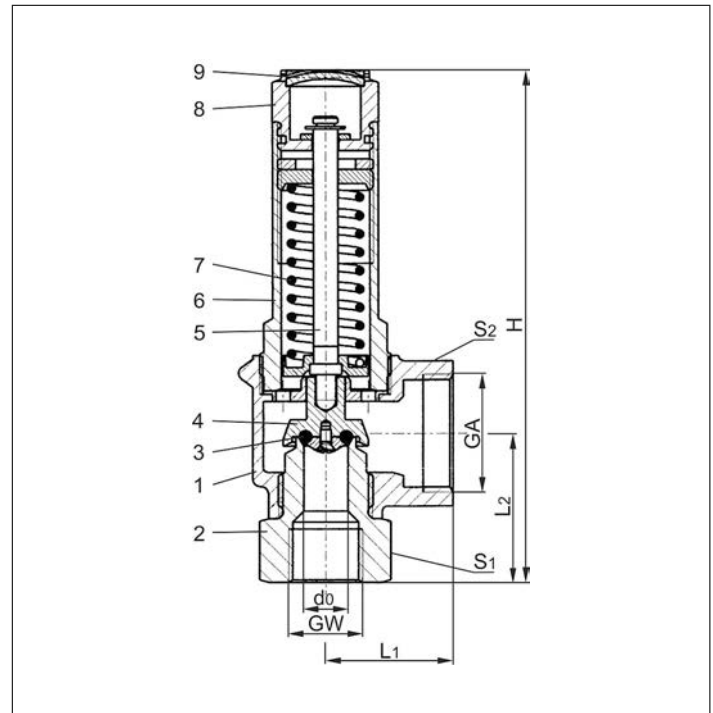
Approved for gases and vapours, preferably for non-inflammable refrigerants acc. to EN 378-1.

Working temperature: -50°C / -58°F (223K) up to +150°C / +316°F (423K)

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 O-ring	PTFE	
4 Disc	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800

**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 2014/68/EU (PED).



Type 06604	Technical data	
<b>Nominal size</b>	<b>GW</b>	<b>1/2</b>
Orifice	d <sub>0</sub>	12.5
Set pressure range	bar	14.0-30
Outlet	GA	1
Height	H	145
Length	L <sub>1</sub>	36
Length	L <sub>2</sub>	42
Wrench size across flats	S <sub>1</sub>	32
Wrench size across flats	S <sub>2</sub>	41
Weight	ca. kg	0.7
Coefficient of discharge	α <sub>w</sub>	0.7

Dimensions in mm.

# Safety Valves

## Type 06604



### 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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	1/2
	d <sub>0</sub> (mm)	12.5
	A <sub>0</sub> (mm <sup>2</sup> )	122.7
	Medium	<b>Air</b>
<b>14.0</b>		969
<b>15.0</b>		1034
<b>16.0</b>		1099
<b>17.0</b>		1164
<b>18.0</b>		1229
<b>19.0</b>		1294
<b>20.0</b>		1372
<b>21.0</b>		1437
<b>22.0</b>		1503
<b>23.0</b>		1569
<b>24.0</b>		1634
<b>25.0</b>		1700
<b>26.0</b>		1765
<b>27.0</b>		1831
<b>28.0</b>		1897
<b>29.0</b>		1962
<b>30.0</b>		2047

# Safety Valves

## Type 06605



Safety Valves, angle type, bronze, type tested TÜV-SV.1080. S/G

Standard safety valve  
with O-ring valve seal,  
closed bonnet, with lifting device,  
with enlarged outlet

Inlet: male thread NPT acc. to ANSI B 1.20.1

Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06605.1204.0000**

Available options - on request only:

- external parts nickel plated



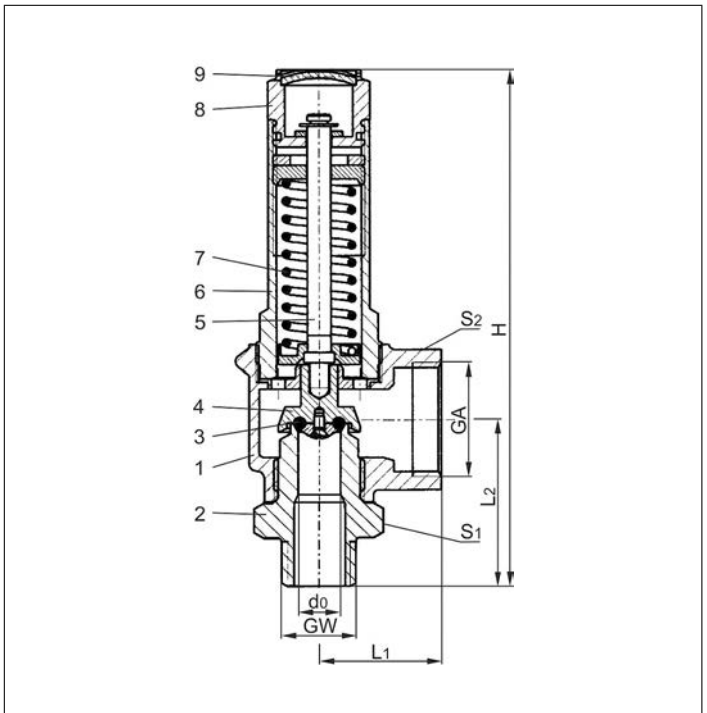
### Applications:

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

Approved for gases and vapours, preferably for non-inflammable refrigerants acc. to EN 378-1.

Working temperature: -50°C / -58°F (223K) up to +150°C / +316°F (423K)

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 O-ring	PTFE	
4 Disc	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06605	Technical data	
Nominal size	<b>GW</b>	1/2
Orifice	$d_0$	12.5
Set pressure range	bar	14.0-30
Outlet	GA	1
Height	H	151
Length	$L_1$	36
Length	$L_2$	48
Wrench size across flats	$S_1$	32
Wrench size across flats	$S_2$	41
Weight	ca. kg	0.7
Coefficient of discharge	$\alpha_w$	0.7

Dimensions in mm.

# Safety Valves

## Type 06605



### 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	1/2
	$d_0$ (mm)	12.5
	$A_0$ (mm <sup>2</sup> )	122.7
	Medium	<b>Air</b>
14.0		969
15.0		1034
16.0		1099
17.0		1164
18.0		1229
19.0		1294
20.0		1372
21.0		1437
22.0		1503
23.0		1569
24.0		1634
25.0		1700
26.0		1765
27.0		1831
28.0		1897
29.0		1962
30.0		2047

# Safety Valves

## Type 06395



### Safety Valves, angle type, bronze, type tested TÜV-SV.910. S/G

Standard safety valve

open bonnet, with lifting device and enlarged outlet

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

#### Part No. 06395.X.0000

metal to metal seated for saturated steam, air and similar gases

Working temperature: -50°C / -58°F (223K) up to +225°C / +437°F (498K)

#### Part No. 06395.X.0500

with PTFE/carbon filled valve seal for saturated steam, air and similar gases

Working temperature: -50°C / -58°F (223K) up to +185°C / +365°F (458K)

#### Part No. 06395.X.0600

with EPDM valve seal for saturated steam, air and similar gases

Working temperature: -40°C / -40°F (233K) up to +150°C / +302°F (423K)

Available options - on request only:

- stainless steel inlet body - material 1.4571
- external parts nickel plated

### Applications:

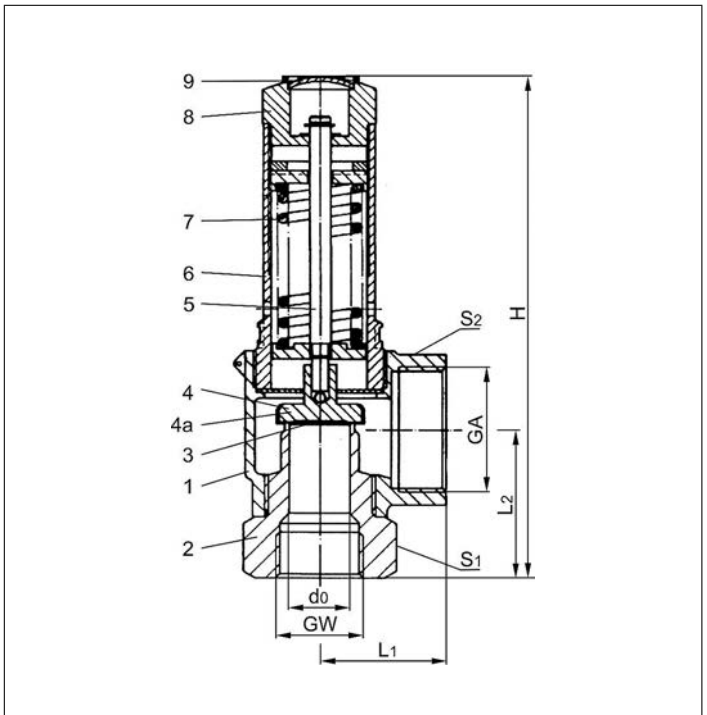
Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers.



Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 Valve seal	PTFE/Carbon filled or EPDM	
4 Disc metal seated	1.4541	A 276 Grade 321
4a Disc soft seated	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800

**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 2014/68/EU (PED).



Type 06395	Technical data				
Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	15	18	23	28
Dimension code	.X.	0400	0600	1000	1200
Set pressure range metal seated	bar	0.5-25	0.5-25	0.5-25	0.5-12
Set pressure range PTFE seal	bar	0.5-25	0.5-25	0.5-25	0.5-12
Set pressure range EPDM seal	bar	0.5-3	0.5-3	0.5-3	0.5-3
Outlet	GA	1	1-1/4	1-1/2	2
Height	H	144	166	195	222
Length	L <sub>1</sub>	36	50	48	58
Length	L <sub>2</sub>	41	48	58	68
Wrench size across flats	S <sub>1</sub>	32	41	50	55
Wrench size across flats	S <sub>2</sub>	41	50	58	70
Weight	ca. kg	0.75	1.25	1.85	3.0
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.64	0.58	0.57	0.66

Dimensions in mm.

# Safety Valves

## Type 06395



### 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.

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1/2	3/4	1	1-1/4
	$d_0$ (mm)	15.0	18.0	23.0	28.0	15.0	18.0	23.0	28.0
	$A_0$ (mm <sup>2</sup> )	176.7	254.5	415.5	615.5	176.7	254.5	415.5	615.5
	Medium	Air				Saturated steam			
0.5		92	130	204	335	76	108	169	279
1.0		142	197	317	522	113	158	253	415
2.0		235	317	509	862	186	250	402	675
3.0		333	434	697	1196	260	339	544	927
4.0		417	545	875	1501	324	423	679	1155
5.0		503	657	1055	1810	388	507	813	1383
6.0		589	768	1233	2116	452	590	946	1613
7.0		674	879	1411	2422	515	672	1079	1844
8.0		761	993	1594	2736	578	755	1211	2065
9.0		846	1105	1773	3043	641	837	1343	2291
10.0		934	1219	1956	3356	704	919	1475	2517
12.0		1105	1442	2314	3971	830	1083	1738	2972
14.0		1276	1665	2672	-	955	1247	2001	-
16.0		1447	1888	3030	-	1081	1411	2264	-
18.0		1618	2112	3389	-	1206	1573	2525	-
20.0		1806	2357	3783	-	1331	1737	2788	-
22.0		1979	2583	4144	-	1456	1900	3050	-
24.0		2152	2802	4506	-	1583	2065	3314	-
25.0		2238	2921	4687	-	1643	2145	3442	-

# Safety Valves

## Type 06395



### Safety Valves, angle type, bronze, type tested TÜV-SV.910. S/G

Standard safety valve

open bonnet, with lifting device and enlarged outlet

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

#### Part No. 06395.X.0080

metal to metal seated for saturated steam, air and similar gases

Working temperature: -50°C / -58°F (223K) up to +225°C / +437°F (498K)

#### Part No. 06395.X.0580

with PTFE/carbon filled valve seal for saturated steam, air and similar gases

Working temperature: -50°C / -58°F (223K) up to +185°C / +365°F (458K)

#### Part No. 06395.X.0680

with EPDM valve seal for saturated steam, air and similar gases

Working temperature: -40°C / -40°F (233K) up to +150°C / +302°F (423K)

Available options - on request only:

- stainless steel inlet body - material 1.4571
- external parts nickel plated

### Applications:

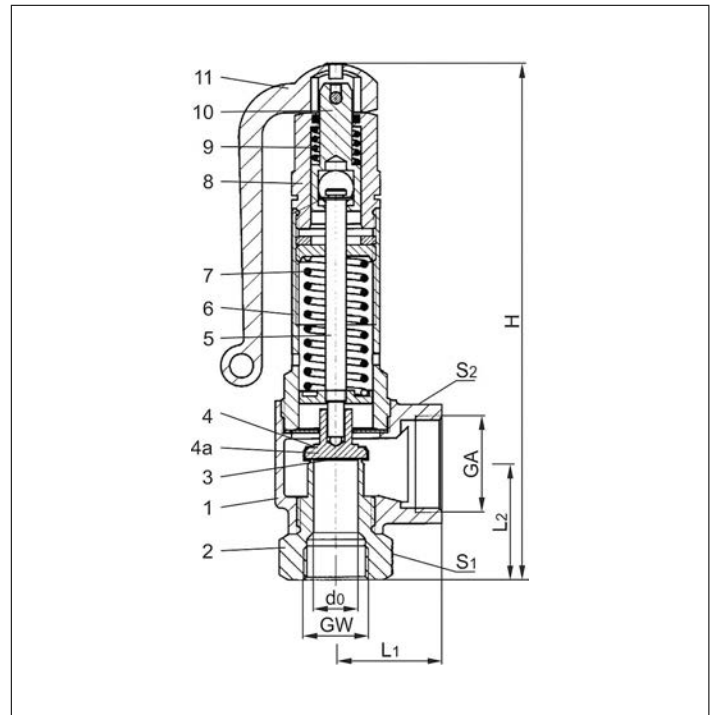
Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers.



Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 Valve seal	PTFE/Carbon filled or EPDM	
4 Disc metal seated	1.4541	A 276 Grade 321
4a Disc soft seated	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting cap	CW614N	B 249 UNS C38500
9 Lifting spring	1.4571	A 313 Grade 316Ti
10 Lifting stem	CW614N	B 249 UNS C38500
11 Lever	1.4408	A 351 CF8M

**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 2014/68/EU (PED).



Type 06395	Technical data				
Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	15	18	23	28
Dimension code	.X.	0400	0600	1000	1200
Set pressure range metal seated	bar	0.5-25	0.5-25	0.5-25	0.5-12
Set pressure range PTFE seal	bar	0.5-25	0.5-25	0.5-25	0.5-12
Set pressure range EPDM seal	bar	0.5-3	0.5-7	0.5-4.6	0.5-6
Outlet	GA	1	1-1/4	1-1/2	2
Height	H	180	200	245	270
Length	L <sub>1</sub>	36	50	48	58
Length	L <sub>2</sub>	41	48	58	68
Wrench size across flats	S <sub>1</sub>	32	41	50	55
Wrench size across flats	S <sub>2</sub>	41	50	58	70
Weight	ca. kg	0.95	1.45	2.4	3.7
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.64	0.58	0.57	0.66

Dimensions in mm.



# Safety Valves

## Type 06395



### 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.**

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1/2	3/4	1	1-1/4
	$d_0$ (mm)	15.0	18.0	23.0	28.0	15.0	18.0	23.0	28.0
	$A_0$ (mm <sup>2</sup> )	176.7	254.5	415.5	615.5	176.7	254.5	415.5	615.5
Medium	Air					Saturated steam			
0.5		92	130	204	335	76	108	169	277
1.0		142	197	317	522	113	158	253	418
2.0		235	316	509	862	186	250	402	681
3.0		333	432	697	1196	260	339	544	934
4.0		417	543	875	1501	324	423	679	1165
5.0		503	653	1055	1810	388	507	813	1396
6.0		589	764	1233	2116	452	590	946	1624
7.0		674	875	1411	2422	515	672	1079	1852
8.0		761	985	1594	2736	578	755	1211	2079
9.0		846	1096	1773	3043	641	837	1343	2306
10.0		934	1206	1956	3356	704	919	1475	2532
12.0		1105	1427	2314	3971	830	1083	1738	2984
14.0		1276	1649	2672	-	955	1247	2001	-
16.0		1447	1870	3030	-	1081	1411	2264	-
18.0		1618	2091	3389	-	1206	1573	2525	-
20.0		1806	2312	3783	-	1331	1737	2788	-
22.0		1979	2533	4144	-	1456	1900	3050	-
24.0		2152	2754	4506	-	1583	2065	3314	-
25.0		2238	2865	4687	-	1643	2145	3442	-

# Safety Valves

## Type 06395



### Safety Valves, angle type, bronze, type tested TÜV-SV.910. S/G

Standard safety valve, open bonnet, with lifting device and enlarged outlet  
 Outlet: female thread type G (BSPP) acc. to ISO 228/1

#### Part No. 06395.X.2000 (Inlet: male thread type G (BSPP) acc. to ISO 228/1)

metal to metal seated for saturated steam, air and similar gases  
 Working temperature: -50°C / -58°F (223K) up to +225°C / +437°F (498K)

#### Part No. 06395.X.2500 (Inlet: male thread type G (BSPP) acc. to ISO 228/1)

with PTFE/carbon filled valve seal for saturated steam, air and similar gases  
 Working temperature: -50°C / -58°F (223K) up to +185°C / +365°F (458K)

#### Part No. 06395.X.2600 (Inlet: male thread type G (BSPP) acc. to ISO 228/1)

with EPDM valve seal for saturated steam, air and similar gases  
 Working temperature: -40°C / -40°F (233K) up to +150°C / +302°F (423K)

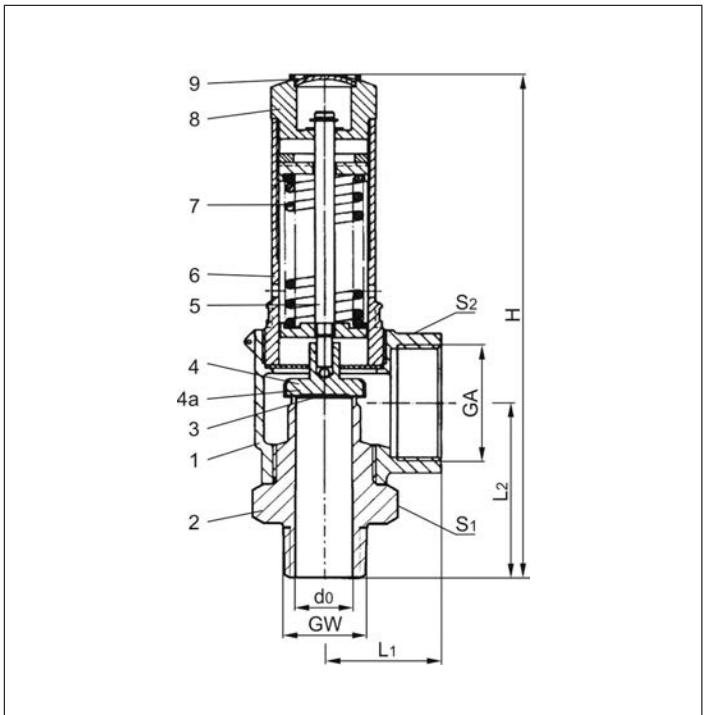
Available options - on request only:  
 external parts nickel plated



### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers.

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	1.4301	A 276 Grade 304
3 Valve seal	PTFE/Carbon filled or EPDM	
4 Disc metal seated	1.4541	A 276 Grade 321
4a Disc soft seated	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06395	Technical data					
	Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	15	18	23	28	
Dimension code	.X.	0400	0600	1000	1200	
Set pressure range metal seated	bar	0.5-25	0.5-25	0.5-25	0.5-12	
Set pressure range PTFE seal	bar	0.5-25	0.5-25	0.5-25	0.5-12	
Set pressure range EPDM seal	bar	0.5-3	0.5-7	0.5-4.6	0.5-6	
Outlet	GA	1	1-1/4	1-1/2	2	
Height	H	151	177	206	236	
Length	L <sub>1</sub>	36	50	48	58	
Length	L <sub>2</sub>	48	59	69	82	
Wrench size across flats	S <sub>1</sub>	32	41	50	55	
Wrench size across flats	S <sub>2</sub>	41	50	58	70	
Weight	ca. kg	0.755	1.3	1.95	3.15	
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.64	0.58	0.57	0.66	

Dimensions in mm.

# Safety Valves

## Type 06395



### 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.

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1/2	3/4	1	1-1/4
	$d_0$ (mm)	15.0	18.0	23.0	28.0	15.0	18.0	23.0	28.0
	$A_0$ (mm <sup>2</sup> )	176.7	254.5	415.5	615.5	176.7	254.5	415.5	615.5
Medium	Air					Saturated steam			
0.5		92	130	204	335	76	108	170	277
1.0		142	197	317	522	113	158	251	418
2.0		235	317	509	862	186	250	398	681
3.0		333	434	697	1196	260	339	540	934
4.0		417	545	875	1501	324	423	673	1165
5.0		503	657	1055	1810	388	507	806	1396
6.0		589	768	1233	2116	452	590	940	1624
7.0		674	879	1411	2422	515	672	1074	1852
8.0		761	993	1594	2736	578	755	1203	2079
9.0		846	1105	1773	3043	641	837	1335	2306
10.0		934	1219	1956	3356	704	919	1466	2532
12.0		1105	1442	2314	3971	830	1083	1732	2984
14.0		1276	1665	2672	-	955	1247	1994	-
16.0		1447	1888	3030	-	1081	1411	2256	-
18.0		1618	2112	3389	-	1206	1573	2517	-
20.0		1806	2357	3783	-	1331	1737	2779	-
22.0		1979	2583	4144	-	1456	1900	3042	-
24.0		2152	2808	4506	-	1583	2065	3301	-
25.0		2238	2921	4687	-	1643	2145	3432	-

# Safety Valves

## Type 06395



### Safety Valves, angle type, bronze, type tested TÜV-SV.910. S/G

Standard safety valve, open bonnet, with lifting device and enlarged outlet  
 Outlet: female thread type G (BSPP) acc. to ISO 228/1

#### Part No. 06395.X.3000 (Inlet: male thread type R (BSPT) acc. to ISO 7/1)

metal to metal seated for saturated steam, air and similar gases  
 Working temperature: -50°C / -58°F (223K) up to +225°C / +437°F (498K)

#### Part No. 06395.X.3500 (Inlet: male thread type R (BSPT) acc. to ISO 7/1)

with PTFE/carbon filled valve seal for saturated steam, air and similar gases  
 Working temperature: -50°C / -58°F (223K) up to +185°C / +365°F (458K)

#### Part No. 06395.X.3600 (Inlet: male thread type R (BSPT) acc. to ISO 7/1)

with EPDM valve seal for saturated steam, air and similar gases  
 Working temperature: -40°C / -40°F (233K) up to +150°C / +302°F (423K)

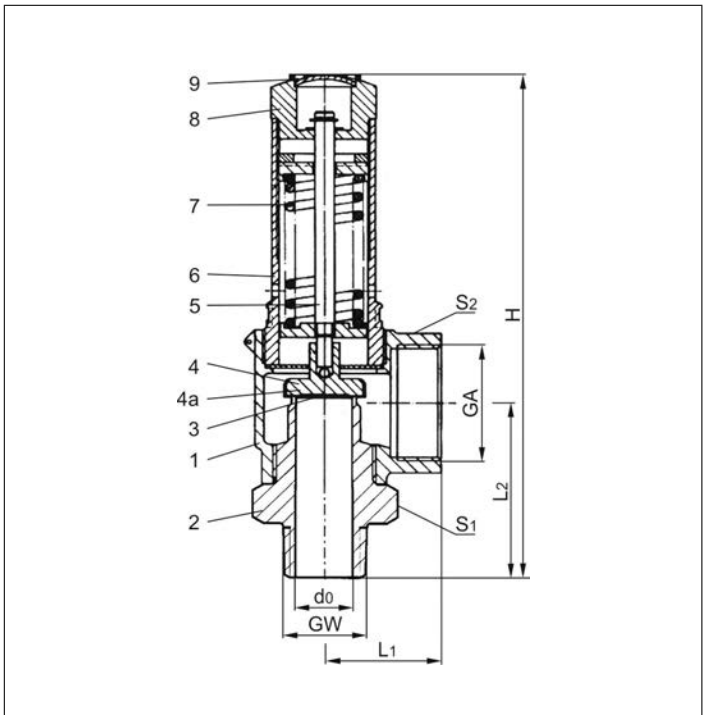
Available options - on request only:  
 external parts nickel plated



### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers.

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 Valve seal	PTFE/Carbon filled or EPDM	
4 Disc metal seated	1.4541	A 276 Grade 321
4a Disc soft seated	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting device	CW614N	B 249 UNS C38500
9 Closing cap	CW507L	B 36 UNS C26800



**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 2014/68/EU (PED).



Type 06395	Technical data					
	Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	15	18	23	28	
Dimension code	.X.	0400	0600	1000	1200	
Set pressure range metal seated	bar	0.5-25	0.5-25	0.5-25	0.5-12	
Set pressure range PTFE seal	bar	0.5-25	0.5-25	0.5-25	0.5-12	
Set pressure range EPDM seal	bar	0.5-3	0.5-7	0.5-4.6	0.5-6	
Outlet	GA	1	1-1/4	1-1/2	2	
Height	H	151	177	206	236	
Length	L <sub>1</sub>	36	50	48	58	
Length	L <sub>2</sub>	48	59	69	82	
Wrench size across flats	S <sub>1</sub>	32	41	50	55	
Wrench size across flats	S <sub>2</sub>	41	50	58	70	
Weight	ca. kg	0.755	1.3	1.95	3.15	
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.64	0.58	0.57	0.66	

Dimensions in mm.

# Safety Valves

## Type 06395



### 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.**

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1/2	3/4	1	1-1/4
	$d_0$ (mm)	15.0	18.0	23.0	28.0	15.0	18.0	23.0	28.0
	$A_0$ (mm <sup>2</sup> )	176.7	254.5	415.5	615.5	176.7	254.5	415.5	615.5
Medium	Air					Saturated steam			
0.5		92	130	204	335	76	108	170	277
1.0		142	197	317	522	113	158	251	418
2.0		235	317	509	862	186	250	398	681
3.0		333	434	697	1196	260	339	540	934
4.0		417	545	875	1501	324	423	673	1165
5.0		503	657	1055	1810	388	507	806	1396
6.0		589	768	1233	2116	452	590	940	1624
7.0		674	879	1411	2422	515	672	1074	1852
8.0		761	993	1594	2736	578	755	1203	2079
9.0		846	1105	1773	3043	641	837	1335	2306
10.0		934	1219	1956	3356	704	919	1466	2532
12.0		1105	1442	2314	3971	830	1083	1732	2984
14.0		1276	1665	2672	-	955	1247	1994	-
16.0		1447	1888	3030	-	1081	1411	2256	-
18.0		1618	2112	3389	-	1206	1573	2517	-
20.0		1806	2357	3783	-	1331	1737	2779	-
22.0		1979	2583	4144	-	1456	1900	3042	-
24.0		2152	2808	4506	-	1583	2065	3301	-
25.0		2238	2921	4687	-	1643	2145	3432	-

# Safety Valves

## Type 06395



### Safety Valves, angle type, bronze, type tested TÜV-SV.910. S/G

Standard safety valve, open bonnet, with lifting device and enlarged outlet

Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06395.X.2080 (Inlet: male thread type G (BSPP) acc. to ISO 228/1)**

**Part No. 06395.X.3080 (Inlet: male thread type R (BSPT) acc. to ISO 7/1)**

metal to metal seated for air and similar gases

Working temperature: -50°C / -58°F (223K) up to +225°C / +437°F (498K)

**Part No. 06395.X.2580 (Inlet: male thread type G (BSPP) acc. to ISO 228/1)**

**Part No. 06395.X.3580 (Inlet: male thread type R (BSPT) acc. to ISO 7/1)**

with PTFE/carbon filled valve seal for air and similar gases

Working temperature: -50°C / -58°F (223K) up to +185°C / +365°F (458K)

**Part No. 06395.X.2680 (Inlet: male thread type G (BSPP) acc. to ISO 228/1)**

**Part No. 06395.X.3680 (Inlet: male thread type R (BSPT) acc. to ISO 7/1)**

with EPDM valve seal for saturated steam

Working temperature: -40°C / -40°F (233K) up to +150°C / +302°F (423K)

Available options - on request only:

· stainless steel inlet body - material 1.4571 · external parts nickel plated

### Applications:

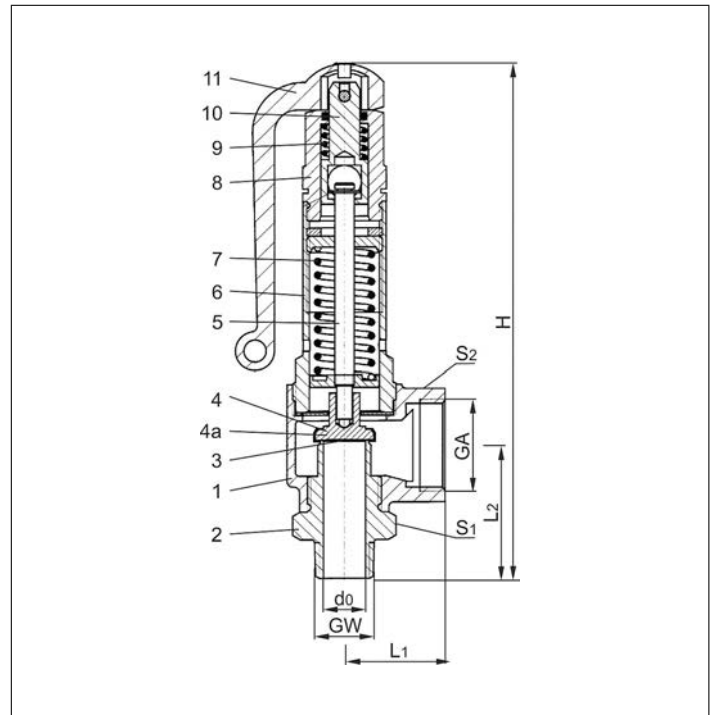
Provided as safety device for protection against excessive pressure in pressure vessels and steam boilers.



Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	CW614N	B 111 UNS C28000
3 Valve seal	PTFE/Carbon filled or EPDM	
4 Disc metal seated	1.4541	A 276 Grade 321
4a Disc soft seated	CW614N	B 249 UNS C38500
5 Stem	CW614N	B 249 UNS C38500
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring	1.4571	A 313 Grade 316Ti
8 Lifting cap	CW614N	B 249 UNS C38500
9 Lifting spring	1.4571	A 313 Grade 316Ti
10 Lifting stem	CW614N	B 249 UNS C38500
11 Lever	1.4408	A 351 CF8M

**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 2014/68/EU (PED).



Type 06395	Technical data				
Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	d <sub>0</sub>	15	18	23	28
Dimension code	.X.	0400	0600	1000	1200
Set pressure range metal seated	bar	0.5-25	0.5-25	0.5-25	0.5-12
Set pressure range PTFE seal	bar	0.5-25	0.5-25	0.5-25	0.5-12
Set pressure range EPDM seal	bar	0.5-3	0.5-7	0.5-4.6	0.5-6
Outlet	GA	1	1-1/4	1-1/2	2
Height	H	187	209	256	284
Length	L <sub>1</sub>	36	50	48	58
Length	L <sub>2</sub>	48	59	69	82
Wrench size across flats	S <sub>1</sub>	32	41	50	55
Wrench size across flats	S <sub>2</sub>	41	50	58	70
Weight	ca. kg	0.955	1.5	2.5	3.85
Coeff. of discharge from 3.0 bar	α <sub>w</sub>	0.64	0.58	0.57	0.66

Dimensions in mm.

# Safety Valves

## Type 06395



### 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.**

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar (g)	GW	1/2	3/4	1	1-1/4	1/2	3/4	1	1-1/4
	$d_0$ (mm)	15.0	18.0	23.0	28.0	15.0	18.0	23.0	28.0
	$A_0$ (mm <sup>2</sup> )	176.7	254.5	415.5	615.5	176.7	254.5	415.5	615.5
Medium	Air					Saturated steam			
0.5		92	130	204	335	76	108	169	277
1.0		142	197	317	522	113	158	253	418
2.0		235	317	509	862	186	250	402	681
3.0		333	434	697	1196	260	339	544	934
4.0		417	545	875	1501	324	423	679	1165
5.0		503	657	1055	1810	388	507	813	1396
6.0		589	768	1233	2116	452	590	946	1624
7.0		674	879	1411	2422	515	672	1079	1852
8.0		761	993	1594	2736	578	755	1211	2079
9.0		846	1105	1773	3043	641	837	1343	2306
10.0		934	1219	1956	3356	704	919	1475	2532
12.0		1105	1442	2314	3971	830	1083	1738	2984
14.0		1276	1665	2672	-	955	1247	2001	-
16.0		1447	1888	3030	-	1081	1411	2264	-
18.0		1618	2112	3389	-	1206	1573	2525	-
20.0		1806	2357	3783	-	1331	1737	2788	-
22.0		1979	2583	4144	-	1456	1900	3050	-
24.0		2152	2808	4506	-	1583	2065	3314	-
25.0		2238	2921	4687	-	1643	2145	3442	-

# Safety Valves

## Type 06810, Type 06815



**Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. S/G/L**

Standard safety valve  
 metal to metal seated, "cleaned and degreased for oxygen service"  
 closed bonnet, gastight cap or lifting device  
 Inlet: male thread type G (BSPP) acc. to ISO 228/1  
 Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06810.X.000000M (Pmax 16.0 bar)**

**Part No. 06810.X.000000H (Pmax 180.0 bar) stellited version**  
 with gastight cap

**Part No. 06815.X.000000M (Pmax 16.0 bar)**

**Part No. 06815.X.000000H (Pmax 180.0 bar) stellited version**  
 with lifting device

Available options - on request only:

- Flange-, NPT- or Tri-Clamp connection for in- and outlet

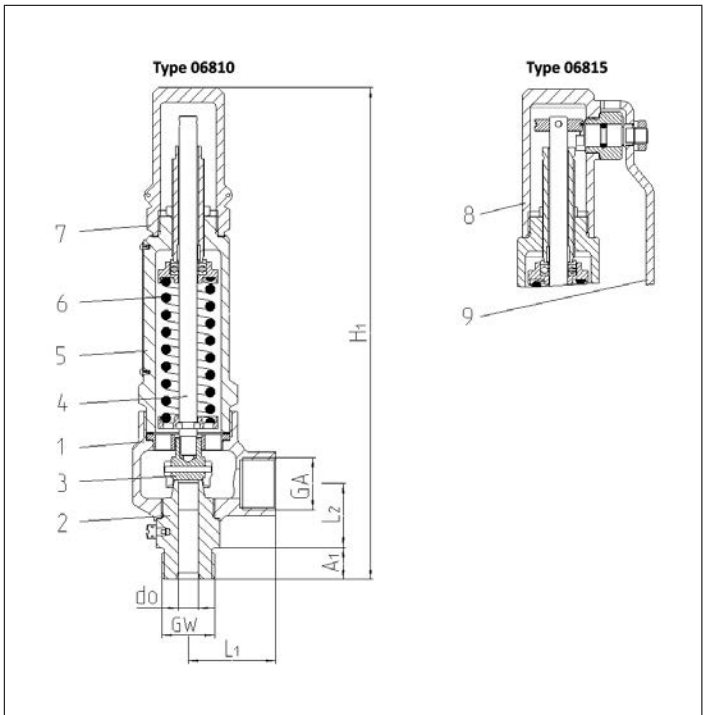


### Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases, vapours and liquids. Working temperature: -270°C / -454°F (3K) up to +400°C / +752°F (673K)

Pressure-temperature must be observed, suitable for horizontal installation from 20 bar

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4408	A 351 CF 8M
2 Inlet body	1.4571	A 276 Grade 316Ti
3 Disc	1.4571	A 276 Grade 316Ti
4 Stem	1.4404	A 276 Grade 316L
5 Bonnet	1.4408	A 351 CF8M
6 Spring	1.4571	A 313 Grade 316Ti
7 Cap	1.4408	A 351 CF8M
8 Lifting cap	1.4408	A 351 CF8M
9 Lever	1.4301	A 276 Grade 304



**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 2014/68/EU (PED).



Type 06810, 06815	Technical data			
<b>Nominal size</b>	<b>GW</b>	<b>1/2</b>	<b>1/2</b>	<b>3/4</b>
Orifice	d <sub>0</sub>	10.0	10.0	10.0
Dimension code	.X.	1022	1023	1033
Set pressure range	bar	0.5-180	0.5-180	0.5-180
Outlet	GA	1/2	3/4	3/4
Height	H <sub>1</sub>	245	245	245
Length	L <sub>1</sub>	44	44	44
Length	L <sub>2</sub>	29	29	29
Length	A <sub>1</sub>	14	14	16
Weight 06810	ca. kg	1.8	1.8	1.8
Weight 06815	ca. kg	2.0	2.0	2.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.5	0.5	0.5
Coeff. of discharge fluids	α <sub>w</sub>	0.5	0.5	0.5

Dimensions in mm.



# Safety Valves

## Type 06810, Type 06815



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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

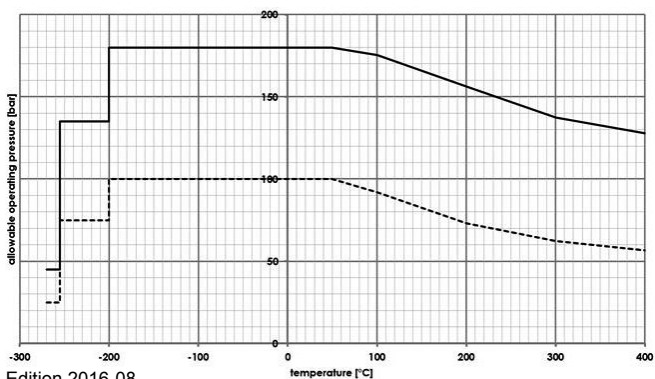
$A_0$  - flow area

Set pressure in bar (g)	GW	1/2 & 3/4		
	$d_0$ (mm)	10.0		
	$A_0$ (mm <sup>2</sup> )	78.5		
Medium	A	B	C	
0.5	32	39	1548	
1.0	44	55	2096	
2.0	67	85	2965	
3.0	90	115	3632	
4.0	112	145	4193	
5.0	134	174	4688	
6.0	156	204	5136	
7.0	178	234	5548	
8.0	200	264	5931	
9.0	222	294	6290	
10.0	244	324	6631	
12.0	288	383	7264	
14.0	331	443	7846	
16.0	375	502	8387	
18.0	418	561	8896	
20.0	462	627	9377	
25.0	570	777	10484	
30.0	680	935	11485	
35.0	788	1087	12405	
40.0	897	1249	13262	
45.0	1008	1401	14066	
50.0	1118	1567	14827	
60.0	1341	1889	16243	
70.0	1562	2216	17544	
80.0	1788	2545	18755	
90.0	2013	2878	19893	
100.0	2244	3212	20969	
120.0	2723	3876	22971	
130.0	2972	4197	23909	
140.0	-	4548	24811	
160.0	-	5213	26524	
180.0	-	5861	28133	

### Pressure-Temperature Rating

Allowable operating pressure at the valve inlet and outlet  
Safety valve type 06810.10 and 06815.10

--- allowable pressure / outlet PN 100    — allowable temperature / inlet PN 180



Edition 2016-08

# Safety Valves

## Type 06810, Type 06815



**Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. D/G/F**

Standard safety valve  
with soft valve seal, "cleaned and degreased for oxygen service"  
closed bonnet, gastight cap or lifting device  
Inlet: male thread type G (BSPP) acc. to ISO 228/1  
Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06810.X.000001L (Pmax 150.0 bar)**  
with gastight cap

**Part No. 06815.X.000001L (Pmax 150.0 bar)**  
with lifting device

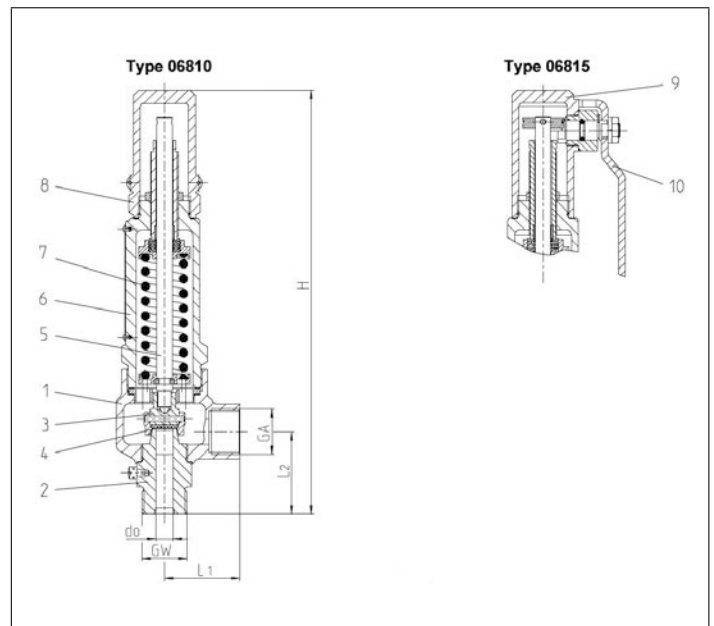
Available options - on request only:  
· Flange-, NPT- or Tri-Clamp connection for in- and outlet



### Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases, vapours and liquids. Working temperature: -270°C / -454°F (3K) up to +300°C / +572°F (573K)  
Pressure-temperature must be observed, suitable for horizontal installation from 20 bar

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4408	A 351 CF8M
2 Inlet body	1.4571	A 276 Grade 316Ti
3 Disc	1.4571	A 276 Grade 316Ti
4 Seal	VESPEL	
5 Stem	1.4404	A 276 Grade 316L
6 Bonnet	1.4408	A 351 CF8M
7 Spring	1.4571	A 313 Grade 316Ti
8 Cap	1.4408	A 351 CF8M
9 Lifting cap	1.4408	A 351 CF8M
10 Lever	1.4301	A 276 Grade 304



Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).

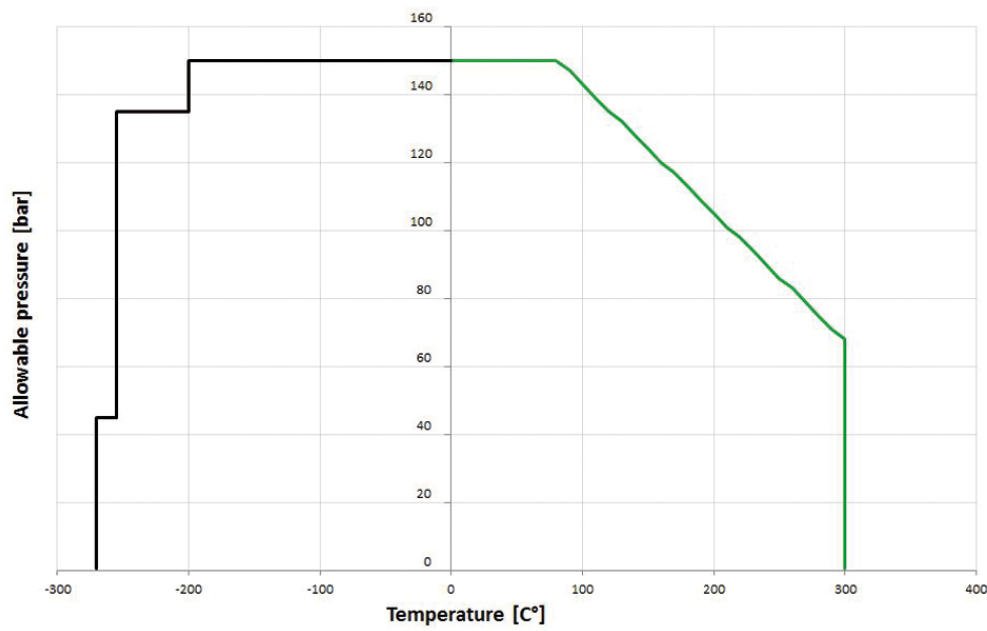


Type 06810, 06815	Technical Data			
D <sub>0</sub>	[mm]	10		
Inlet	GW	1/2	1/2	3/4
Outlet	GW	1/2	3/4	3/4
Dimension code	.X.	1022	1023	1033
Height	H1	245.0	245.0	245.0
Length	L1	44.0	44.0	44.0
Length	L2	43.0	43.0	45.0
Length	A1	14.0	14.0	16.0
Weight 06810	ca. kg	1.8	1.8	1.8
Weight 06815	ca. kg	2.0	2.0	2.0
Coeff. of discharge	α <sub>w</sub> S/G/L	0.50	0.50	0.50
Min. set pressure	bar-g	0.5	0.5	0.5
Max. set pressure	bar-g	150.0	150.0	150.0
Min. temperature	°C	-270	-270	-270
Max. temperature	°C	+300	+300	+300

Abmessungen in mm.

## Pressure-Temperature Rating

Maximum allowable set pressure safety valve Type 0681X



# Safety Valves

## Type 06810, Type 06815



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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	1/2, 3/4 & 1		
	$d_0$ (mm)	10.0		
	$A_0$ (mm <sup>2</sup> )	78.5		
	Medium	A	B	C
0.2	-	-	-	-
0.5	-	39	1548	
1.0	-	55	2096	
2.0	-	85	2965	
3.0	-	115	3632	
4.0	-	145	4193	
5.0	-	174	4688	
6.0	-	204	5136	
7.0	-	234	5548	
8.0	-	264	5931	
9.0	-	294	6290	
10.0	-	324	6631	
15.0	-	472	6947	
20.0	-	627	9377	
30.0	-	935	11485	
40.0	-	1249	13262	
50.0	-	1567	14827	
60.0	-	1889	16243	
65.0	-	2045	16906	
70.0	-	2216	-	
80.0	-	2545	-	
90.0	-	2878	-	
100.0	-	3212	-	
110.0	-	3544	-	
120.0	-	3876	-	
140.0	-	4548	-	
150.0	-	4871	-	

# Safety Valves

## Type 06850, Type 06855



**Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. S/G/L**

Full lift / standard safety valve (D<sub>0</sub>10 standard, D<sub>0</sub>14 and D<sub>0</sub>18 full lift)  
 metal to metal seated, "cleaned and degreased for oxygen service"  
 closed bonnet, gastight cap or lifting device  
 Inlet: male thread type G (BSPP) acc. to ISO 228/1  
 Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06850.X.000000M (Pmax 20.0 bar)**

**Part No. 06850.X.000000H (Pmax 250.0 bar) stellited version**  
 with gastight cap

**Part No. 06855.X.000000M (Pmax 20.0 bar)**

**Part No. 06855.X.000000H (Pmax 250.0 bar) stellited version**  
 with lifting device

Available options - on request only:

· Flange-, NPT- or Tri-Clamp connection for in- and outlet

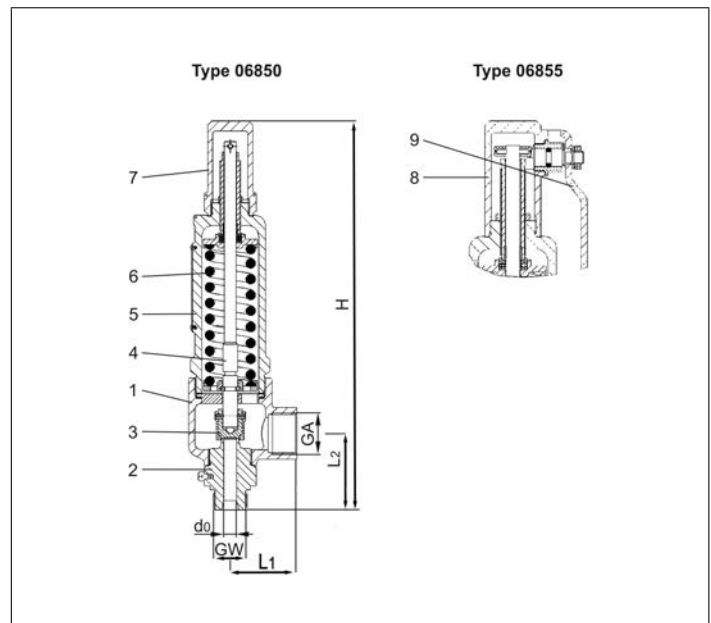


### Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases, vapours and liquids. Working temperature: -270°C / -454°F (3K) up to +400°C / +752°F (673K)

Pressure-temperature must be observed, suitable for horizontal installation from 20 bar

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4408	A 351 CF8M
2 Inlet body	1.4571	A 276 Grade 316Ti
3 Disc	1.4571	A 276 Grade 316Ti
4 Stem	1.4404	A 276 Grade 316L
5 Bonnet	1.4408	A 351 CF8M
6 Spring	1.4571	A 313 Grade 316Ti
7 Cap	1.4408	A 351 CF8M
8 Lifting cap	1.4408	A 351 CF8M
9 Lever	1.4301	A 276 Grade 304



Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 06850, 06855	Technical data	Orifice											
		10			14								
Inlet	GW	1/2	3/4	1	1/2	1/2	1/2	3/4	3/4	3/4	1	1	1
Outlet	GW	1	1	1	1	1-1/4	1-1/2	1	1-1/4	1-1/2	1	1-1/4	1-1/2
Dimension code	.X.	1024	1034	1044	1424	1425	1426	1434	1435	1436	1444	1445	1446
Height	H1	305.0	307.0	309.0	308.5	308.5	308.5	310.5	310.5	310.5	312.5	312.5	312.5
Length	L1	53.0	53.0	53.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Length	L2	44.5	44.5	44.5	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
Weight 06850	ca. kg	3.2	3.2	3.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Weight 06855	ca. kg	3.4	3.4	3.4	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
coefficient of discharge	$\alpha_w D, G / F$	0.84 / 0.68	0.84 / 0.68	0.84 / 0.68	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *
Min. set pressure	bar-g	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Max. set pressure	bar-g	250.0	250.0	250.0	50.0	50.0	50.0	200.0	200.0	200.0	200.0	200.0	200.0
Min. temperature	°C	-270	-270	-270	-270	-270	-270	-270	-270	-270	-270	-270	-270
Max. temperature	°C	+400	+400	+400	+400	+400	+400	+400	+400	+400	+400	+400	+400

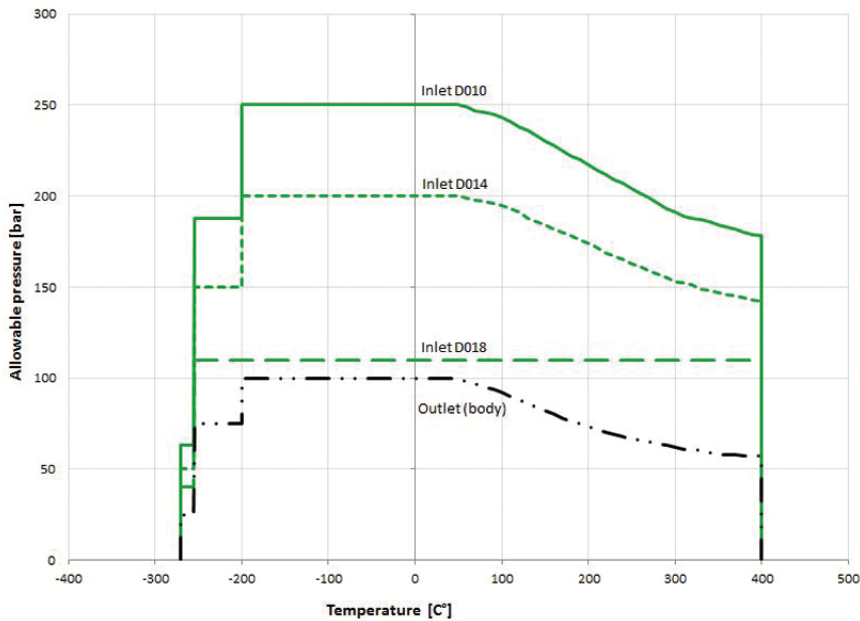
Dimensions in mm. \* 0.20-11.50 bar=0.50 / 11.51-74.99 bar=0.49 / 75.00-200.00 bar=0.46

Type 06850, 06855		Technical data					
Orifice	[mm]	18					
Inlet	GW	1	1	1-1/4	1-1/4	1-1/2	1-1/2
Outlet	GW	1-1/2	2	1-1/2	2	1-1/2	2
Dimension code	.X.	1846	1847	1856	1857	1866	1867
Height	H1	306.0	306.0	306.0	306.0	306.0	306.0
Length	L1	60.0	63.0	60.0	63.0	60.0	63.0
Length	L2	49.0	53.0	49.0	53.0	49.0	53.0
Weight 06850	ca. kg	3.9	4.1	3.9	4.1	4.0	4.2
Weight 06855	ca. kg	4.1	4.3	4.1	4.3	4.2	4.4
coefficient of discharge	$\alpha_w D, G / F$	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50
Min. set pressure	bar-g	0.5	0.5	0.5	0.5	0.5	0.5
Max. set pressure	bar-g	110.0	110.0	110.0	110.0	110.0	110.0
Min. temperature	°C	-270	-270	-270	-270	-270	-270
Max. temperature	°C	+400	+400	+400	+400	+400	+400

Abmessungen in mm.

### Pressure-Temperature Rating

Maximum allowable set pressure safety valve Type 0685X



# Safety Valves

## Type 06850, Type 06855



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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	1/2, 3/4 & 1			1/2, 3/4 & 1			1, 1-1/4 & 1-1/2		
	$d_0$ (mm)	10.0			14.0			18.0		
	$A_0$ (mm <sup>2</sup> )	78.5			153.9			254.0		
	Medium	A	B	C	A	B	C	A	B	C
0.2	-	-	-	53	56	2146	-	-	-	
0.5	46	56	2075	80	96	3035	127	152	5017	
1.0	69	88	2851	112	142	4110	186	236	6794	
2.0	112	142	4033	179	228	5812	309	393	9608	
3.0	151	194	4939	239	306	7118	428	549	11767	
4.0	189	243	5703	297	383	8220	534	688	13588	
5.0	226	293	6377	356	461	9190	639	828	15192	
6.0	264	343	6985	414	539	10067	743	967	16642	
7.0	300	393	7545	471	616	10874	846	1106	17975	
8.0	337	444	8066	529	696	11625	949	1249	19216	
9.0	374	494	8555	586	773	12330	1052	1388	20382	
10.0	411	544	9018	643	853	12997	1154	1530	21485	
15.0	592	794	11045	926	1242	15599	1663	2229	26313	
20.0	774	1053	12754	1209	1646	18013	2170	2955	30384	
30.0	1139	1572	15620	1779	2454	22061	3193	4405	37213	
40.0	1509	2098	18036	2356	3275	25474	4228	5878	42970	
50.0	1882	2633	20165	2937	4109	28481	5271	7375	48042	
60.0	2256	3175	22090	3519	4953	31199	6317	8891	52627	
70.0	2630	3723	23860	4103	5808	33699	7365	10424	56844	
80.0	3008	4276	25508	4693	6671	33820	8423	11973	60769	
90.0	3393	4835	27055	5293	7542	35872	9501	13536	64455	
100.0	3790	5396	28518	5912	8417	37812	10611	15107	67942	
110.0	4202	5931	29910	6554	9251	39658	11763	16603	71258	
120.0	4629	6512	31240	7220	10157	41421	-	-	-	
140.0	5519	7642	33744	8608	11918	44740	-	-	-	
160.0	6447	8758	36073	-	13658	47829	-	-	-	
180.0	7575	9846	38262	-	15356	50731	-	-	-	
200.0	-	10898	40331	-	16995	53475	-	-	-	
220.0	-	11930	42300	-	-	-	-	-	-	
240.0	-	12982	44181	-	-	-	-	-	-	
250.0	-	13521	45092	-	-	-	-	-	-	

# Safety Valves

## Type 06850, Type 06855



**Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. S/G/L**

standard safety valve  
with soft valve seal, "cleaned and degreased"  
closed bonnet, gastight cap or lifting device  
Inlet: male thread type G (BSPP) acc. to ISO 228/1  
Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06850.X.000001L (Pmax 150.0 bar)**  
with gastight cap

**Part No. 06855.X.000001L (Pmax 150.0 bar)**  
with lifting device

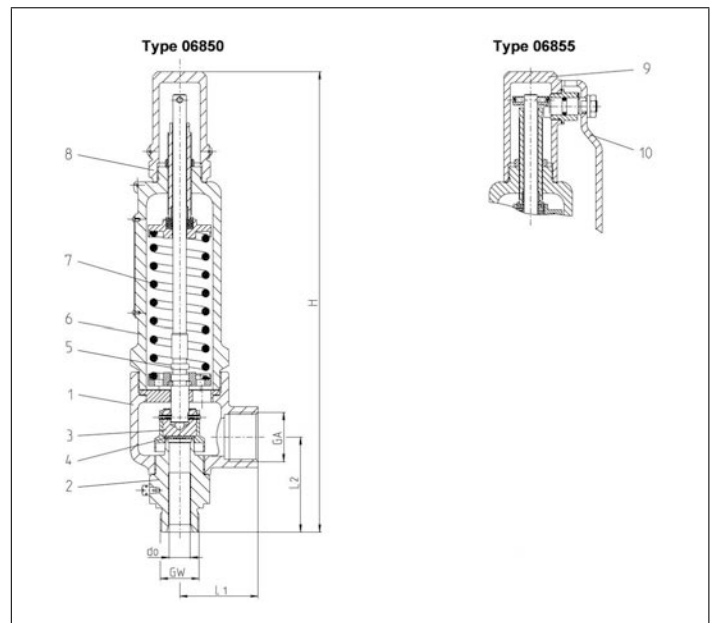
Available options - on request only:  
· Flange-, NPT- or Tri-Clamp connection for in- and outlet



### Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases, vapours and liquids. Working temperature: -270°C / -454°F (3K) up to +300°C / +572°F (573K)  
Pressure-temperature must be observed, suitable for horizontal installation from 20 bar

Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4408	A 351 CF8M
2 Inlet body	1.4571	A 276 Grade 316Ti
3 Disc	1.4571	A 276 Grade 316Ti
4 Seal	VESPEL	
5 Stem	1.4404	A 276 Grade 316L
6 Bonnet	1.4408	A 351 CF8M
7 Spring	1.4571	A 313 Grade 316Ti
8 Cap	1.4408	A 351 CF8M
9 Lifting cap	1.4408	A 351 CF8M
10 Lever	1.4301	A 276 Grade 304



Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Typ 06850, 06855	Technical data												
	Orifice	[mm] 10			14								
Inlet	GW	1/2	3/4	1	1/2	1/2	1/2	3/4	3/4	3/4	1	1	1
Outlet	GW	1	1	1	1	1-1/4	1-1/2	1	1-1/4	1-1/2	1	1-1/4	1-1/2
Dimension code	.X.	1024	1034	1044	1424	1425	1426	1434	1435	1436	1444	1445	1446
Height	H1	305.0	307.0	309.0	308.5	308.5	308.5	310.5	310.5	310.5	312.5	312.5	312.5
Length	L1	53.0	53.0	53.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Length	L2	58.5	60.5	62.5	62.2	62.2	62.2	64.2	64.2	64.2	66.2	66.2	66.2
Weight 06850	ca. kg	3.2	3.2	3.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Weight 06855	ca. kg	3.4	3.4	3.4	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Coefficient of discharge	$\alpha_w D, G / F$	0.84 / 0.68	0.84 / 0.68	0.84 / 0.68	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *	0.70 / *
Min. set pressure	bar-g	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Max. set pressure	bar-g	150.0	150.0	150.0	50.0	50.0	50.0	120.0	120.0	120.0	120.0	120.0	120.0
Min. temperature	°C	-270	-270	-270	-270	-270	-270	-270	-270	-270	-270	-270	-270
Max. temperature	°C	+300	+300	+300	+300	+300	+300	+300	+300	+300	+300	+300	+300

Dimensions in mm. \* 0.20-11.50 bar=0.50 / 11.51-74.99 bar=0.49 / 75.00-120.00 bar=0.46

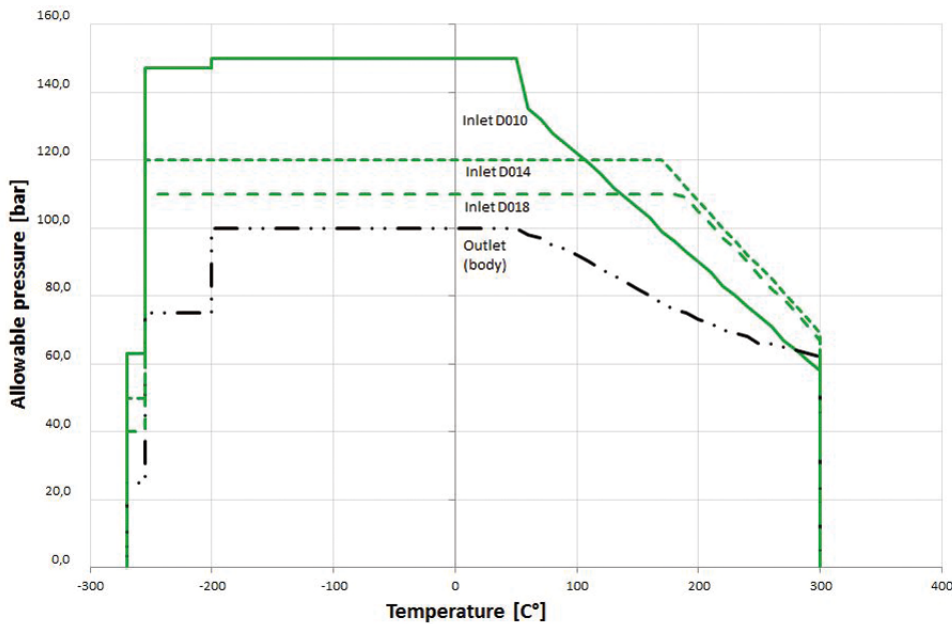


Type 06850, 06855		Technical data					
Orifice	[mm]	18					
Inlet	GW	1	1	1-1/4	1-1/4	1-1/2	1-1/2
Outlet	GW	1-1/2	2	1-1/2	2	1-1/2	2
Dimension code	.X.	1846	1847	1856	1857	1866	1867
Height	H1	306.0	306.0	306.0	306.0	306.0	306.0
Length	L1	60.0	63.0	60.0	63.0	60.0	63.0
Length	L2	49.0	53.0	49.0	53.0	49.0	53.0
Weight 06850	ca. kg	3.9	4.1	3.9	4.1	4.0	4.2
Weight 06855	ca. kg	4.1	4.3	4.1	4.3	4.2	4.4
Coefficient of discharge	$\alpha_{wD,G}$ / F	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50	0.76 / 0.50
Min. set pressure	bar-g	0.5	0.5	0.5	0.5	0.5	0.5
Max. set pressure	bar-g	110.0	110.0	110.0	110.0	110.0	110.0
Min. temperature	°C	-270	-270	-270	-270	-270	-270
Max. temperature	°C	+300	+300	+300	+300	+300	+300

Abmessungen in mm.

### Pressure-Temperature Rating

Maximum allowable set pressure safety valve Type 0685X



# Safety Valves

## Type 06850, Type 06855



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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	1/2, 3/4 & 1			1/2, 3/4 & 1			1, 1-1/4 & 1-1/2		
	$d_0$ (mm)	10.0			14.0			18.0		
	$A_0$ (mm <sup>2</sup> )	78.5			153.94			254.0		
	Medium	A	B	C	A	B	C	A	B	C
0.2	-	-	-	-	-	56	2146	-	-	-
0.5	-	56	2075	-	-	96	3035	-	152	5017
1.0	-	88	2851	-	-	146	4110	-	241	6794
2.0	-	142	4033	-	-	235	5812	-	406	9608
3.0	-	194	4939	-	-	317	7118	-	569	11767
4.0	-	243	5703	-	-	398	8220	-	714	13588
5.0	-	293	6377	-	-	480	9190	-	861	15192
6.0	-	343	6985	-	-	561	10067	-	1007	16642
7.0	-	393	7545	-	-	642	10874	-	1152	17975
8.0	-	444	8066	-	-	725	11625	-	1302	19216
9.0	-	494	8555	-	-	806	12330	-	1448	20382
10.0	-	544	9018	-	-	890	12997	-	1597	21485
15.0	-	794	11045	-	-	1297	15590	-	2328	26298
20.0	-	1053	12754	-	-	1721	18013	-	3089	30384
30.0	-	1572	15620	-	-	2568	22061	-	4609	37213
40.0	-	2098	18036	-	-	3427	25747	-	6152	42970
45.0	-	2355	19131	-	-	3846	27019	-	6903	45577
50.0	-	2633	20165	-	-	4301	28481	-	7720	-
60.0	-	3175	22090	-	-	5186	-	-	9307	-
65.0	-	3435	22992	-	-	5611	-	-	10071	-
70.0	-	3723	-	-	-	6081	-	-	10913	-
80.0	-	4276	-	-	-	6985	-	-	12536	-
90.0	-	4835	-	-	-	7897	-	-	14174	-
100.0	-	5396	-	-	-	8814	-	-	15819	-
110.0	-	5931	-	-	-	9687	-	-	17387	-
120.0	-	6512	-	-	-	10637	-	-	-	-
140.0	-	7642	-	-	-	-	-	-	-	-
150.0	-	8184	-	-	-	-	-	-	-	-

\*not suitable for water steam!



# Safety Valves

## Type 50051.0004



Safety Valves, angle type, bronze  
Lloyds Register Approval LR-TA 92/20011

Standard safety valve  
metal to metal seated,  
closed bonnet, with lifting device  
Inlet: male thread type G (BSPP) acc. to ISO 228/1  
Outlet: female thread type G (BSPP) acc. to ISO 228/1

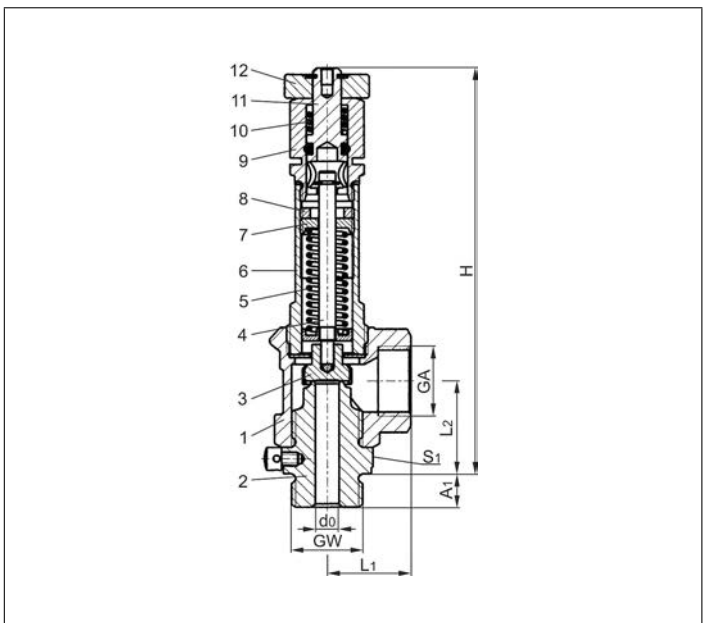
**Part No. 50051.0004.0000**



### Applications:

Provided as safety device for protection against thermal expansion in electric or steam fired heat exchangers for vapours, gases and fluids, specific for heavy oil and lubricants (especially for ships).  
Approved for fluids, vapours and gases.  
Working temperature: -10°C / +14°F (263K) up to +160°C / +320°F (403K)

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Inlet body	1.4301	A 276 Grade 304
3 Disc	1.4541	A 276 Grade 321
4 Stem	CW614N	B 249 UNS C38500
5 Spring	1.4571	A 313 Grade 316Ti
6 Bonnet	CW614N	B 249 UNS C38500
7 Spring clamp	CW614N	B 249 UNS C38500
8 Thread ring	CW614N	B 249 UNS C38500
9 Lifting cap	CW614N	B 249 UNS C38500
10 Lifting spring	1.4571	A 313 Grade 316Ti
11 Lifting stem	CW614N	B 249 UNS C38500
12 Lifting device	CW614N	B 249 UNS C38500



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

Type 50051.0004	Technical data	
Nominal size	<b>GW</b>	<b>1/2</b>
Orifice	$d_0$	7
Set pressure range	bar	6.0-15.0
Outlet	GA	1/2
Height	H	122
Length	$L_1$	25
Length	$L_2$	28
Length	$A_1$	10
Wrench size across flats	$S_1$	27
Weight	ca. kg	0.38
Coefficient of discharge	$\alpha_w$	0.68

Dimensions in mm.

# Safety Valves

## Type 50051.0004



### 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

**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	1/2	1/2
	$d_0$ (mm)	7.0	7.0
	$A_0$ (mm <sup>2</sup> )	38.48	38.48
	Medium	<b>Air</b>	<b>Water</b>
<b>6.0</b>		136	3422
<b>7.0</b>		155	3697
<b>8.0</b>		176	3952
<b>9.0</b>		195	4192
<b>10.0</b>		216	4419
<b>11.0</b>		235	4634
<b>12.0</b>		255	4840
<b>13.0</b>		275	5038
<b>14.0</b>		295	5228
<b>15.0</b>		315	5412

# Safety Valves

## Type 50051.0011



**Safety Valves, angle type, brass, type tested TÜV-SV.1009. S/G**

Standard safety valve  
 with EPDM valve seal for vapours and gases  
 open bonnet, with lifting device  
 Outlet: female thread M15x1 with installed hose nozzle  
 Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 50051.0011.0000**

Available options - on request only:

- hose nozzle acc. to customer specification
- body material CW509L



### Applications:

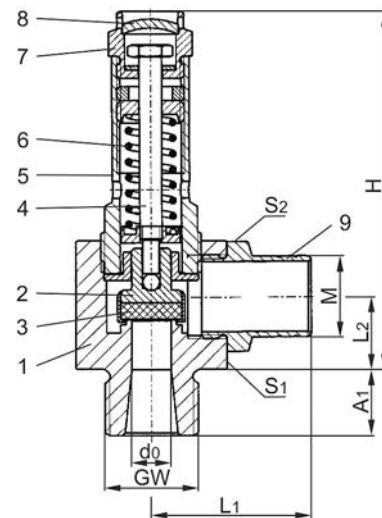
Provided as safety device for protection against excessive pressure in pressure vessels, especially for coffee machines.

Approved for non-toxic gases and vapours.

Working temperature: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

For saturated steam use only up to 4 bar and +150°C / +302°F (423K)

Materials	DIN EN	ASME/ASTM
1 Body	CW614N	B 249 UNS C38500
2 Disc	CW614N	B 249 UNS C38500
3 Valve seal	EPDM	
4 Stem	CW614N	B 249 UNS C38500
5 Bonnet	CW614N	B 249 UNS C38500
6 Spring	1.4571	A 313 Grade 316Ti
7 Lifting device	CW614N	B 249 UNS C38500
8 Closing cap	CC507L	B 36 UNS C26800
9 Hose nozzle	CW614N	B 249 UNS C38500



**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 2014/68/EU (PED).



Type 50051.0011	Technical data	
Nominal size	<b>GW</b>	<b>3/8</b>
Orifice	d <sub>0</sub>	7
Set pressure range	bar	1.5-5.0
Hose nozzle-Ø	M	14.5
Height	H	64
Length	L <sub>1</sub>	28.5
Length	L <sub>2</sub>	13
Length	A <sub>1</sub>	12
Wrench size across flats	S <sub>1</sub>	27
Wrench size across flats	S <sub>2</sub>	17
Weight	ca. kg	0.16
Coeff. of discharge from 2.0 bar	α <sub>w</sub>	0.42

Dimensions in mm.

# Safety Valves

## Type 50051.0011



### 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	3/8	3/8
	d <sub>0</sub> (mm)	7.0	7.0
	A <sub>0</sub> (mm <sup>2</sup> )	38.48	38.48
	Medium	Air	Saturated steam
1.5		28	22
2.0		35	27
2.5		41	32
3.0		47	37
3.5		53	41
4.0		59	46
4.5		65	51
5.0		72	55

# Safety Valves

## Type 06310



**Safety Valves, angle type, ductile casting GGG-40.3, type tested, TÜV-SV.909. S/G/L**

Full lift safety valve  
 Standard safety valve for fluids  
 metal to metal seated,  
 closed bonnet, with lifting device  
 Inlet: male thread type G (BSPP) acc. to ISO 228/1  
 Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06310.X.0000**

Available options - on request only:  
 · Disc with soft sealing (NBR, CR, EPDM, FKM, FFKM, PCTFE, PTFE-FDA)



### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels.  
 Approved for gases, vapours and fluids.  
 Working temperatures: -10°C / +14°F (263K) up to +300°C / +572°F (573K)

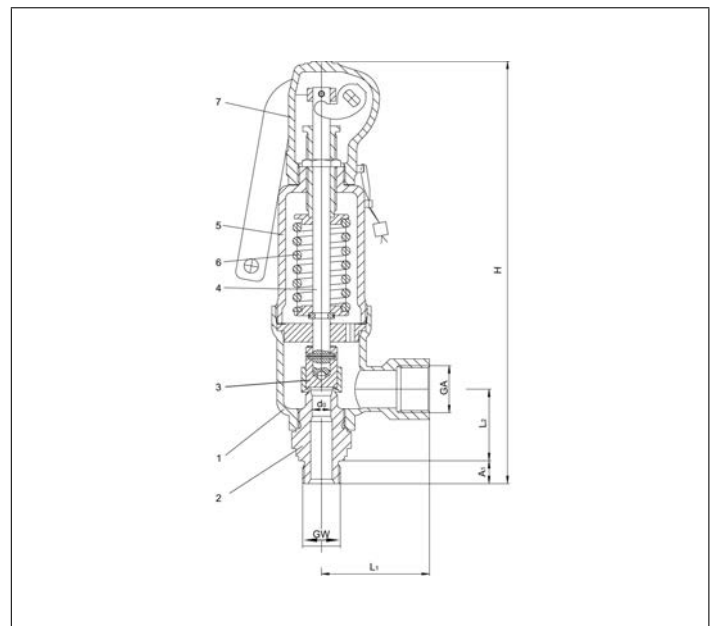
Materials	DIN EN	ASME/ASTM
1 Outlet body	0.7043	A 536-87 Gr. 60-40-18
2 Inlet body	1.4104	A 276 Grade 430F
3 Disc	1.4122	no reference
4 Stem	1.4021	A 276 Grade 420
5 Bonnet	0.7043	A 536-87 Gr. 60-40-18
6 Spring	1.4310	A 313 Grade 301
7 Lifting device	0.7040	A 536-87 Gr. 60-40-18

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Type 06310	Technical data				
	Nominal size	GW	3/4	3/4	1
Orifice	d <sub>0</sub>	9	13	17.5	17.5
Dimension code	.X.	0906	1306	1710	1710
Set pressure saturated steam	bar	2.0-150	0.2-150	0.2-100	0.2-100
Set pressure air and fluids	bar	2.0-250	0.2-250	0.2-100	0.2-100
Outlet	GA	1	1	1-1/2	1-1/2
Height	H	280	280	281	281
Length	L <sub>1</sub>	50	50	54	54
Length	L <sub>2</sub>	75	75	75	75
Length	A <sub>1</sub>	16	16	18	18
Weight	ca. kg	2.6	2.6	3.0	3.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.83	0.81	0.79	0.79
Coeff. of discharge fluids	α <sub>w</sub>	0.61	0.53	0.52	0.52

Dimensions in mm.



# Safety Valves

## Type 06310



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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	3/4			3/4			1		
	$d_0$ (mm)	9			13			17.5		
	$A_0$ (mm <sup>2</sup> )	63.6			132.7			240.6		
	Medium	A	B	C	A	B	C	A	B	C
0.2	-	-	-	53	61	1960	85	98	3480	
0.5	-	-	-	84	98	2770	134	157	4930	
1.0	-	-	-	120	143	3750	200	238	6670	
2.0	93	113	2930	190	229	5310	331	400	9440	
3.0	127	155	3590	258	316	6500	456	558	11600	
4.0	158	195	4140	322	396	7510	569	700	13300	
5.0	189	234	4630	386	477	8390	681	842	14900	
6.0	220	274	5070	449	557	9190	793	985	16300	
8.0	282	353	5860	573	718	10600	1013	1269	18900	
10.0	343	432	6550	699	879	11900	1235	1554	21100	
15.0	496	629	8020	1009	1281	14500	1783	2264	25800	
20.0	650	827	9260	1323	1685	16800	2338	2977	29800	
25.0	802	1025	10400	1632	2087	18800	2885	3688	33400	
30.0	957	1223	11300	1949	2490	20600	3445	4401	36500	
40.0	1268	1618	13100	2582	3295	23700	4562	5824	42200	
50.0	1588	2014	14600	3234	4101	26500	5715	7247	47200	
60.0	1910	2409	16000	3889	4906	29100	6874	8671	51700	
80.0	2583	3201	18500	5259	6517	33600	9294	11518	59700	
100.0	3296	3992	20700	6711	8127	37500	11862	14364	66700	
150.0	5438	5969	25400	11072	12153	46000	-	-	-	
200.0	-	7947	29300	-	16181	53100	-	-	-	
250.0	-	9924	32700	-	20248	59500	-	-	-	

# Safety Valves

## Type 06311



**Safety Valves, angle type, stainless steel, type tested, TÜV-SV.909. S/G/L**

Full lift safety valve  
 Standard safety valve for fluids  
 metal to metal seated,  
 closed bonnet, with lifting device  
 Inlet: male thread type G (BSPP) acc. to ISO 228/1  
 Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06311.X.0000**

Available options - on request only:  
 · Disc with soft sealing (NBR, CR, EPDM, FKM, FFKM, PCTFE, PTFE-FDA)



### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -196°C / -321°F (77K) up to +300°C / +572°F (573K)

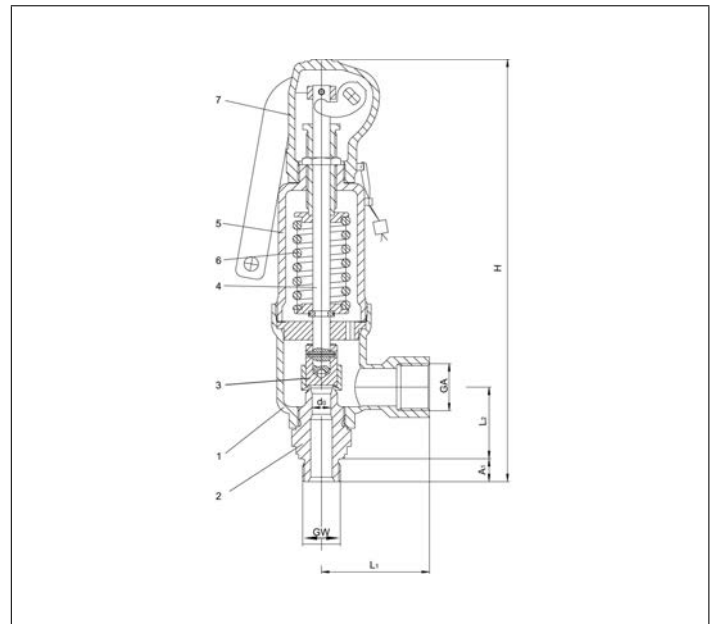
Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4404	A 276 Grade 316L
2 Inlet body	1.4404	A 276 Grade 316L
3 Disc	1.4404	A 276 Grade 316L
4 Stem	1.4404	A 276 Grade 316L
5 Bonnet	1.4404	A 276 Grade 316L
6 Spring	1.4310	A 313 Grade 301
7 Lifting device	1.4408	A 351 CF 8M

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Type 06311	Technical data			
	Nominal size	GW	3/4	1
Orifice	d <sub>0</sub>	9	13	17.5
Dimension code	.X.	0906	1306	1710
Set pressure saturated steam	bar	1.5-200	0.2-200	0.2-100
Set pressure air and fluids	bar	1.5-250	0.2-200	0.2-100
Outlet	GA	1	1	1-1/2
Height	H	280	280	281
Length	L <sub>1</sub>	50	50	54
Length	L <sub>2</sub>	75	75	75
Length	A <sub>1</sub>	16	16	18
Weight	ca. kg	2.6	2.6	3.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.83	0.81	0.79
Coeff. of discharge fluids	α <sub>w</sub>	0.61	0.53	0.52

Dimensions in mm.

# Safety Valves

## Type 06311



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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	3/4			3/4			1		
	$d_0$ (mm)	9			13			17.5		
	$A_0$ (mm <sup>2</sup> )	63.6			132.7			240.6		
	Medium	A	B	C	A	B	C	A	B	C
0.2	-	-	-	53	61	1960	85	98	3480	
0.5	-	-	-	84	98	2770	134	157	4930	
1.0	-	-	-	120	143	3750	200	238	6670	
2.0	93	113	2930	190	229	5310	331	400	9440	
3.0	127	155	3590	258	316	6500	456	558	11600	
4.0	158	195	4140	322	396	7510	569	700	13300	
5.0	189	234	4630	386	477	8390	681	842	14900	
6.0	220	274	5070	449	557	9190	793	985	16300	
8.0	282	353	5860	573	718	10600	1013	1269	18900	
10.0	343	432	6550	699	879	11900	1235	1554	21100	
15.0	496	629	8020	1009	1281	14500	1783	2264	25800	
20.0	650	827	9260	1323	1685	16800	2338	2977	29800	
25.0	802	1025	10400	1632	2087	18800	2885	3688	33400	
30.0	957	1223	11300	1949	2490	20600	3445	4401	36500	
40.0	1268	1618	13100	2582	3295	23700	4562	5824	42200	
50.0	1588	2014	14600	3234	4101	26500	5715	7247	47200	
60.0	1910	2409	16000	3889	4906	29100	6874	8671	51700	
80.0	2583	3201	18500	5259	6517	33600	9294	11518	59700	
100.0	3296	3992	20700	6711	8127	37500	11862	14364	66700	
150.0	5438	5969	25400	11072	12153	46000	-	-	-	
200.0	-	7947	29300	-	16181	53100	-	-	-	
250.0	-	9924	32700	-	20248	59500	-	-	-	

# Safety Valves

## Type 06315

# HEROSE



**Safety Valves, angle type, chromium steel, type tested, TÜV-SV.980. S/G/L**

Standard safety valve

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. 06315.X.N000 (0.1 - 93.0 bar)**

**Part No. 06315.X.L000 (93.0 - 180.0 bar)**

with lifting device - head A

**Part No. 06315.X.N020 (0.1 - 93.0 bar)**

**Part No. 06315.X.L020 (93.0 - 180.0 bar)**

with gastight cap - head C

Available options - on request only:

- Threads NPT acc. to ANSI B 1.20.1
- Disc with soft sealing (NBR, CR, EPDM, FKM, FFKM, PCTFE, PTFE-FDA)



### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels. Approved for gases, vapours and fluids.

Working temperature: -10°C / +14°F (263K) up to +220°C / +428°F (493K)

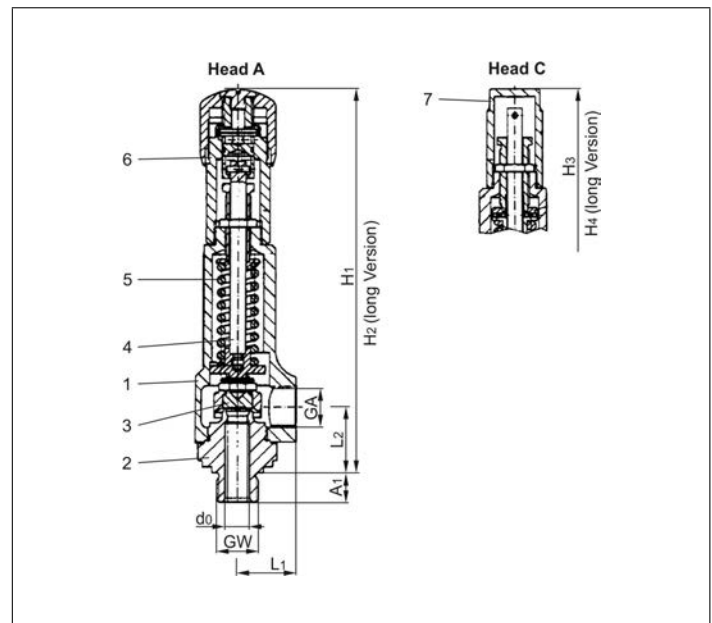
Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4104	A 276 Grade 430F
2 Inlet body	1.4104	A 276 Grade 430F
3 Disc	1.4122	no reference
4 Stem	1.4021	A 276 Grade 420
5 Spring	1.4310	A 313 Grade 301
6 Lifting device	1.4104	A 276 Grade 430F
7 Cap	1.0718	A 108

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Technical data	Type 06315.X.N000/N020		Type 06315.X.L000/L020			
	Nominal size	GW	1/2	3/4	1/2	3/4
Nominal size	GW		1/2	3/4	1/2	3/4
Orifice	d <sub>0</sub>		10	10	10	10
Dimension code	.X.		1004	1006	1004	1006
Set pressure range	bar		0.1-93	0.1-93	93-180	93-180
Outlet	GA		1/2	1/2	1/2	1/2
Height	H <sub>1</sub>		195	195	-	-
Height	H <sub>2</sub>		-	-	216	216
Height	H <sub>3</sub>		180	180	-	-
Height	H <sub>4</sub>		-	-	191	191
Length	L <sub>1</sub>		30	30	30	30
Length	L <sub>2</sub>		33	33	33	33
Length	A <sub>1</sub>		15	16	15	16
Weight	ca. kg		1.2	1.2	1.4	1.4
Coeff. of discharge gases, vapours	α <sub>w</sub>		0.50	0.50	0.50	0.50
Coeff. of discharge fluids	α <sub>w</sub>		0.35	0.35	0.35	0.35

Dimensions in mm.

# Safety Valves

## Type 06315



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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	1/2 & 3/4		
	$d_0$ (mm)	10.0		
	$A_0$ (mm <sup>2</sup> )	78.5		
	Medium	A	B	C
0.1		12	14	630
0.5		29	34	1080
1.0		43	51	1470
2.0		70	84	2070
3.0		94	115	2540
4.0		118	145	2930
5.0		141	174	3280
6.0		164	204	3590
8.0		209	262	4150
10.0		255	321	4640
15.0		369	468	5680
20.0		483	615	6560
25.0		596	762	7330
30.0		712	909	8030
40.0		943	1204	9270
50.0		1181	1498	10400
60.0		1421	1792	11400
70.0		1670	2086	12300
80.0		1921	2380	13100
100.0		2451	2969	14700
150.0		4044	4439	18000
180.0		-	5322	19700

# Safety Valves

## Type 06316

# HEROSE



### Safety Valves, angle type, stainless steel, type tested, TÜV-SV.980. S/G/L

Standard safety valve

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. 06316.X.N000 (0.1 - 68.0 bar)**

**Part No. 06316.X.L000 (68.0 - 330.0 bar)**

with lifting device - head A

**Part No. 06316.X.N020 (0.1 - 68.0 bar)**

**Part No. 06316.X.L020 (68.0 - 330.0 bar)**

with gastight cap - head C

Available options - on request only:

- Threads NPT acc. to ANSI B 1.20.1
- Disc with soft sealing (NBR, CR, EPDM, FKM, FFKM, PCTFE, PTFE-FDA)



### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels. Approved for gases, vapours and fluids.

Working temperature (pay attention to AD-Merkblatt W10: Temperature-Pressure-Overview): -270°C / -454°F (6K) up to +280°C / +536°F (553K)

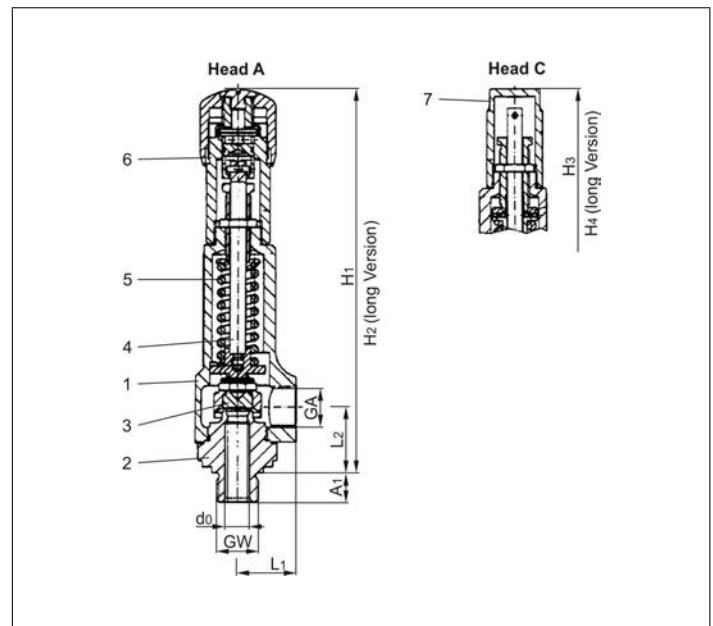
Materials	DIN EN	ASME/ASTM
1 Outlet body	1.4404	A 276 Grade 316L
2 Inlet body	1.4404	A 276 Grade 316L
3 Disc	1.4404	A 276 Grade 316L
4 Stem	1.4404	A 276 Grade 316L
5 Spring	1.4310	A 313 Grade 301
6 Lifting device	1.4404	A 276 Grade 316L
7 Cap	1.4404	A 276 Grade 316L

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Technical data	Type 06316.X.N000/N020		Type 06316.X.L000/L020				
	GW	1/2	3/4	1/2	3/4	1/2	3/4
Nominal size	GW	1/2	3/4	1/2	3/4	1/2	3/4
Orifice	d <sub>0</sub>	10	10	6	6	10	10
Dimension code	.X.	1004	1006	0604	0606	1004	1006
Set pressure range	bar	0.1-68	0.1-68	180-330	180-330	68-180	68-180
Outlet	GA	1/2	1/2	1/2	1/2	1/2	1/2
Height	H <sub>1</sub>	195	195	-	-	-	-
Height	H <sub>2</sub>	-	-	201	201	216	216
Height	H <sub>3</sub>	180	180	-	-	-	-
Height	H <sub>4</sub>	-	-	191	191	191	191
Length	L <sub>1</sub>	30	30	30	30	30	30
Length	L <sub>2</sub>	33	33	33	33	33	33
Length	A <sub>1</sub>	15	16	15	16	15	16
Weight	ca. kg	1.2	1.2	1.4	1.4	1.4	1.4
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.50	0.50	0.72	0.72	0.50	0.50
Coeff. of discharge fluids	α <sub>w</sub>	0.35	0.35	-	-	0.35	0.35

Dimensions in mm.

# Safety Valves

## Type 06316



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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		1/2 & 3/4			
	$d_0$ (mm)	6	10			
	$A_0$ (mm <sup>2</sup> )	28.3	78.5			
	Medium	<b>B</b>	<b>A</b>	<b>B</b>	<b>C</b>	
0.1	-	-	12	14	630	
0.5	-	-	29	34	1080	
1.0	-	-	43	51	1470	
2.0	-	-	70	84	2070	
3.0	-	-	94	115	2540	
4.0	-	-	118	145	2930	
5.0	-	-	141	174	3280	
6.0	-	-	164	204	3590	
8.0	-	-	209	262	4150	
10.0	-	-	255	321	4640	
15.0	-	-	369	468	5680	
20.0	-	-	483	615	6560	
25.0	-	-	596	762	7330	
30.0	-	-	712	909	8030	
40.0	-	-	943	1204	9270	
50.0	-	-	1181	1498	10400	
60.0	-	-	1421	1792	11400	
70.0	-	-	1670	2086	12300	
80.0	-	-	1921	2380	13100	
100.0	-	-	2451	2969	14700	
150.0	-	-	4044	4439	18000	
180.0	-	2759	-	5322	19700	
200.0	-	3064	-	-	-	
250.0	-	3826	-	-	-	
300.0	-	4589	-	-	-	
330.0	-	5046	-	-	-	

# Safety Valves

## Type 06317

# HEROSE



**Safety Valves, angle type, stainless steel,**  
**type tested, TÜV-SV.847. S/G/L (G 3/8 - G 1/2, d<sub>0</sub> = 6.0 only S/G)**  
**type tested, TÜV-SV.878. S/G/L (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: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06317.X.0000**  
 with lifting device - head A

**Part No. 06317.X.0020**  
 with gastight cap - head C

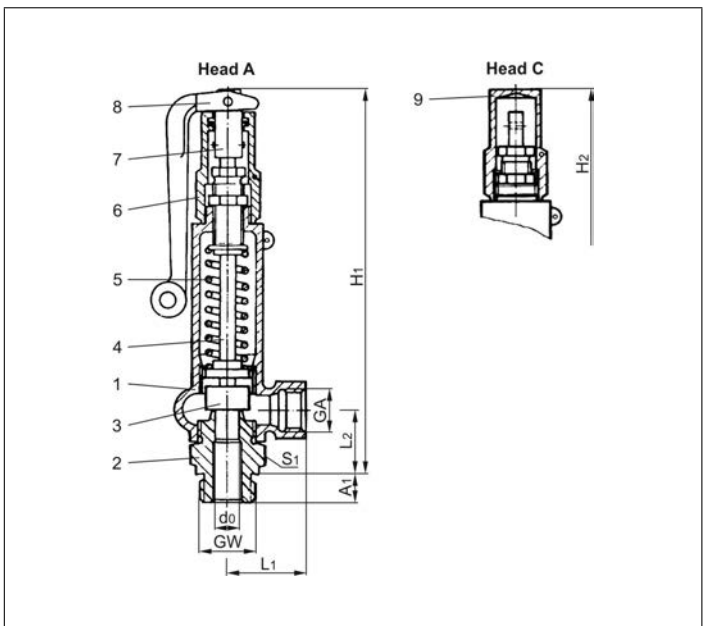
Available options - on request only:  
 · Disc with soft sealing (EPDM, FKM, PTFE)



### Applications:

Provided as safety device for protection against excessive pressure in pressure vessels. Approved for gases, vapours and fluids.  
 Working temperature: -60°C / -76°F (213K) up to +280°C / +536°F (553K)

Materials	DIN EN	ASME/ASTM
1 Body + bonnet	1.4581	A 351 CF 10MC
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 301
6 Lifting cap	1.4581	A 351 CF 10MC
7 Lifting stem	1.4305	A 276 Grade 303
8 Lever	3.2581	no reference
9 Cap	1.4581	A 351 CF 10MC



**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 2014/68/EU (PED).



Type 06317	Technical data											
	GW	3/8	1/2	1/2	1/2	1/2	3/4	3/4	1	1	1-1/4	1-1/4
Nominal size	d <sub>0</sub>	10	6	8	10	12.5	12.5	16	12.5	16	16	20
Dimension code	.X.	1003	0604	0804	1004	1204	1206	1606	1210	1610	1612	2012
Set pressure range	bar	0.1-140	120-500	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	3/4	1/2	1/2	1/2	1	1	1	1	1	1
Height	H <sub>1</sub>	200	200	200	200	200	230	230	230	230	230	230
Height	H <sub>2</sub>	185	185	185	185	185	215	215	215	215	215	215
Length	L <sub>1</sub>	40	40	40	40	40	50	50	50	50	50	50
Length	L <sub>2</sub>	34	34	34	34	34	40	40	40	40	40	40
Length	A <sub>1</sub>	12	14	12	14	14	16	16	18	18	20	20
Wrench size across flats	S <sub>1</sub>	32	32	32	32	32	41	41	41	41	50	50
Weight	ca. kg	1.0	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 <sub>w</sub>	0.38	0.42	0.42	0.38	0.27	0.37	0.29	0.37	0.29	0.29	0.11
Coeff. of discharge fluids	α <sub>w</sub>	0.30	-	0.30	0.30	0.20	0.29	0.23	0.29	0.23	0.23	0.08

Dimensions in mm.



# Safety Valves

## Type 06317



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	1/2				3/8 & 1/2			1/2			3/4 & 1		
	d <sub>0</sub> (mm)	6				8			10			12.5		
	A <sub>0</sub> (mm <sup>2</sup> )	28.3				50.3			78.5			122.7		
	Medium	B	A	B	C	A	B	C	A	B	C	A	B	C
0.1	-	-	-	-	-	12	15	536	12	15	558	-	-	-
0.4	-	-	-	-	-	17	24	847	19	26	883	-	-	-
1.0	-	-	-	-	-	33	40	1257	36	44	1309	-	-	-
2.0	-	-	-	-	-	51	64	1778	57	72	1852	-	-	-
3.0	-	-	-	-	-	68	88	2177	76	97	2269	-	-	-
4.0	-	-	-	-	-	85	110	2514	95	122	2619	-	-	-
6.0	-	-	-	-	-	119	155	3079	132	172	3207	-	-	-
8.0	-	-	-	-	-	152	200	3555	169	222	3703	-	-	-
10.0	-	-	-	-	-	186	245	3975	207	272	4140	-	-	-
20.0	-	249	333	3598	351	471	5621	390	523	5855	-	-	-	
30.0	-	366	494	4406	518	698	6884	575	775	7171	-	-	-	
35.0	-	425	575	4759	601	812	7436	667	902	7746	914	1236	11232	
40.0	-	484	656	5088	684	927	7949	759	1029	8280	1040	1410	12007	
50.0	-	602	819	5688	851	1157	8888	945	1285	9258	1295	1760	13424	
60.0	-	722	983	6231	1021	1389	9736	1133	1542	10141	1553	2113	14706	
70.0	-	843	1148	6730	1192	1622	10516	1324	1801	10954	1814	2469	15884	
80.0	-	968	1314	7195	1368	1858	11242	-	-	-	-	-	-	
90.0	-	1096	1482	7632	1549	1549	11924	-	-	-	-	-	-	
100.0	-	1225	1650	8044	1731	1731	12569	-	-	-	-	-	-	
120.0	1627	1486	1991	8812	2100	2100	13769	-	-	-	-	-	-	
140.0	1909	1754	2337	9518	2479	2479	14872	-	-	-	-	-	-	
160.0	2182	-	2725	10186	-	-	-	-	-	-	-	-	-	
180.0	2455	-	3065	10704	-	-	-	-	-	-	-	-	-	
200.0	2782	-	3406	11376	-	-	-	-	-	-	-	-	-	
250.0	3541	-	-	-	-	-	-	-	-	-	-	-	-	
300.0	4332	-	-	-	-	-	-	-	-	-	-	-	-	
350.0	5156	-	-	-	-	-	-	-	-	-	-	-	-	
400.0	6019	-	-	-	-	-	-	-	-	-	-	-	-	
450.0	6923	-	-	-	-	-	-	-	-	-	-	-	-	
500.0	7873	-	-	-	-	-	-	-	-	-	-	-	-	

Set pressure in bar (g)	GW	3/4, 1 & 1-1/4			1-1/4		
	d <sub>0</sub> (mm)	16			20		
	A <sub>0</sub> (mm <sup>2</sup> )	201.1			314.2		
	Medium	A	B	C	A	B	C
0.1	23	29	1052	13	16	572	
0.4	36	50	1663	19	27	904	
1.0	67	81	2467	39	48	1341	
2.0	100	127	3489	59	75	1896	
3.0	134	171	4273	79	102	2322	
4.0	167	215	4934	99	128	2682	
6.0	232	303	6043	138	180	3284	
8.0	298	391	6978	177	232	3792	
10.0	363	479	7801	215	284	4240	
20.0	686	920	11033	407	545	5996	
30.0	1011	1364	13512	-	-	-	
35.0	1174	1587	14595	-	-	-	

# Safety Valves

## Type 06318

**HEROSE**



**Safety Valves, angle type, ductile casting GGG-40.3, type tested, TÜV-SV.847. S/G/L (G 3/8 - G 1/2) type tested, TÜV-SV.878. S/G/L (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: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06318.X.0000**

with lifting device - head A

**Part No. 06318.X.0020**

with gastight cap - head C

Available options - on request only:

- Disc with soft sealing (EPDM, FKM, PTFE)



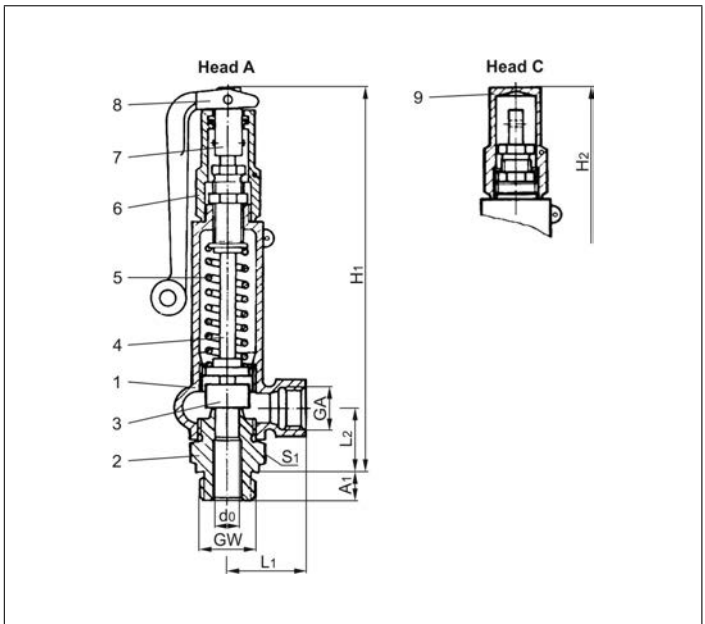
### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -10°C / +14°F (263K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASME/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



**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 2014/68/EU (PED).



Type 06318	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 <sub>0</sub>	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 <sub>1</sub>	200	200	200	200	230	230	230	230	230	230
Height	H <sub>2</sub>	185	185	185	185	215	215	215	215	215	215
Length	L <sub>1</sub>	40	40	40	40	50	50	50	50	50	50
Length	L <sub>2</sub>	34	34	34	34	40	40	40	40	40	40
Length	A <sub>1</sub>	12	12	14	14	16	16	18	18	20	20
Wrench size across flats	S <sub>1</sub>	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 <sub>w</sub>	0.38	0.42	0.38	0.27	0.37	0.29	0.37	0.29	0.29	0.11
Coeff. of discharge fluids	α <sub>w</sub>	0.30	0.30	0.30	0.20	0.29	0.23	0.29	0.23	0.23	0.08

Dimensions in mm.

# Safety Valves

## Type 06318



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	1/2			3/8 & 1/2			1/2			3/4 & 1		
	d <sub>0</sub> (mm)	8			10			12.5			12.5		
	A <sub>0</sub> (mm <sup>2</sup> )	50.3			78.5			122.7			122.7		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.1	-	-	-	12	15	536	12	15	558	-	-	-	
0.4	-	-	-	17	24	847	19	26	883	-	-	-	
1.0	-	-	-	33	40	1257	36	44	1309	-	-	-	
2.0	-	-	-	51	64	1778	57	72	1852	-	-	-	
3.0	-	-	-	68	88	2177	76	97	2268	-	-	-	
4.0	-	-	-	85	110	2514	95	122	2619	-	-	-	
6.0	-	-	-	119	155	3079	132	172	3207	-	-	-	
8.0	-	-	-	152	200	3555	169	222	3703	-	-	-	
10.0	-	-	-	186	245	3975	207	272	4140	-	-	-	
20.0	249	333	3598	351	471	5621	390	523	5855	-	-	-	
30.0	366	494	4406	518	698	6884	575	775	7171	-	-	-	
35.0	425	575	4759	601	812	7436	667	902	7746	914	1236	11232	
40.0	484	656	5088	684	927	7949	759	1029	8280	1040	1410	12007	
50.0	602	819	5688	851	1157	8888	945	1285	9258	1295	1760	13424	
60.0	722	983	6231	1021	1389	9736	1133	1542	10141	1553	2113	14706	
70.0	843	1148	6730	1192	1622	10516	1324	1801	10954	1814	2469	15884	
80.0	968	1314	7195	1368	1858	11242	-	-	-	-	-	-	
90.0	1096	1482	7632	1549	1549	11924	-	-	-	-	-	-	
100.0	1225	1650	8044	1731	1731	12569	-	-	-	-	-	-	
120.0	1486	1991	8812	2100	2100	13769	-	-	-	-	-	-	
140.0	1754	2337	9518	2479	2479	14872	-	-	-	-	-	-	
160.0	-	2725	10186	-	-	-	-	-	-	-	-	-	
180.0	-	3065	10704	-	-	-	-	-	-	-	-	-	
200.0	-	3406	11376	-	-	-	-	-	-	-	-	-	

Set pressure in bar (g)	GW	3/4. 1 & 1-1/4			1-1/4		
	d <sub>0</sub> (mm)	16			20		
	A <sub>0</sub> (mm <sup>2</sup> )	201.1			314.2		
	Medium	A	B	C	A	B	C
0.1	23	29	1052	13	16	572	
0.4	36	50	1663	19	27	904	
1.0	67	81	2467	39	48	1341	
2.0	100	127	3489	59	75	1896	
3.0	134	171	4273	79	102	2322	
4.0	167	215	4934	99	128	2682	
6.0	232	303	6043	138	180	3284	
8.0	298	391	6978	177	232	3792	
10.0	363	479	7801	215	284	4240	
20.0	686	920	11033	407	545	5996	
30.0	1011	1364	13512	-	-	-	
35.0	1174	1587	14595	-	-	-	

# Safety Valves

## Type 06319



**Safety Valves, angle type, stainless steel,  
type tested, TÜV-SV.847. S/G/L (G 3/8 - G 1/2)  
type tested, TÜV-SV.878. S/G/L (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: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06319.X.0020**  
with gastight cap



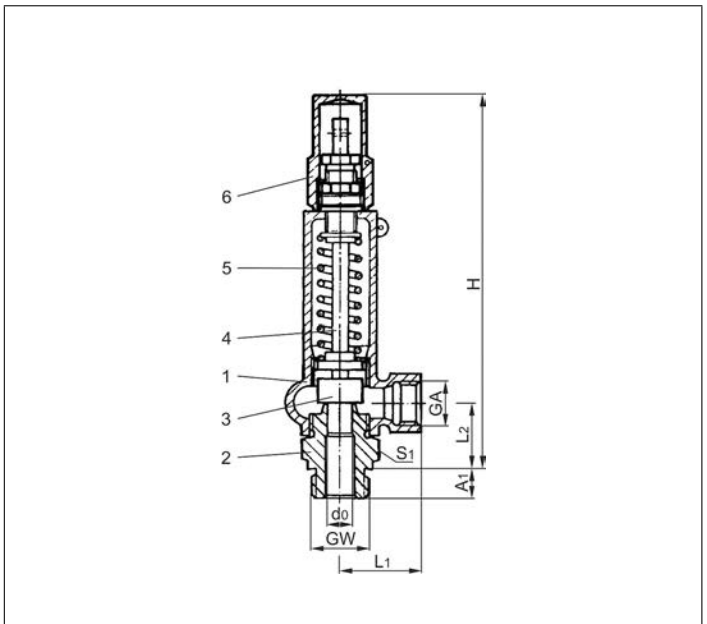
### Applications:

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	ASME/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 301
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 2014/68/EU (PED).



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 <sub>0</sub>	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 <sub>1</sub>	40	40	40	40	50	50	50	50	50	50
Length	L <sub>2</sub>	34	34	34	34	40	40	40	40	40	40
Length	A <sub>1</sub>	12	12	14	14	16	16	18	18	20	20
Wrench size across flats	S <sub>1</sub>	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 <sub>w</sub>	0.38	0.42	0.38	0.27	0.37	0.29	0.37	0.29	0.29	0.11
Coeff. of discharge fluids	α <sub>w</sub>	0.30	0.30	0.30	0.20	0.29	0.23	0.29	0.23	0.23	0.08

Dimensions in mm.

# Safety Valves

## Type 06319



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	1/2			3/8 & 1/2			1/2			3/4 & 1		
	d <sub>0</sub> (mm)	8			10			12.5			12.5		
	A <sub>0</sub> (mm <sup>2</sup> )	50.3			78.5			122.7			122.7		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.1		-	-	-	12	15	536	12	15	558	-	-	-
0.4		-	-	-	17	24	847	19	26	883	-	-	-
1.0		-	-	-	33	40	1257	36	44	1309	-	-	-
2.0		-	-	-	51	64	1778	57	72	1852	-	-	-
3.0		-	-	-	68	88	2177	76	97	2268	-	-	-
4.0		-	-	-	85	110	2514	95	122	2619	-	-	-
6.0		-	-	-	119	155	3079	132	172	3207	-	-	-
8.0		-	-	-	152	200	3555	169	222	3703	-	-	-
10.0		-	-	-	186	245	3975	207	272	4140	-	-	-
20.0		249	333	3598	351	471	5621	390	523	5855	-	-	-
30.0		366	494	4406	518	698	6884	575	775	7171	-	-	-
35.0		425	575	4759	601	812	7436	667	902	7746	914	1236	11232
40.0		484	656	5088	684	927	7949	759	1029	8280	1040	1410	12007
50.0		602	819	5688	851	1157	8888	945	1285	9258	1295	1760	13424
60.0		722	983	6231	1021	1389	9736	1133	1542	10141	1553	2113	14706
70.0		843	1148	6730	1192	1622	10516	1324	1801	10954	1814	2469	15884
80.0		968	1314	7195	1368	1858	11242	-	-	-	-	-	-
90.0		1096	1482	7632	1549	1549	11924	-	-	-	-	-	-
100.0		1225	1650	8044	1731	1731	12569	-	-	-	-	-	-
120.0		1486	1991	8812	2100	2100	13769	-	-	-	-	-	-
140.0		1754	2337	9518	2479	2479	14872	-	-	-	-	-	-
160.0		-	2725	10186	-	-	-	-	-	-	-	-	-
180.0		-	3065	10704	-	-	-	-	-	-	-	-	-
200.0		-	3406	11376	-	-	-	-	-	-	-	-	-

Set pressure in bar (g)	GW	3/4, 1 & 1-1/4			1-1/4		
	d <sub>0</sub> (mm)	16			20		
	A <sub>0</sub> (mm <sup>2</sup> )	201.1			314.2		
	Medium	A	B	C	A	B	C
0.1		23	29	1052	13	16	572
0.4		36	50	1663	19	27	904
1.0		67	81	2467	39	48	1341
2.0		100	127	3489	59	75	1896
3.0		134	171	4273	79	102	2322
4.0		167	215	4934	99	128	2682
6.0		232	303	6043	138	180	3284
8.0		298	391	6978	177	232	3792
10.0		363	479	7801	215	284	4240
20.0		686	920	11033	407	545	5996
30.0		1011	1364	13512	-	-	-
35.0		1174	1587	14595	-	-	-

# Safety Valves

## Type 06120, Type 06121



**Safety Valves, angle type, cast iron  
type tested, TÜV-SV.577. S/G/L**

Standard safety valve  
metal to metal seated, with lifting device  
Flanged connection acc. to DIN EN 1092-1 PN16

**Part No. 06120.X.0000**

open bonnet

**Part No. 06121.X.0000**

closed bonnet

Available options - on request only:

- Disc with soft sealing
- Extended pressure and temperature ranges



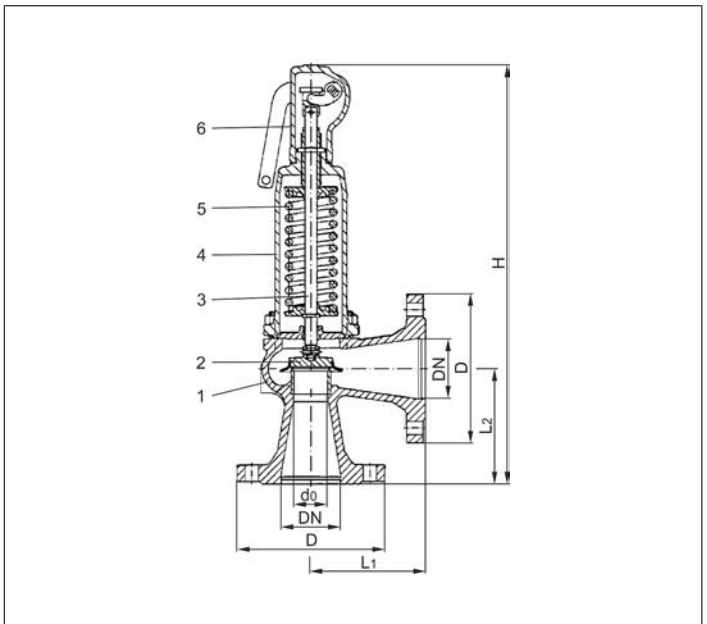
### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -10°C / +14°F (263K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASME/ASTM
1 Body	0.6025	A 48-83 Gr. 35B
2 Disc	1.4122	no reference
3 Stem	1.4021	A 276 Grade 420
4 Spring	1.1200	A 227
5 Bonnet	0.7040	A 536-87 Gr. 60-40-18
6 Lifting device	0.7040	A 536-87 Gr. 60-40-18



**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 2014/68/EU (PED).



Type 06120, 06121	Technical data									
Nominal size	DN	15	20	25	32	40	50	65	80	100
Orifice	d <sub>0</sub>	12	18	18	18	23	29	37	46	60
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000
Set pressure range	bar	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16
Flange diameter	D	95	105	115	140	150	165	185	200	220
Height Type 06120	H	310	315	320	325	335	360	470	525	605
Height Type 06121	H	305	310	315	320	330	355	475	530	590
Length	L <sub>1</sub>	90	95	100	105	115	125	145	155	175
Length	L <sub>2</sub>	90	95	100	105	115	125	145	155	175
Weight	ca. kg	5.0	6.0	6.0	8.0	9.0	12.0	15.0	20.0	33.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.62	0.29	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Coeff. of discharge fluids	α <sub>w</sub>	0.48	0.19	0.25	0.25	0.25	0.25	0.25	0.25	0.25

Dimensions in mm.

# Safety Valves

## Type 06120, Type 06121



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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)	DN	15			20			25 & 32			40		
	$d_0$ (mm)	12			18			18			23		
	$A_0$ (mm <sup>2</sup> )	113.1			254.5			254.5			415.5		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.2	-	-	-	-	-	-	-	34	39	1770	55	63	2890
0.5	55	67	2140	30	35	1900	63	74	2510	102	120	4090	
1.0	78	93	2900	67	80	2580	101	121	3390	165	197	5540	
2.0	125	151	4100	129	156	3650	170	206	4800	278	336	7840	
3.0	168	206	5020	177	217	4470	232	284	5880	379	463	9600	
4.0	210	258	5790	221	272	5160	290	356	6790	473	582	11100	
5.0	251	311	6480	265	327	5770	347	429	7590	566	700	12400	
6.0	293	363	7090	308	382	6320	404	501	8310	659	818	13600	
7.0	333	416	7660	350	438	6820	459	574	8980	750	936	14700	
8.0	374	468	8190	394	493	7300	516	646	9600	842	1055	15700	
9.0	415	521	8690	437	548	7740	572	718	10200	934	1173	16600	
10.0	456	573	9160	480	604	8160	629	791	10700	1026	1291	17500	
12.0	538	679	10000	566	714	8930	741	936	11800	1210	1528	19200	
14.0	618	784	10800	650	825	9650	852	1081	12700	1391	1764	20700	
16.0	699	889	11600	736	935	10300	964	1225	13600	1574	2001	22200	

Set pressure in bar (g)	DN	50			65			80			100		
	$d_0$ (mm)	29			37			46			60		
	$A_0$ (mm <sup>2</sup> )	660.6			1075.3			1662.1			2827.8		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.2	88	101	4600	142	165	7500	220	255	11600	375	431	19700	
0.5	163	191	6510	265	311	10600	410	481	16400	697	819	27800	
1.0	263	313	8810	428	510	14300	661	788	22200	1125	1341	37700	
2.0	442	534	12500	720	870	20300	1113	1344	31300	1893	2287	53300	
3.0	603	737	15300	981	1199	24800	1517	1854	38400	2581	3153	65300	
4.0	752	925	17600	1224	1505	28700	1892	2327	44300	3218	3958	75400	
5.0	900	1113	19700	1465	1811	32100	2265	2800	49600	3853	4763	84300	
6.0	1048	1301	21600	1706	2117	35100	2636	3273	54300	4485	5568	92400	
7.0	1192	1489	23300	1940	2423	37900	2999	3746	58600	5102	6373	99800	
8.0	1339	1677	24900	2179	2729	40600	3368	4219	62700	5730	7177	107000	
9.0	1485	1865	26400	2418	3035	43000	3737	4692	66500	6358	7982	113000	
10.0	1632	2053	27900	2656	3342	45300	4105	5165	70100	6984	8787	119000	
12.0	1924	2429	30500	3132	3954	49700	4842	6111	76800	8237	10397	131000	
14.0	2211	2805	33000	3599	4566	53700	5563	7057	82900	9464	12006	141000	
16.0	2503	3181	35200	4074	5178	57400	6297	8003	88700	10714	13616	151000	

# Safety Valves

## Type 06125, Type 06126



**Safety Valves, angle type, cast steel**  
**type tested, TÜV-SV.577. S/G/L**

Standard safety valve  
 metal to metal seated, with lifting device  
 Flanged connection acc. to DIN EN 1092-1 PN40

**Part No. 06125.X.0000**

open bonnet

**Part No. 06126.X.0000**

closed bonnet

Available options - on request only:

- Disc with soft sealing
- Extended pressure and temperature ranges



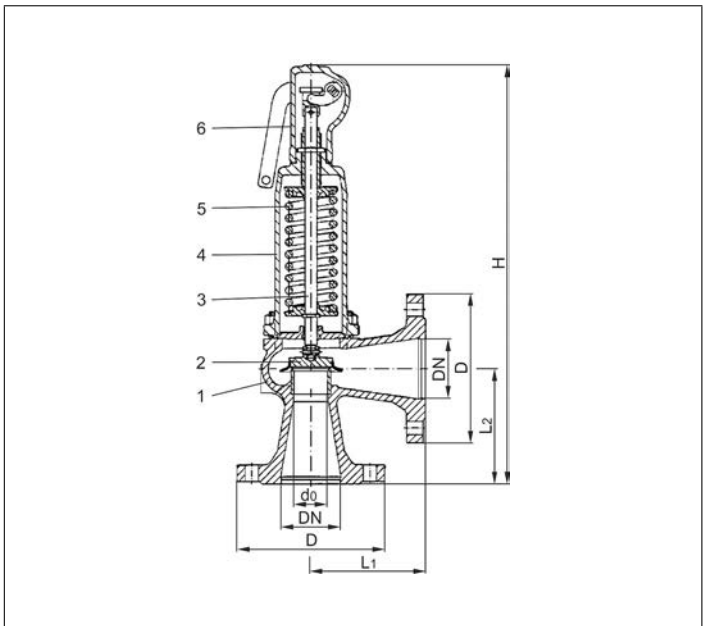
### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -85°C / -121°F (188K) up to +450°C / +842°F (723K)

Materials	DIN EN	ASME/ASTM
1 Body	1.0619	A 216 Grade WCB
2 Disc	1.4122	no reference
3 Stem	1.4021	A 276 Grade 420
4 Spring	1.1200	A 227
5 Bonnet	1.0619	A 216 Grade WCB
6 Lifting device	0.7040	A 536-87 Gr. 60-40-18



**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 2014/68/EU (PED).



Type 06125, 06126	Technical data										
Nominal size	DN	15	20	25	32	40	50	65	80	100	125
Orifice	d <sub>0</sub>	12	18	18	18	23	29	37	46	60	74
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250
Set pressure saturated steam	bar	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-30	0.2-24
Set pressure air and fluids	bar	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-35	0.2-30	0.2-32
Flange diameter	D	95	105	115	140	150	165	185	200	235	270
Height Type 06125	H	310	315	320	325	335	360	470	525	605	740
Height Type 06126	H	305	310	315	320	330	355	475	530	590	745
Length	L <sub>1</sub>	90	95	100	105	115	125	145	155	175	200
Length	L <sub>2</sub>	90	95	100	105	115	125	145	155	175	200
Weight	ca. kg	5.0	6.0	6.0	8.0	9.0	12.0	15.0	20.0	33.0	48.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.62	0.29	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Coeff. of discharge fluids	α <sub>w</sub>	0.48	0.19	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

Dimensions in mm.



# Safety Valves

## Type 06125, Type 06126

# HEROSE



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	DN	15			20			25 & 32			40			50		
	d <sub>0</sub> (mm)	12			18			18			23			29		
	A <sub>0</sub> (mm <sup>2</sup> )	113.1			254.5			254.5			415.5			660.6		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
0.2	-	-	-	-	-	-	34	39	1770	55	63	2890	88	101	4600	
0.5	55	67	2140	30	35	1900	63	74	2510	102	120	4090	163	191	6510	
1.0	78	93	2900	67	80	2580	101	121	3390	165	197	5540	263	313	8810	
2.0	125	151	4100	129	156	3650	170	206	4800	278	336	7840	442	534	12500	
3.0	168	206	5020	177	217	4470	232	284	5880	379	463	9600	603	737	15300	
4.0	210	258	5790	221	272	5160	290	356	6790	473	582	11100	752	925	17600	
5.0	251	311	6480	265	327	5770	347	429	7590	566	700	12400	900	1113	19700	
6.0	293	363	7090	308	382	6320	404	501	8310	659	818	13600	1048	1301	21600	
7.0	333	416	7660	350	438	6820	459	574	8980	750	936	14700	1192	1489	23300	
8.0	374	468	8190	394	493	7300	516	646	9600	842	1055	15700	1339	1677	24900	
9.0	415	521	8690	437	548	7740	572	718	10200	934	1173	16600	1485	1865	26400	
10.0	456	573	9160	480	604	8160	629	791	10700	1026	1291	17500	1632	2053	27900	
12.0	538	679	10000	566	714	8930	741	936	11800	1210	1528	19200	1924	2429	30500	
16.0	699	889	11600	736	935	10300	964	1225	13600	1574	2001	22200	2503	3181	35200	
20.0	863	1099	13000	908	1156	11500	1190	1515	15200	1942	2474	24800	3088	3933	39400	
24.0	1024	1309	14200	1078	1377	12600	1412	1805	16600	2306	2947	27100	3665	4685	43200	
28.0	1189	1519	15300	1251	1599	13600	1639	2095	18000	2676	3420	29300	4254	5437	46600	
32.0	1354	1729	16400	1425	1820	14600	1867	2384	19200	3049	3893	31300	4847	6189	49800	
36.0	-	1939	17400	-	2041	15500	-	2674	20400	-	4366	33200	-	6941	52900	
40.0	-	2149	18300	-	2262	16300	-	2964	21500	-	4839	35000	-	7693	55700	

Set pressure in bar (g)	DN	65			80			100			125		
	d <sub>0</sub> (mm)	37			46			60			74		
	A <sub>0</sub> (mm <sup>2</sup> )	1075.3			1662.1			2827.8			4300.7		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.2	142	165	7500	220	255	11600	375	431	19700	570	660	30000	
0.5	265	311	10600	410	481	16400	697	819	27800	1060	1245	42400	
1.0	428	510	14300	661	788	22200	1125	1341	37700	1711	2039	57400	
2.0	720	870	20300	1113	1344	31300	1893	2287	53300	2880	3478	81100	
3.0	981	1199	24800	1517	1854	38400	2581	3153	65300	3926	4797	99300	
4.0	1224	1505	28700	1892	2327	44300	3218	3958	75400	4895	6021	115000	
5.0	1465	1811	32100	2265	2800	49600	3853	4763	84300	5861	7245	128000	
6.0	1706	2117	35100	2636	3273	54300	4485	5568	92400	6823	8469	140000	
7.0	1940	2423	37900	2999	3746	58600	5102	6373	99800	7761	9694	152000	
8.0	2179	2729	40600	3368	4219	62700	5730	7177	107000	8717	10918	162000	
9.0	2418	3035	43000	3737	4692	66500	6358	7982	113000	9671	12142	172000	
10.0	2656	3342	45300	4105	5165	70100	6984	8787	119000	10624	13366	181000	
12.0	3132	3954	49700	4842	6111	76800	8237	10397	131000	12530	15815	199000	
16.0	4074	5178	57400	6297	8003	88700	10714	13616	151000	16296	20711	229000	
20.0	5027	6402	64100	7770	9895	99100	13218	16835	169000	20107	25608	257000	
24.0	5967	7626	70200	9222	11788	109000	15690	20055	185000	23866	30505	281000	
28.0	6925	8851	75900	10704	13680	117000	18211	23274	200000	-	35402	304000	
32.0	7890	10075	81100	12195	15572	125000	20748	-	-	-	40299	324000	
34.0	-	10687	83600	-	16518	129000	-	-	-	-	-	-	
36.0	-	11299	86000	-	-	-	-	-	-	-	-	-	
40.0	-	12523	90700	-	-	-	-	-	-	-	-	-	

# Safety Valves

## Type 06127



**Safety Valves, angle type, stainless steel  
type tested, TÜV-SV.577. S/G/L**

Standard safety valve  
metal to metal seated, with lifting device,  
closed bonnet  
Flanged connection acc. to DIN EN 1092-1 PN40

**Part No. 06127.X.0000**

Available options - on request only:

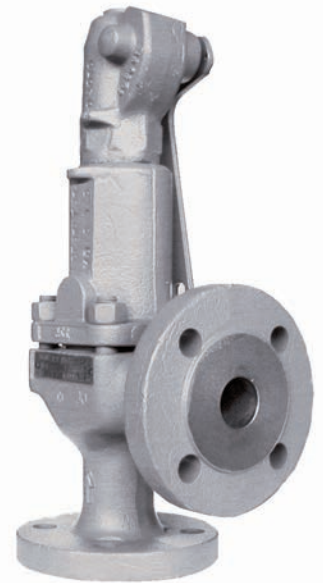
- Disc with soft sealing
- Extended pressure and temperature ranges

### Applications:

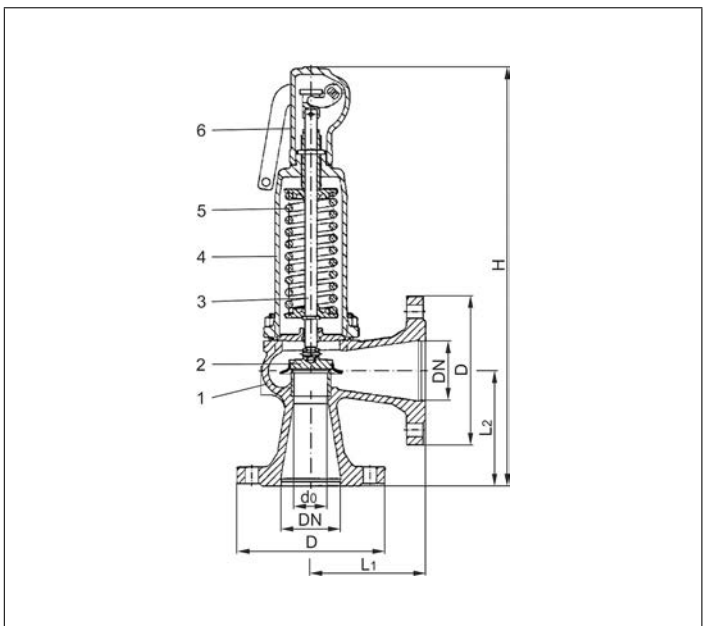
Provided as safety device for protection against excessive pressure in pressure vessels.

Approved for gases, vapours and fluids.

Working temperatures: -270°C / -454°F (3K) up to +450°C / +842°F (723K)



Materials	DIN EN	ASME/ASTM
1 Body	1.4408	A 351 CF 8M
2 Disc	1.4404	A 276 Grade 316L
3 Stem	1.4404	A 276 Grade 316L
4 Spring	1.4310	A 313 Grade 301
5 Bonnet	1.4408	A 351 CF 8M
6 Lifting device	1.4408	A 351 CF 8M



**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 2014/68/EU (PED).



Type 06127	Technical data									
Nominal size	DN	15	20	25	32	40	50	65	80	100
Orifice	d <sub>0</sub>	12	18	18	18	23	29	37	46	60
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000
Set pressure	bar	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-26	0.2-25	0.2-22
Flange diameter	D	95	105	115	140	150	165	185	200	235
Height	H	310	315	320	325	335	360	475	530	605
Length	L <sub>1</sub>	90	95	100	105	115	125	145	155	175
Length	L <sub>2</sub>	90	95	100	105	115	125	145	155	175
Weight	ca. kg	5.0	6.0	6.0	8.0	9.0	12.0	15.0	20.0	33.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.62	0.29	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Coeff. of discharge fluids	α <sub>w</sub>	0.48	0.19	0.25	0.25	0.25	0.25	0.25	0.25	0.25

Dimensions in mm.

# Safety Valves

## Type 06127

# HEROSE



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	DN	15			20			25 & 32			40			50		
	d <sub>0</sub> (mm)	12			18			18			23			29		
	A <sub>0</sub> (mm <sup>2</sup> )	113.1			254.5			254.5			415.5			660.6		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
0.2	-	-	-	-	-	-	34	39	1770	55	63	2890	88	101	4600	
0.5	55	67	2140	30	35	1900	63	74	2510	102	120	4090	163	191	6510	
1.0	78	93	2900	67	80	2580	101	121	3390	165	197	5540	263	313	8810	
2.0	125	151	4100	129	156	3650	170	206	4800	278	336	7840	442	534	12500	
3.0	168	206	5020	177	217	4470	232	284	5880	379	463	9600	603	737	15300	
4.0	210	258	5790	221	272	5160	290	356	6790	473	582	11100	752	925	17600	
5.0	251	311	6480	265	327	5770	347	429	7590	566	700	12400	900	1113	19700	
6.0	293	363	7090	308	382	6320	404	501	8310	659	818	13600	1048	1301	21600	
7.0	333	416	7660	350	438	6820	459	574	8980	750	936	14700	1192	1489	23300	
8.0	374	468	8190	394	493	7300	516	646	9600	842	1055	15700	1339	1677	24900	
9.0	415	521	8690	437	548	7740	572	718	10200	934	1173	16600	1485	1865	26400	
10.0	456	573	9160	480	604	8160	629	791	10700	1026	1291	17500	1632	2053	27900	
12.0	538	679	10000	566	714	8930	741	936	11800	1210	1528	19200	1924	2429	30500	
16.0	699	889	11600	736	935	10300	964	1225	13600	1574	2001	22200	2503	3181	35200	
20.0	863	1099	13000	908	1156	11500	1190	1515	15200	1942	2474	24800	3088	3933	39400	
24.0	1024	1309	14200	1078	1377	12600	1412	1805	16600	2306	2947	27100	3665	4685	43200	
28.0	1189	1519	15300	1251	1599	13600	1639	2095	18000	2676	3420	29300	4254	5437	46600	
32.0	1354	1729	16400	1425	1820	14600	1867	2384	19200	3049	3893	31300	4847	6189	49800	
34.0	-	1834	16900	-	1930	15000	-	2529	19800	-	4130	32300	-	6565	51400	
36.0	-	1939	17400	-	2041	15500	-	2674	20400	-	4366	33200	-	6941	52900	
40.0	-	2149	18300	-	2262	16300	-	2964	21500	-	4839	35000	-	7693	55700	

Set pressure in bar (g)	DN	65			80			100		
	d <sub>0</sub> (mm)	37			46			60		
	A <sub>0</sub> (mm <sup>2</sup> )	1075.3			1662.1			2827.8		
	Medium	A	B	C	A	B	C	A	B	C
0.2	142	165	7500	220	255	11600	375	431	19700	
0.5	265	311	10600	410	481	16400	697	819	27800	
1.0	428	510	14300	661	788	22200	1125	1341	37700	
2.0	720	870	20300	1113	1344	31300	1893	2287	53300	
3.0	981	1199	24800	1517	1854	38400	2581	3153	65300	
4.0	1224	1505	28700	1892	2327	44300	3218	3958	75400	
5.0	1465	1811	32100	2265	2800	49600	3853	4763	84300	
6.0	1706	2117	35100	2636	3273	54300	4485	5568	92400	
7.0	1940	2423	37900	2999	3746	58600	5102	6373	99800	
8.0	2179	2729	40600	3368	4219	62700	5730	7177	107000	
9.0	2418	3035	43000	3737	4692	66500	6358	7982	113000	
10.0	2656	3342	45300	4105	5165	70100	6984	8787	119000	
12.0	3132	3954	49700	4842	6111	76800	8237	10397	131000	
16.0	4074	5178	57400	6297	8003	88700	10714	13616	151000	
20.0	5027	6402	64100	7770	9895	99100	13218	16835	169000	
22.0	5489	7014	67300	8484	10842	104000	14434	18445	177000	
24.0	5967	7626	70200	9222	11788	109000	-	-	-	
26.0	6445	8238	73100	-	-	-	-	-	-	

# Safety Valves

## Type 06340, Type 06341



**Safety Valves, angle type, cast iron, type tested, TÜV-SV.576. S/G/L**

Full lift safety valve  
 Standard safety valve for fluids  
 metal to metal seated, with lifting device,  
 with enlarged outlet  
 Flanged connection acc. to DIN EN 1092-1 PN16

**Part No. 06340.X.0000**

open bonnet

**Part No. 06341.X.0000**

closed bonnet

Available options - on request only:

- Disc with soft sealing



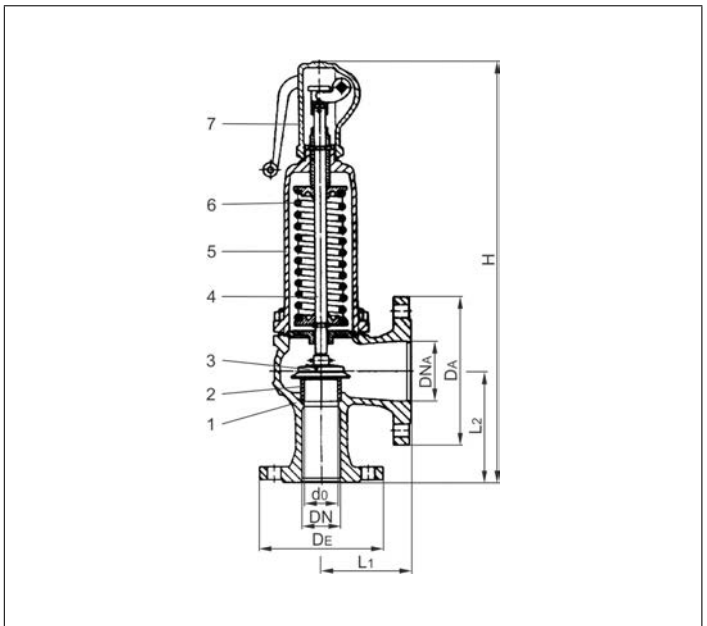
### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -10°C / +14°F (263K) up to +200°C / +392°F (473K)  
 with spring in special steel up to +300°C / +572°F (573K)

Materials	DIN EN	ASME/ASTM
1 Body	0.6025	A 48-83 Gr. 35B
2 Seat	1.4404	A 276 Grade 316L
3 Disc	1.4122	no reference
4 Stem	1.4021	A 276 Grade 420
5 Spring	1.1200	A 227
6 Bonnet	0.7040	A 536-87 Gr. 60-40-18
7 Lifting device	0.7040	A 536-87 Gr. 60-40-18



**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 2014/68/EU (PED).



Type 06340, 06341	Technical data									
Nominal size	DN	25	32	40	50	65	80	100	125	150
Outlet	DN	40	50	65	80	100	125	150	200	250
Orifice	d <sub>0</sub>	23	29	37	46	60	74	92	98	125
Dimension code	.X.	0250	0320	0400	0500	0650	0800	1000	1250	1500
Set pressure range	bar	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16	0.2-16
Flange diameter	D <sub>E</sub>	115	140	150	165	185	200	220	250	285
Flange diameter	D <sub>A</sub>	150	165	185	200	220	250	285	340	405
Height Type 06340	H	338	440	506	563	696	798	880	910	1020
Height Type 06341	H	339	446	512	569	702	801	883	913	1020
Length	L <sub>1</sub>	100	110	115	120	140	160	180	200	225
Length	L <sub>2</sub>	105	115	140	150	170	195	220	250	285
Weight	ca. kg	9.0	12.0	16.0	22.0	32.0	56.0	75.0	85.0	131.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Coeff. of discharge fluids	α <sub>w</sub>	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45

Dimensions in mm.

# Safety Valves

## Type 06340, Type 06341



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	DN	25			32			40			50			65		
	d <sub>0</sub> (mm)	23			29			37			46			60		
	A <sub>0</sub> (mm <sup>2</sup> )	415.5			660.6			1075.3			1662.1			2827.8		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
0.2		140	162	5210	223	258	8280	363	420	13500	561	649	20800	954	1105	35500
0.5		224	263	7370	356	418	11700	579	680	19100	895	1051	29500	1523	1789	50100
1.0		326	388	9970	518	617	15900	843	1004	25800	1302	1552	39900	2215	2641	67900
2.0		519	627	14100	825	996	22400	1343	1622	36500	2075	2507	56400	3531	4265	96000
3.0		699	854	17300	1111	1357	27500	1808	2209	44700	2794	3414	69100	4754	5809	118000
4.0		871	1071	19900	1385	1703	31700	2254	2773	51600	3485	4286	79800	5928	7291	136000
5.0		1043	1289	22300	1658	2050	35500	2699	3337	57700	4172	5157	89200	7097	8774	152000
6.0		1214	1507	24400	1930	2396	38800	3142	3900	63200	4856	6029	97700	8262	10257	166000
7.0		1381	1725	26400	2196	2742	42000	3574	4464	68300	5525	6900	106000	9399	11739	180000
8.0		1551	1943	28200	2466	3089	44800	4014	5028	73000	6205	7771	113000	10556	13222	192000
9.0		1721	2161	29900	2736	3435	47600	4454	5592	77400	6884	8643	120000	11712	14704	204000
10.0		1891	2379	31500	3006	3781	50100	4893	6155	81600	7562	9514	126000	12866	16187	215000
12.0		2230	2814	34600	3545	4474	54900	5770	7283	89400	8919	11257	138000	15174	19152	235000
14.0		2562	3250	37300	4073	5167	59300	6629	8411	96600	10247	13000	149000	17433	22117	254000
16.0		2900	3686	39900	4610	5859	63400	7505	9538	103000	11600	14743	160000	19735	25082	272000

Set pressure in bar (g)	DN	80			100			125			150		
	d <sub>0</sub> (mm)	74			92			98			125		
	A <sub>0</sub> (mm <sup>2</sup> )	4301.4			6648.5			7543.9			12273.4		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.2		1451	1680	53900	2243	2597	83300	2545	2947	94600	4140	4794	154000
0.5		2316	2721	76300	3580	4206	118000	4062	4772	134000	6609	7764	218000
1.0		3370	4017	103000	5209	6209	160000	5910	7045	181000	9616	11461	295000
2.0		5371	6487	146000	8302	10026	226000	9420	11377	256000	15326	18509	417000
3.0		7232	8836	179000	11178	13657	276000	12683	15497	314000	20635	25212	510000
4.0		9018	11091	206000	13938	17143	319000	15816	19462	362000	25731	31647	589000
5.0		10796	13346	231000	16687	20629	357000	18934	23407	405000	30804	38082	659000
6.0		12568	15601	253000	19426	24114	391000	22042	27362	444000	35861	44516	722000
7.0		14297	17857	273000	22098	27600	422000	25074	31317	479000	40794	50951	779000
8.0		16057	20112	292000	24818	31086	451000	28161	35273	512000	45816	57386	833000
9.0		17815	22367	310000	27535	34571	479000	31244	39228	543000	50831	63821	884000
10.0		19571	24622	326000	30250	38057	505000	34324	43183	573000	55842	70255	932000
12.0		23081	29132	358000	35675	45028	553000	40480	51093	627000	65858	83125	1021000
14.0		26518	33642	386000	40987	52000	597000	46507	59003	678000	75664	95994	1102000
16.0		30020	38153	413000	46400	58971	638000	52650	66914	724000	85657	108863	1178000

# Safety Valves

## Type 06345, Type 06346



**Safety Valves, angle type, cast steel, type tested, TÜV-SV.576. S/G/L**

Full lift safety valve

Standard safety valve for fluids  
metal to metal seated, with lifting device,  
with enlarged outlet

Inlet: Flanged connection acc. to DIN EN 1092-1 PN40

Outlet: Flanged connection acc. to DIN EN 1092-1 PN16

**Part No. 06345.X.0000**

open bonnet

**Part No. 06346.X.0000**

closed bonnet

Available options - on request only:

· Disc with soft sealing · Extended pressure and temperature ranges



### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -85°C / -121°F (188K) up to +450°C / +842°F (723K)

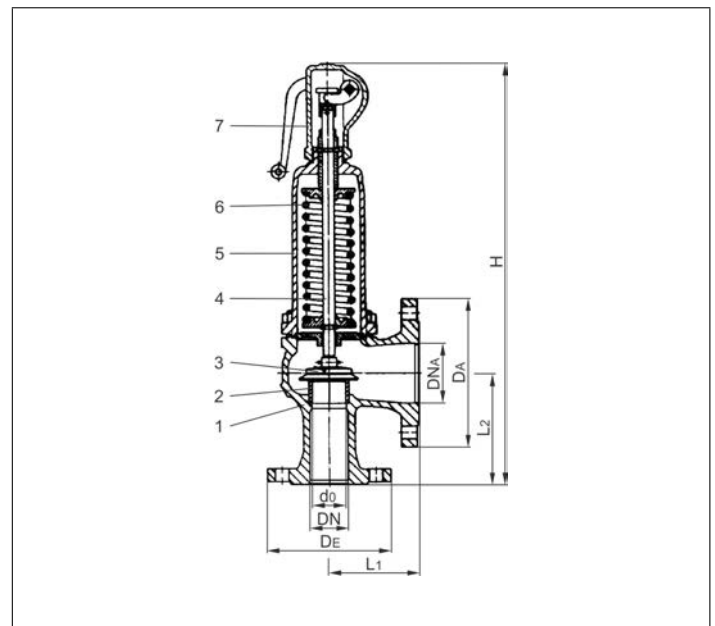
Materials	DIN EN	ASME/ASTM
1 Body	1.0619	A 216 Grade WCB
2 Seat	1.4404	A 276 Grade 316L
3 Disc	1.4122	no reference
4 Stem	1.4021	A 276 Grade 420
5 Spring	1.1200	A 227
6 Bonnet	1.0619	A 216 Grade WCB
7 Lifting device	0.7040	A 536-87 Gr. 60-40-18

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Type 06345, 06346	Technical data									
Nominal size	DN	25	32	40	50	65	80	100	125	150
Outlet	DN	40	50	65	80	100	125	150	200	250
Orifice	d <sub>0</sub>	23	29	37	46	60	74	92	98	125
Dimension code	.X.	0250	0320	0400	0500	0650	0800	1000	1250	1500
Set pressure saturated steam	bar	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-32	0.2-24	0.2-16
Set pressure air and fluids	bar	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-40	0.2-28	0.2-25
Flange diameter	D <sub>E</sub>	115	140	150	165	185	200	220	250	285
Flange diameter	D <sub>A</sub>	150	165	185	200	220	250	285	340	405
Height Type 06345	H	338	440	506	563	696	798	880	910	1020
Height Type 06346	H	339	446	512	569	702	801	883	913	1020
Length	L <sub>1</sub>	100	110	115	120	140	160	180	200	225
Length	L <sub>2</sub>	105	115	140	150	170	195	220	250	285
Weight	ca. kg	9.0	12.0	16.0	22.0	32.0	56.0	75.0	85.0	131.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Coeff. of discharge fluids	α <sub>w</sub>	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45

Dimensions in mm.

### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	DN	25			32			40			50			65		
	d <sub>0</sub> (mm)	23			29			37			46			60		
	A <sub>0</sub> (mm <sup>2</sup> )	415.5			660.6			1075.3			1662.1			2827.8		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
0.2	140	162	5210	223	258	8280	363	420	13500	561	649	20800	954	1105	35500	
0.5	224	263	7370	356	418	11700	579	680	19100	895	1051	29500	1523	1789	50100	
1.0	326	388	9970	518	617	15900	843	1004	25800	1302	1552	39900	2215	2641	67900	
2.0	519	627	14100	825	996	22400	1343	1622	36500	2075	2507	56400	3531	4265	96000	
3.0	699	854	17300	1111	1357	27500	1808	2209	44700	2794	3414	69100	4754	5809	118000	
4.0	871	1071	19900	1385	1703	31700	2254	2773	51600	3485	4286	79800	5928	7291	136000	
5.0	1043	1289	22300	1658	2050	35500	2699	3337	57700	4172	5157	89200	7097	8774	152000	
6.0	1214	1507	24400	1930	2396	38800	3142	3900	63200	4856	6029	97700	8262	10257	166000	
7.0	1381	1725	26400	2196	2742	42000	3574	4464	68300	5525	6900	106000	9399	11739	180000	
8.0	1551	1943	28200	2466	3089	44800	4014	5028	73000	6205	7771	113000	10556	13222	192000	
9.0	1721	2161	29900	2736	3435	47600	4454	5592	77400	6884	8643	120000	11712	14704	204000	
10.0	1891	2379	31500	3006	3781	50100	4893	6155	81600	7562	9514	126000	12866	16187	215000	
12.0	2230	2814	34600	3545	4474	54900	5770	7283	89400	8919	11257	138000	15174	19152	235000	
16.0	2900	3686	39900	4610	5859	63400	7505	9538	103000	11600	14743	160000	19735	25082	272000	
20.0	3578	4557	44600	5688	7245	70900	9260	11793	115000	14312	18228	178000	24350	31012	304000	
24.0	4247	5429	48900	6752	8630	77700	10991	14048	126000	16988	21714	195000	28903	36943	333000	
28.0	4930	6300	52800	7837	10016	83900	12757	16304	137000	19718	25200	211000	33547	42873	359000	
32.0	5616	7171	56400	8929	11401	89700	14534	18559	146000	22465	28685	226000	38220	48803	384000	
34.0	5945	7607	58200	9451	12094	92500	15384	19686	151000	23779	30428	233000	40455	51768	396000	
36.0	6290	8043	59800	10000	12786	95100	16278	20814	155000	25160	32171	239000	42806	54733	407000	
40.0	6985	8914	63100	11104	14172	100000	18076	23059	163000	27939	35657	252000	47533	60663	429000	

Set pressure in bar (g)	DN	80			100			125			150		
	d <sub>0</sub> (mm)	74			92			98			125		
	A <sub>0</sub> (mm <sup>2</sup> )	4301.4			6648.5			7543.9			12273.4		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.2	1451	1680	53900	2243	2597	83300	2545	2947	94600	4140	4794	154000	
0.5	2316	2721	76300	3580	4206	118000	4062	4772	134000	6609	7764	218000	
1.0	3370	4017	103000	5209	6209	160000	5910	7045	181000	9616	11461	295000	
2.0	5371	6487	146000	8302	10026	226000	9420	11377	256000	15326	18509	417000	
3.0	7232	8836	179000	11178	13657	276000	12683	15497	314000	20635	25212	510000	
4.0	9018	11091	206000	13938	17143	319000	15816	19462	362000	25731	31647	589000	
5.0	10796	13346	231000	16687	20629	357000	18934	23407	405000	30804	38082	659000	
6.0	12568	15601	253000	19426	24114	391000	22042	27362	444000	35861	44516	722000	
7.0	14297	17857	273000	22098	27600	422000	25074	31317	479000	40794	50951	779000	
8.0	16057	20112	292000	24818	31086	451000	28161	35273	512000	45816	57386	833000	
9.0	17815	22367	310000	27535	34571	479000	31244	39228	543000	50831	63821	884000	
10.0	19571	24622	326000	30250	38057	505000	34324	43183	573000	55842	70255	932000	
12.0	23081	29132	358000	35675	45028	553000	40480	51093	627000	65858	83125	1021000	
16.0	30020	38153	413000	46400	58971	638000	52650	66914	724000	85657	108863	1178000	
20.0	37039	47173	462000	57249	72913	714000	64960	82734	810000	105685	134602	1317000	
24.0	43964	56194	506000	67953	86856	782000	77106	98555	887000	125445	160341	1443000	
28.0	51029	65214	546000	78873	100799	844000	89496	114375	958000	-	-	-	
32.0	58137	74235	584000	89860	114741	-	-	-	-	-	-	-	
34.0	61537	78745	602000	95115	121713	-	-	-	-	-	-	-	
36.0	65112	83255	619000	100641	128684	-	-	-	-	-	-	-	
40.0	72303	92276	653000	111756	142626	-	-	-	-	-	-	-	

# Safety Valves

## Type 06347



**Safety Valves, angle type, stainless steel  
type tested, TÜV-SV.576. S/G/L**

Full lift safety valve

Standard safety valve for fluids

metal to metal seated, with lifting device,

closed bonnet, with enlarged outlet

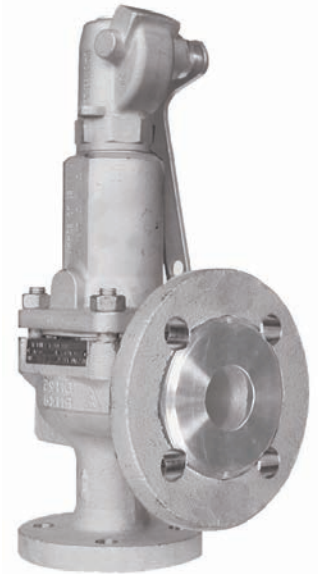
Inlet: Flanged connection acc. to DIN EN 1092-1 PN40

Outlet: Flanged connection acc. to DIN EN 1092-1 PN16

**Part No. 06347.X.0000**

Available options - on request only:

- Disc with soft sealing
- Extended pressure and temperature ranges



### Applications:

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

Approved for gases, vapours and fluids.

Working temperatures: -270°C / -454°F (3K) up to +400°C / +752°F (673K)

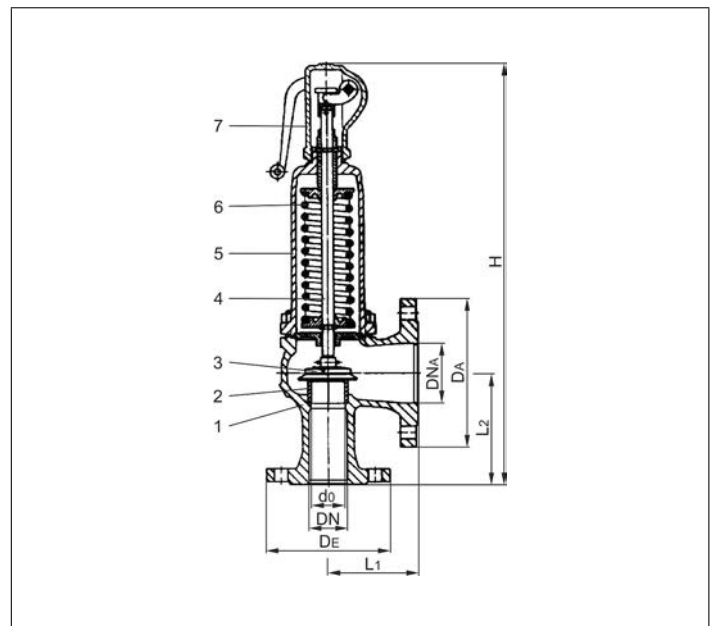
Materials	DIN EN	ASME/ASTM
1 Body	1.4408	A 351 CF 8M
2 Seat	1.4404	A 276 Grade 316L
3 Disc	1.4404	A 276 Grade 316L
4 Stem	1.4404	A 276 Grade 316L
5 Spring	1.4310	A 313 Grade 301
6 Bonnet	1.4408	A 351 CF 8M
7 Lifting device	1.4408	A 351 CF 8M

**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 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



Type 06347	Technical data									
Nominal size	DN	25	32	40	50	65	80	100	125	150
Outlet	DN	40	50	65	80	100	125	150	200	250
Orifice	d <sub>0</sub>	23	29	37	46	60	74	92	98	125
Dimension code	.X.	0250	0320	0400	0500	0650	0800	1000	1250	1500
Set pressure saturated steam	bar	0.2-32	0.2-32	0.2-32	0.2-32	0.2-28	0.2-25	0.2-26	0.2-24	0.2-10
Set pressure air and fluids	bar	0.2-40	0.2-40	0.2-40	0.2-37	0.2-28	0.2-25	0.2-26	0.2-24	0.2-10
Flange diameter	D <sub>E</sub>	115	140	150	165	185	200	220	250	285
Flange diameter	D <sub>A</sub>	150	165	185	200	220	250	285	340	405
Height	H	339	446	512	569	702	801	883	913	1020
Length	L <sub>1</sub>	100	110	115	120	140	160	180	200	225
Length	L <sub>2</sub>	105	115	140	150	170	195	220	250	285
Weight	ca. kg	9.0	12.0	16.0	22.0	32.0	56.0	75.0	85.0	131.0
Coeff. of discharge gases, vapours	α <sub>w</sub>	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Coeff. of discharge fluids	α <sub>w</sub>	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45

Dimensions in mm.



# Safety Valves

## Type 06347

# HEROSE



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	DN	25			32			40			50			65		
	d <sub>0</sub> (mm)	23			29			37			46			60		
	A <sub>0</sub> (mm <sup>2</sup> )	415.5			660.6			1075.3			1662.1			2827.8		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
0.2	140	162	5210	223	258	8280	363	420	13500	561	649	20800	954	1105	35500	
0.5	224	263	7370	356	418	11700	579	680	19100	895	1051	29500	1523	1789	50100	
1.0	326	388	9970	518	617	15900	843	1004	25800	1302	1552	39900	2215	2641	67900	
2.0	519	627	14100	825	996	22400	1343	1622	36500	2075	2507	56400	3531	4265	96000	
3.0	699	854	17300	1111	1357	27500	1808	2209	44700	2794	3414	69100	4754	5809	118000	
4.0	871	1071	19900	1385	1703	31700	2254	2773	51600	3485	4286	79800	5928	7291	136000	
5.0	1043	1289	22300	1658	2050	35500	2699	3337	57700	4172	5157	89200	7097	8774	152000	
6.0	1214	1507	24400	1930	2396	38800	3142	3900	63200	4856	6029	97700	8262	10257	166000	
7.0	1381	1725	26400	2196	2742	42000	3574	4464	68300	5525	6900	106000	9399	11739	180000	
8.0	1551	1943	28200	2466	3089	44800	4014	5028	73000	6205	7771	113000	10556	13222	192000	
9.0	1721	2161	29900	2736	3435	47600	4454	5592	77400	6884	8643	120000	11712	14704	204000	
10.0	1891	2379	31500	3006	3781	50100	4893	6155	81600	7562	9514	126000	12866	16187	215000	
12.0	2230	2814	34600	3545	4474	54900	5770	7283	89400	8919	11257	138000	15174	19152	235000	
16.0	2900	3686	39900	4610	5859	63400	7505	9538	103000	11600	14743	160000	19735	25082	272000	
20.0	3578	4557	44600	5688	7245	70900	9260	11793	115000	14312	18228	178000	24350	31012	304000	
24.0	4247	5429	48900	6752	8630	77700	10991	14048	126000	16988	21714	195000	28903	36943	333000	
28.0	4930	6300	52800	7837	10016	83900	12757	16304	137000	19718	25200	211000	33547	42873	359000	
32.0	5616	7171	56400	8929	11401	89700	14534	18559	146000	22465	28685	226000	-	-	-	
34.0	5945	7607	58200	9451	12094	92500	15384	19686	151000	23779	30428	233000	-	-	-	
36.0	6290	8043	59800	10000	12786	95100	16278	20814	155000	25160	32171	239000	-	-	-	
40.0	6985	8914	63100	11104	14172	100000	18076	23059	163000	-	-	-	-	-	-	

Set pressure in bar (g)	DN	80			100			125			150		
	d <sub>0</sub> (mm)	74			92			98			125		
	A <sub>0</sub> (mm <sup>2</sup> )	4301.4			6648.5			7543.9			12273.4		
	Medium	A	B	C	A	B	C	A	B	C	A	B	C
0.2	1451	1680	53900	2243	2597	83300	2545	2947	94600	4140	4794	154000	
0.5	2316	2721	76300	3580	4206	118000	4062	4772	134000	6609	7764	218000	
1.0	3370	4017	103000	5209	6209	160000	5910	7045	181000	9616	11461	295000	
2.0	5371	6487	146000	8302	10026	226000	9420	11377	256000	15326	18509	417000	
3.0	7232	8836	179000	11178	13657	276000	12683	15497	314000	20635	25212	510000	
4.0	9018	11091	206000	13938	17143	319000	15816	19462	362000	25731	31647	589000	
5.0	10796	13346	231000	16687	20629	357000	18934	23407	405000	30804	38082	659000	
6.0	12568	15601	253000	19426	24114	391000	22042	27362	444000	35861	44516	722000	
7.0	14297	17857	273000	22098	27600	422000	25074	31317	479000	40794	50951	779000	
8.0	16057	20112	292000	24818	31086	451000	28161	35273	512000	45816	57386	833000	
9.0	17815	22367	310000	27535	34571	479000	31244	39228	543000	50831	63821	884000	
10.0	19571	24622	326000	30250	38057	505000	34324	43183	573000	55842	70255	932000	
12.0	23081	29132	358000	35675	45028	553000	40480	51093	627000	-	-	-	
16.0	30020	38153	413000	46400	58971	638000	52650	66914	724000	-	-	-	
20.0	37039	47173	462000	57249	72913	714000	64960	82734	810000	-	-	-	
24.0	43964	56194	506000	67953	86856	782000	77106	98555	887000	-	-	-	
26.0	-	-	-	73405	93827	814000	-	-	-	-	-	-	

# Overflow Valves

## Type 50051.0012



Overflow valve, angle type, brass

Overflow valve  
with EPDM valve seal for vapours and gases,  
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. 50051.0012.0000**



### Applications:

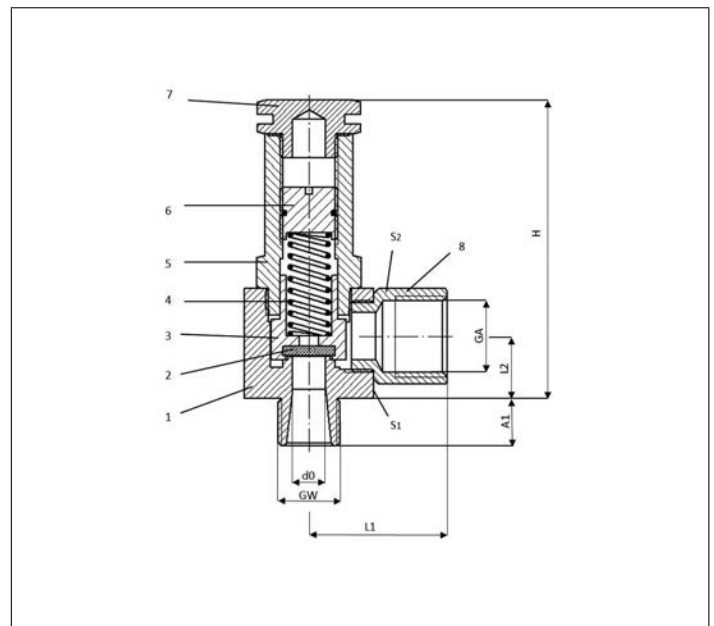
Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.

Working temperature: -10°C / +14°F (263K) up to +65°C / +149°F (338K)

Materials	DIN EN	ASTM
1 Body	CW614N	B 249 UNS C38500
2 Valve seal	EPDM	
3 Disc	CW614N	B 249 UNS C38500
4 Spring	1.1200	A 227
5 Bonnet	CW614N	B 249 UNS C38500
6 Adjusting screw	CW614N	B 249 UNS C38500
7 Plug	CW614N	B 249 UNS C38500
8 Adapter 3/8"	CW614N	B 249 UNS C38500

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

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



Typ 50051.0012	Technical Data	
Nominal size	<b>GW</b>	<b>1/4</b>
Orifice	$d_0$	7
Set pressure range	bar	0.7-2.0
Outlet	GA	3/8
Height	H	62
Length	$L_1$	28.5
Length	$L_2$	13
Length	$A_1$	10
Wrench size across flats	$S_1$	27
Wrench size across flats	$S_2$	19
Weight	ca. kg	0.16

Abmessungen in mm.

# Overflow Valves

## Type 50051.0012



### 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 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	1/4
	$d_0$ (mm)	7.0
	$A_0$ (mm <sup>2</sup> )	38.48
	Medium	<b>Luft</b>
0.7		7.0
0.8		7.7
0.9		8.1
1.0		8.7
1.1		9.4
1.2		9.9
1.3		10.4
1.4		11.0
1.5		11.3
1.6		11.8
1.7		12.1
1.8		12.5
1.9		12.9
2.0		13.2

# Overflow Valves

## Type 06195



### Overflow Valve, angle type, bronze, not type tested

with soft valve seal, closed bonnet,  
In- and Outlet: female thread type G (BSPP) acc. to ISO 228/1

#### Part No. 06195.X.0000

with NBR valve seal  
Working temperature: -10°C / +14°F (263K) up to +110°C / +230°F (383K)

#### Part No. 06195.X.0700

with FPM valve seal  
Working temperature: -10°C / +14°F (263K) up to +165°C / +329°F (438K)

Available options - on request only:

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



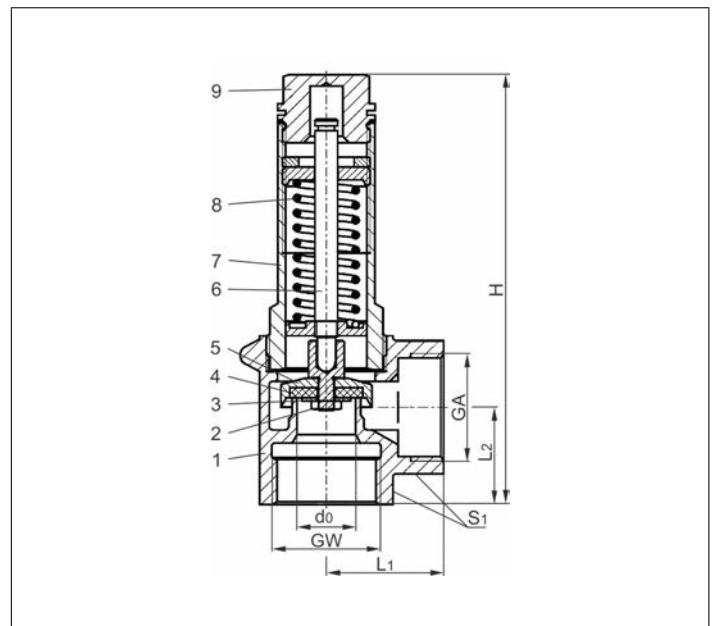
### Applications:

Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Disc nut	CW614N	B 249 UNS C38500
3 Plate	CW507L	B 36 UNS C26800
4 Valve seal	NBR or FPM	
5 Disc	CW614N	B 249 UNS C38500
6 Stem	CW614N	B 249 UNS C38500
7 Bonnet	CW614N	B 249 UNS C38500
8 Spring	1.1200	A 227
9 Cap	CW614N	B 249 UNS C38500

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

Not to use as equipment with safety function acc. to Pressure Equipment Directive 2014/68/EU (PED) (CE marking only from size 1-1/4).



Type 06195	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	bar	0.5-25	0.2-20	0.5-16	0.5-16	0.2-16	0.2-16
Outlet	GA	1/2	3/4	1	1-1/4	1-1/2	2
Height	H	90	110	130	150	170	195
Length	L <sub>1</sub>	25	30	36	40	48	56
Length	L <sub>2</sub>	20	25	30	35	40	48
Wrench size across flats	S <sub>1</sub>	27	32	41	50	58	70
Weight	ca. kg	0.21	0.36	0.65	0.95	1.5	2.25

Dimensions in mm.

# Overflow Valves

## Type 06195



### 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

**Water** in kg/h at 20 °C

**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	452.4	615.8	
Medium	Air							Water						
<b>0.2</b>	-	40	-	-	-	123	159	-	1330	-	-	5298	6525	
<b>0.5</b>	47	63	117	158	208	277	1025	1881	3111	4832	7493	9227		
<b>1.0</b>	68	89	172	230	306	407	1389	2547	4212	6542	10146	12494		
<b>2.0</b>	113	139	284	386	505	660	1964	3603	5957	9252	14348	17670		
<b>3.0</b>	156	192	389	527	692	906	2405	4412	7296	11332	17573	21641		
<b>4.0</b>	196	241	488	661	869	1137	2778	5095	8424	13085	20292	24989		
<b>5.0</b>	236	291	589	797	1048	1371	3105	5697	9419	14629	22687	27938		
<b>6.0</b>	276	340	689	932	1225	1603	3402	6240	10318	16025	24852	30605		
<b>7.0</b>	316	389	788	1067	1402	1835	3675	6740	11145	17310	26843	33057		
<b>8.0</b>	357	440	891	1205	1584	2073	3928	7206	11914	18505	28697	35340		
<b>9.0</b>	398	489	990	1340	1761	2305	4167	7643	12637	19627	30438	37483		
<b>10.0</b>	439	540	1093	1479	1943	2543	4392	8056	13320	20689	32084	39511		
<b>12.0</b>	519	638	1293	1750	2298	3008	4811	8825	14592	22664	35146	43282		
<b>14.0</b>	599	737	1493	2020	2654	3474	5197	9533	15761	24480	37962	46750		
<b>16.0</b>	680	836	1693	2291	3010	3940	5556	10191	16849	26170	40584	49978		
<b>18.0</b>	760	935	-	-	-	-	5893	10809	17871	-	-	-		
<b>20.0</b>	849	1044	-	-	-	-	6211	11394	18838	-	-	-		
<b>22.0</b>	930	-	-	-	-	-	6515	-	19757	-	-	-		
<b>25.0</b>	1052	-	-	-	-	-	6945	-	21062	-	-	-		

# Overflow Valves

## Type 06196



**Overflow Valve, angle type, bronze, not type tested**

with PTFE valve seal, closed bonnet,  
In- and outlet: female thread type G (BSPF) acc. to ISO 228/1

**Part No. 06196.X.0000**

Available options - on request only:

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

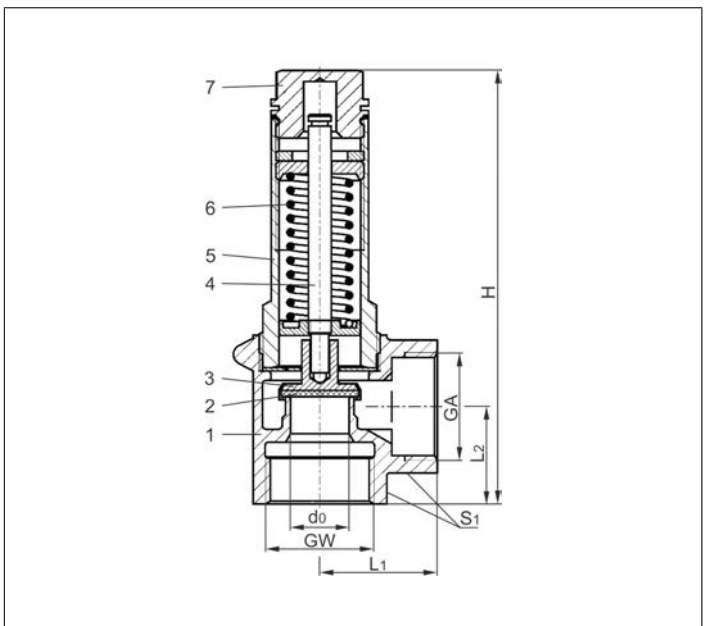


### Applications:

Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.

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

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	PTFE	
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 Cap	CW614N	B 249 UNS C38500



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

Not to use as equipment with safety function acc. to Pressure Equipment Directive 2014/68/EU (PED) (CE marking only from size 1-1/4).

Type 06196	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	bar	0.2-25	0.2-20	0.2-20	0.4-16	0.2-23.5	0.2-16
Outlet	GA	1/2	3/4	1	1-1/4	1-1/2	2
Height	H	90	110	130	150	170	195
Length	L <sub>1</sub>	25	30	36	40	48	56
Length	L <sub>2</sub>	20	25	30	35	40	48
Wrench size across flats	S <sub>1</sub>	27	32	41	50	58	70
Weight	ca. kg	0.21	0.36	0.65	0.95	1.5	2.25

Dimensions in mm.

# Overflow Valves

## Type 06196



### 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

**Water** in kg/h at 20 °C

**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	452.4	615.8	
Medium	Air							Water						
0.2		28	40	69	-	122	159	725	1330	2199	-	5298	6525	
0.4		43	58	108	142	188	250	936	1717	2840	4411	6840	8423	
0.5		48	63	117	158	207	277	1025	1881	3111	4832	7493	9227	
1.0		68	89	172	230	306	407	1389	2547	4212	6542	10146	12494	
2.0		113	139	284	391	505	660	1964	3603	5957	9252	14348	17670	
3.0		156	192	389	527	691	906	2405	4412	7296	11332	17573	21641	
4.0		196	241	488	661	867	1137	2778	5095	8424	13085	20292	24989	
5.0		236	291	589	797	1043	1371	3105	5697	9419	14629	22687	27938	
6.0		276	340	689	932	1220	1603	3402	6240	10318	16025	24852	30605	
7.0		316	389	788	1067	1396	1835	3675	6740	11145	17310	26843	33057	
8.0		357	440	891	1205	1572	2073	3928	7206	11914	18505	28697	35340	
9.0		398	489	990	1340	1748	2305	4167	7643	12637	19627	30438	37483	
10.0		439	540	1093	1479	1925	2543	4392	8056	13320	20689	32084	39511	
12.0		519	638	1293	1750	2277	3008	4811	8825	14592	22689	35146	43282	
14.0		599	737	1493	2020	2629	3474	5197	9533	15761	24480	37962	46750	
16.0		680	836	1693	2291	2982	3940	5556	10191	16849	26170	40584	49978	
18.0		760	935	1893	-	3334	-	5893	10809	17871	-	43045	-	
20.0		849	1044	2113	-	3687	-	6211	11394	18838	-	45374	-	
22.0		930	-	-	-	4039	-	6515	-	-	-	47589	-	
23.5		991	-	-	-	4304	-	6733	-	-	-	49184	-	
25.0		1052	-	-	-	-	-	6945	-	-	-	-	-	

# Overflow Valves

## Type 06198



### Overflow Valve, angle type, bronze, not type tested

with adjusting device,  
with soft valve seal, closed bonnet,  
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

#### Part No. 06198.X.0000

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

#### Part No. 06198.X.0700

with FPM valve seal  
Working temperature: -10°C / +14°F (263K) up to +165°C / +329°F (438K)

Available options - on request only:

- other spring ranges acc. to customer specification
- stainless steel spring - material 1.4571
- external parts nickel plated



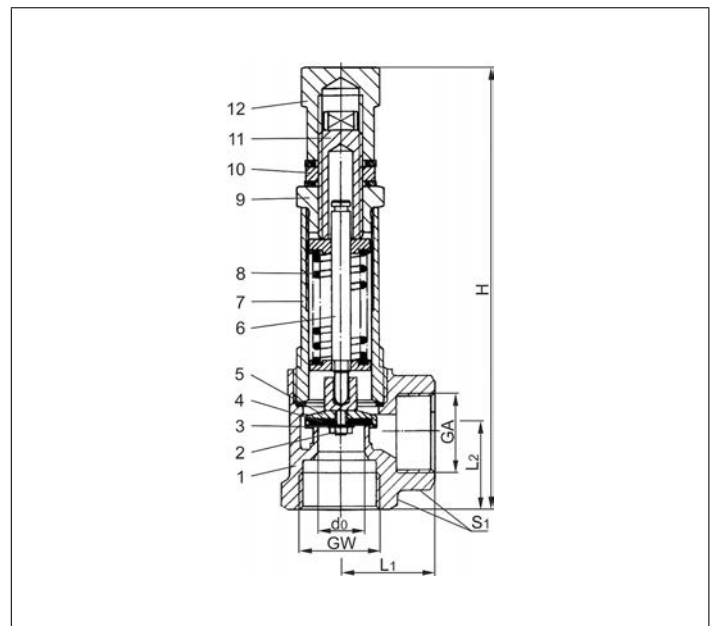
### Applications:

Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Disc nut	CW614N	B 249 UNS C38500
3 Plate	CW614N	B 249 UNS C38500
4 Valve seal	PTFE or FPM	
5 Disc	CW614N	B 249 UNS C38500
6 Stem	CW614N	B 249 UNS C38500
7 Bonnet	CW614N	B 249 UNS C38500
8 Spring	1.1200	A 227
9 Cap	CW614N	B 249 UNS C38500
10 Nut	CW614N	B 249 UNS C38500
11 Adjusting screw	CW614N	B 249 UNS C38500
12 Closing cap	CW614N	B 249 UNS C38500

**Important:** Adjusting ranges of springs are marked with a label on the bonnet.

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



Type 06198	Technical data							
	(1-1/4, 1-1/2 & 2 in preparation)							
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 PTFE valve seal	bar	12.0-25	2.0-25	2.0-25	-	-	-	
Set pressure FPM valve seal	bar	0.8-25	5.0-12	5.0-12	-	-	-	
Outlet	GA	1/2	3/4	1	-	-	-	
Height	H	113	145	165	-	-	-	
Length	L <sub>1</sub>	25	30	36	-	-	-	
Length	L <sub>2</sub>	20	25	30	-	-	-	
Wrench size across flats	S <sub>1</sub>	27	32	41	-	-	-	
Weight	ca. kg	0.30	0.55	0.85	-	-	-	

Dimensions in mm.



# Overflow Valves

## Type 06198



### 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<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
	d <sub>0</sub> (mm)	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
Medium							
Air							
0.8		24	-	-	-	-	-
1.0		26	-	-	-	-	-
1.5		33	-	-	-	-	-
1.99		40	-	-	-	-	-
2.0		37	46	13	-	-	-
3.0		50	62	28	-	-	-
3.99		63	77	45	-	-	-
4.0		53	77	45	-	-	-
4.99		64	93	68	-	-	-
5.0		64	70	68	-	-	-
6.0		75	82	93	-	-	-
7.0		86	94	128	-	-	-
8.0		97	106	161	-	-	-
9.0		108	118	197	-	-	-
10.0		119	129	245	-	-	-
11.99		141	153	335	-	-	-
12.0		169	119	335	-	-	-
14.0		195	138	397	-	-	-
16.0		222	156	460	-	-	-
18.0		248	175	527	-	-	-
19.99		274	193	597	-	-	-
20.0		274	193	446	-	-	-
22.0		300	212	489	-	-	-
22.99		313	221	502	-	-	-
23.0		313	221	502	-	-	-
25.0		340	240	553	-	-	-

	GW	1/2	3/4	1	1-1/4	1-1/2	2
<b>Part No. spring</b>	<b>Pressure range of springs in bar</b>						
<b>Material 1.1200</b>							
55341.0091.2780	0.8-1.99	-	-	-	-	-	-
55341.0092.2780	2.0-3.99	-	-	-	-	-	-
55341.0152.1780	4.0-11.99	-	-	-	-	-	-
55341.0193.2780	12.0-25.0	-	-	-	-	-	-
55341.0194.1780	-	2.0-4.99	-	-	-	-	-
55341.0078.0780	-	5.0-11.99	-	-	-	-	-
55341.0104.1780	-	12.0-22.99	-	-	-	-	-
55341.0196.1780	-	23.0-25.0	-	-	-	-	-
55341.0217.0780	-	-	2.0-19.99	-	-	-	-
55341.0199.1780	-	-	20.0-25.0	-	-	-	-

	GW	1/2	3/4	1	1-1/4	1-1/2	2
<b>Part No. spring</b>	<b>Pressure range of springs in bar</b>						
<b>Material 1.4571</b>							
55345.0117.1767	-	-	2.0-3.99	-	-	-	-
55345.0119.1767	-	-	4.0-9.99	-	-	-	-
55345.0234.1767	-	-	10.0-15.99	-	-	-	-
55345.0236.1767	-	-	16.0-25.0	-	-	-	-

# Overflow Valves

## Type 06321

**HEROSE**



**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:

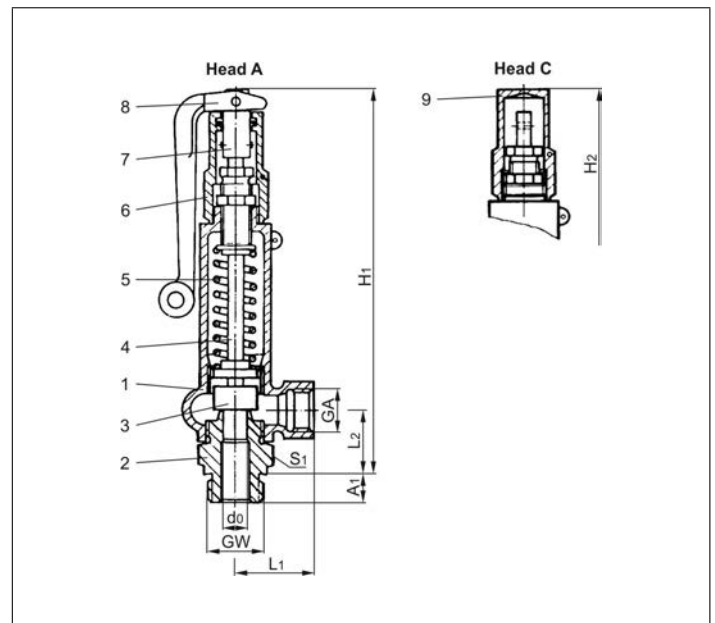
Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.

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

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

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 <sub>0</sub>	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 <sub>1</sub>	200	200	200	200	230	230	230	230	230	230	
Height	H <sub>2</sub>	185	185	185	185	215	215	215	215	215	215	
Length	L <sub>1</sub>	40	40	40	40	50	50	50	50	50	50	
Length	L <sub>2</sub>	34	34	34	34	40	40	40	40	40	40	
Length	A <sub>1</sub>	12	12	14	16	16	16	18	18	20	20	
Wrench size across flats	S <sub>1</sub>	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

## Type 06321

# HEROSE



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	3/8 & 3/4			3/8			1/2, 3/4 & 1			3/4 & 1		
	d <sub>0</sub> (mm)	8			10			12.5			16		
	A <sub>0</sub> (mm <sup>2</sup> )	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 <sub>0</sub> (mm)	22			27		
	A <sub>0</sub> (mm <sup>2</sup> )	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	-	-	-	

# Overflow Valves

## Type 06322

**HEROSE**



**Overflow Valve, angle type, stainless steel,  
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. 06322.X.0000**

with lifting device - head A

**Part No. 06322.X.0020**

with gastight cap - head C



### Applications:

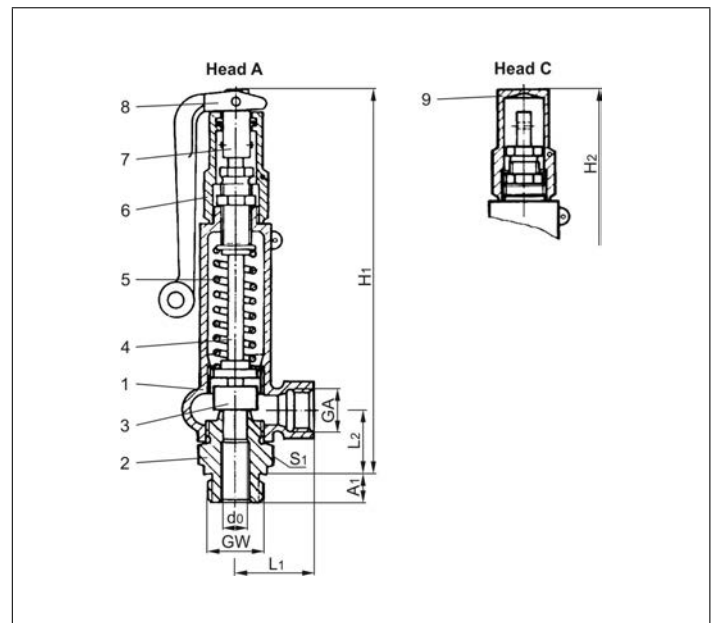
Provided as overflow valve for protection against excessive pressure in pipe systems and pressure vessels, which are not subject to approval.

Working temperatures: -60°C / -76°F (213K) up to +280°C / +536°F (553K)

Materials	DIN EN	ASTM
1 Body + Bonnet	1.4581	A 351 CF 10MC
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 301
6 Lifting cap	1.4581	A 351 CF 10MC
7 Lifting stem	1.4305	A 276 Grade 303
8 Lever	3.2581	no reference
9 Cap	1.4581	A 351 CF 10MC

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

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



Type 06322	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 <sub>0</sub>	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	50-250	0.1-140	0.1-120	50-250	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 <sub>1</sub>	200	200	200	200	230	230	230	230	230	230	
Height	H <sub>2</sub>	185	185	185	185	215	215	215	215	215	215	
Length	L <sub>1</sub>	40	40	40	40	50	50	50	50	50	50	
Length	L <sub>2</sub>	34	34	34	34	40	40	40	40	40	40	
Length	A <sub>1</sub>	12	12	14	16	16	16	18	18	20	20	
Wrench size across flats	S <sub>1</sub>	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

## Type 06322



### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

**A = Saturated steam** in kg/h

**B = Air** in m<sup>3</sup>/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<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	GW	3/8 & 3/4			3/8			1/2, 3/4 & 1			3/4 & 1		
	d <sub>0</sub> (mm)	8			10			12.5			16		
	A <sub>0</sub> (mm <sup>2</sup> )	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 (g)	GW	1-1/4			1-1/2		
	d <sub>0</sub> (mm)	22			27		
	A <sub>0</sub> (mm <sup>2</sup> )	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	-	-	-	



## DIN EN Valves for Industrial Use



Safe standards with a multitude of applications: DIN EN valves made of gunmetal/brass

# Globe Valves

## Type 01021



### Globe Valves, PN16, DIN 3844

Bronze body, screwed topwork in brass

#### Part No. 01021.X.0000

#### Part No. 01021.X.5000 Globe/Check Valve

Female thread connection (G) acc. to ISO 7-1 Rp

Available options - on request only:

- Handwheel in plastic DIN 388-1
- Valve with safety plate in brass



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

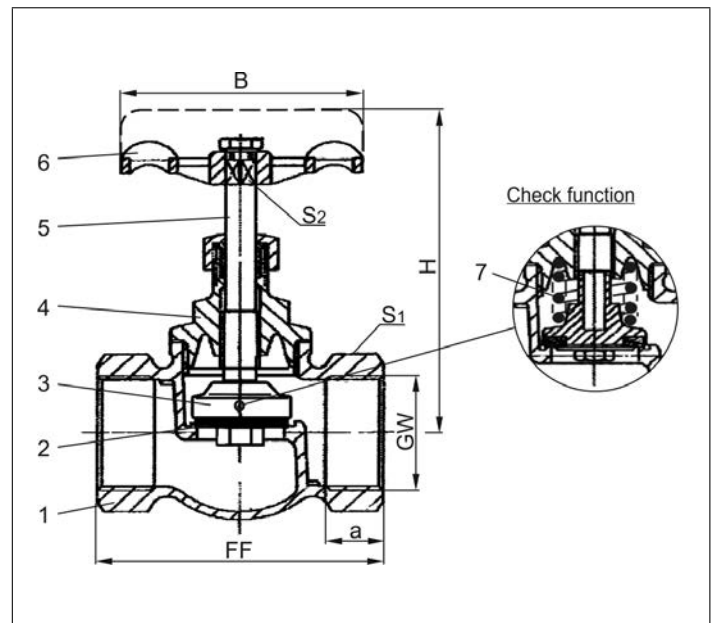
up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	PTFE	
3 Disc	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Stem	CW614N	B 283 UNS C38500
6 Handwheel	Aluminium - diecasting	
7 Spring	1.4310	A 313 Grade 301

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.



Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 01021	Technical data									
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000	
Face-to-face dimension	FF	50	50	60	70	80	95	105	130	
Height	H	75	75	85	95	105	120	130	145	
Socket depth	a	9	10	13	14	17	19	19	23	
Handwheel-Ø	B	40	40	50	60	70	80	90	110	
Wrench size across flats	S <sub>1</sub>	22	22	27	32	41	50	58	70	
Wrench size across flats	S <sub>2</sub>	4.5	4.5	5	6	7	8	9	9	
Weight	ca. kg	0.25	0.25	0.3	0.43	0.7	1.0	1.3	2.1	

Dimensions in mm.



# Globe Valves

## Type 03021



### Globe Valves, PN16

Bronze body, screwed topwork in brass

**Part No. 03021.X.0160**

**Part No. 03021.X.5160 Globe/Check Valve**

Flanged connection acc. to DIN EN 1092-1 PN16



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

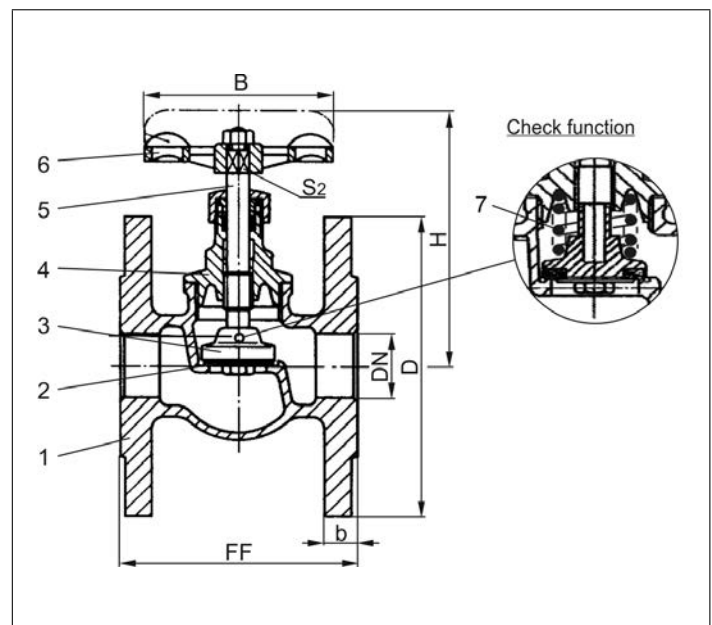
up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	PTFE	
3 Disc	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Stem	CW614N	B 283 UNS C38500
6 Handwheel	Aluminium - diecasting	
7 Spring	1.4310	A 313 Grade 301

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 03021	Technical data					
Nominal size	DN	20	25	32	40	50
Dimension code	.X.	0200	0250	0320	0400	0500
Face-to-face dimension	FF	80	90	95	110	125
Height	H	95	105	120	130	145
Flange diameter	D	105	115	140	150	165
Width of flange	b	12	12	14	14	16
Handwheel-Ø	B	60	70	80	90	110
Wrench size across flats	S <sub>2</sub>	6	7	8	9	9
Weight	ca. kg	1.9	2.5	3.8	4.4	6.5

Dimensions in mm.

# Globe Valves

## Type 03050



### Globe Valves, PN16, DIN 86 260-A

Bronze body and topwork  
metal to metal seated

#### Part No. 03050.X.0160

Flanged connection acc. to DIN EN 1092-1 PN16  
face-to-face dimension acc. to DIN EN 558-1, Reihe 1

Available options - on request only:

- Disc with PTFE seal
- Valve with control disc (tapered design) and PTFE seal



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

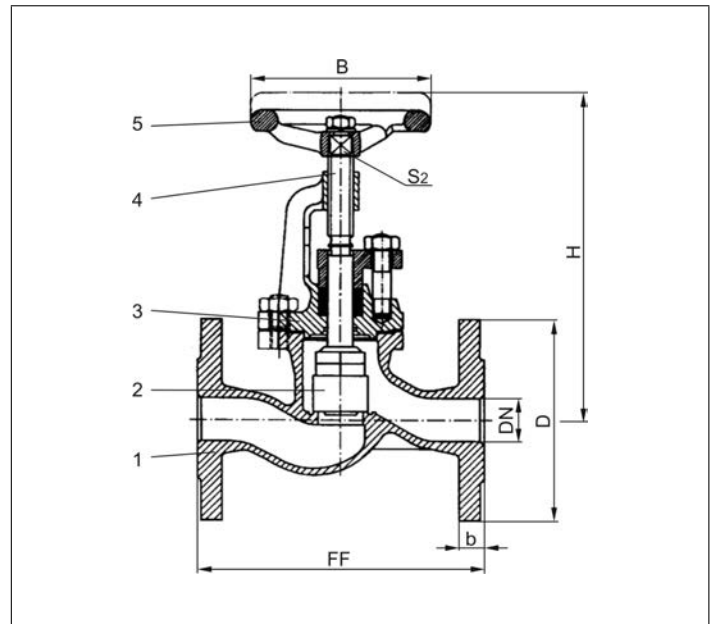
The laws, regulations and standards are to observe for the range of application.

Working temperatures: -10°C / +14°F (263K) up to +225°C / +437°F (498K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Disc	CC491K	B 62 UNS C83600
3 Headpiece	CC491K	B 62 UNS C83600
4 Stem	CW710R	no reference
5 Handwheel	cast iron	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 03050	Technical data									
Nominal size	DN	25	32	40	50	65	80	100	125	150
Dimension code	.X.	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	160	180	200	230	290	310	350	400	480
Height	H	210	220	250	250	315	335	375	420	460
Flange diameter	D	115	140	150	165	185	200	220	250	285
Width of flange	b	12	14	14	16	16	18	20	20	22
Handwheel-Ø	B	100	125	150	150	185	200	200	225	250
Wrench size across flats	S <sub>2</sub>	9	11	12	12	14	17	17	19	22
Weight	ca. kg	6.0	8.0	10.0	12.0	17.0	23.0	30.0	50.0	65.0

Dimensions in mm.

# Globe Valves

## Type 03080

**HEROSE**



### Globe Valves, PN16, DIN 3356-1

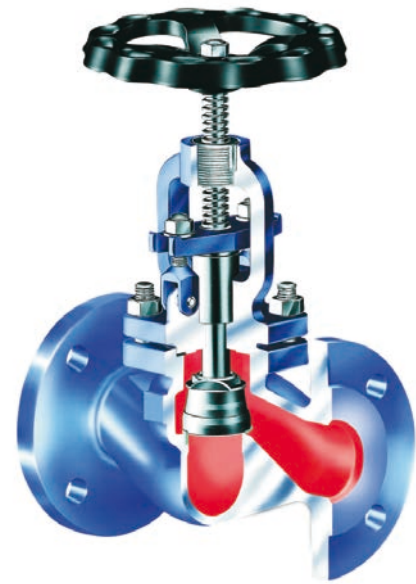
Body and topwork in cast iron  
seat and disc in stainless steel, metal to metal seated

### Part No. 03080.X.0000

Flanged connection acc. to DIN EN 1092-1 PN16  
face-to-face dimension acc. to DIN EN 558-1, Reihe 1

Available options - on request only:

- Angled Valves
- Valve with control disc



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

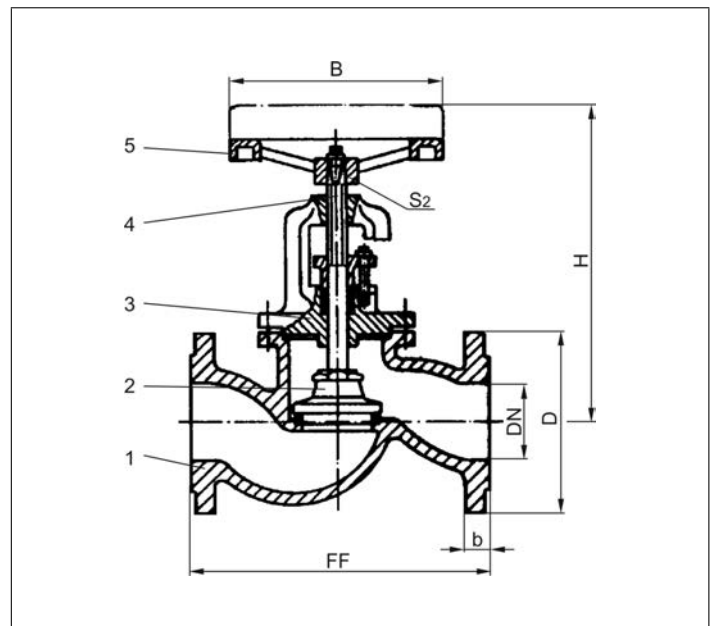
The laws, regulations and standards are to observe for the range of application.

Working temperatures: -10°C / +14°F (263K) up to +225°C / +437°F (498K)

Materials	DIN EN	ASTM
1 Body	0.6025	A 48-83 Gr. 35B
2 Disc	1.4021	A 276 grade 420
3 Headpiece	0.6025	A 48-83 Gr. 35B
4 Stem	1.4021	A 276 grade 420
5 Handwheel	cast iron	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 03080	Technical data											
	DN	15	20	25	32	40	50	65	80	100	125	150
Nominal size	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	130	150	160	180	200	230	290	310	350	400	480
Height	H	180	180	190	190	225	235	265	290	345	375	465
Flange diameter	D	95	105	115	140	150	165	185	200	220	250	285
Width of flange	b	12	12	12	14	14	16	16	18	20	20	22
Handwheel-Ø	B	120	120	140	140	160	160	180	200	225	250	300
Wrench size across flats	S <sub>2</sub>	10	10	12	12	13	13	14	15	17	18	21
Weight	ca. kg	3.5	4.0	5.0	6.8	9.3	11.7	16.0	23.5	35.0	52.0	75.5

Dimensions in mm.

# Globe Valves

## Type 03090

**HEROSE**



### Globe Valves, PN40, DIN 3356-1

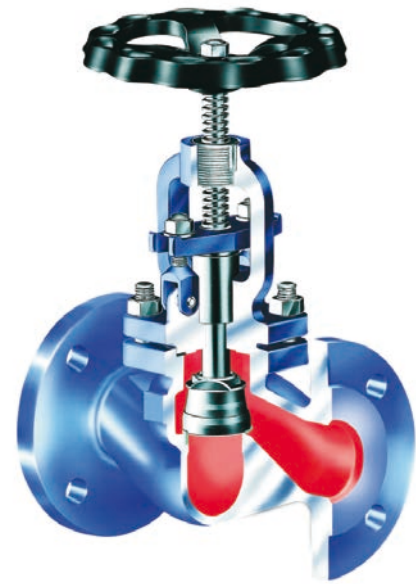
Body and topwork in cast steel  
seat and disc in stainless steel, metal to metal seated

### Part No. 03090.X.0000

Flanged connection acc. to DIN EN 1092-1 PN40  
face-to-face dimension acc. to DIN EN 558-1, Reihe 1

Available options - on request only:

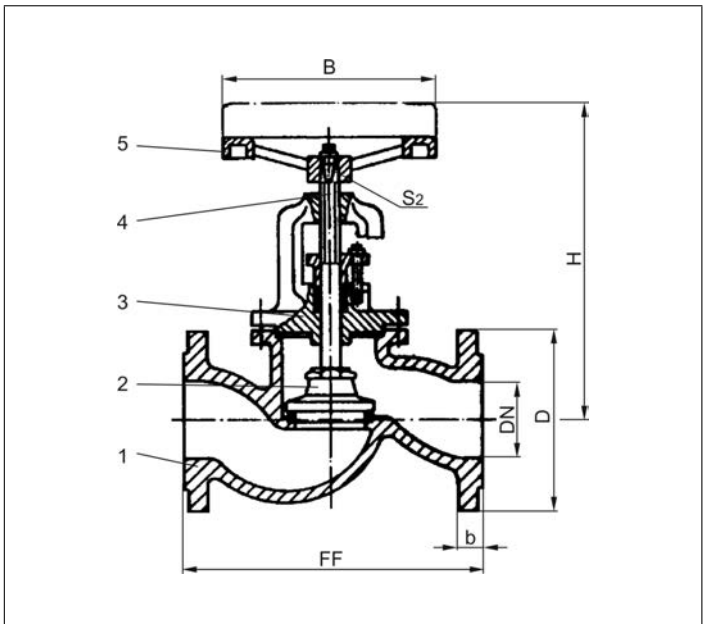
- Angled Valves
- Valve with control disc



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.  
The laws, regulations and standards are to observe for the range of application.  
Working temperatures: -10°C / +14°F (263K) up to +400°C / +752°F (673K)

Materials	DIN EN	ASTM
1 Body	1.0619	A 216 Grade WCB
2 Disc	1.4021	A 276 grade 420
3 Headpiece	1.0619	A 216 Grade WCB
4 Stem	1.4021	A 276 grade 420
5 Handwheel	cast iron	



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 03090	Technical data											
	DN	15	20	25	32	40	50	65	80	100	125	150
Nominal size	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	130	150	160	180	200	230	290	310	350	400	480
Height	H	190	190	205	205	245	255	295	325	380	425	520
Flange diameter	D	95	105	115	140	150	165	185	200	235	270	300
Width of flange	b	12	12	12	14	14	16	16	18	20	20	22
Handwheel-Ø	B	120	120	140	140	160	160	180	200	225	250	300
Wrench size across flats	S <sub>2</sub>	10	10	12	12	13	13	14	15	17	18	21
Weight	ca. kg	4.4	5.4	6.3	7.0	10.5	13.8	21.0	27.5	40.0	61.0	88.5

Dimensions in mm.

# Gate Valves

## Type 09010



### Gate Valves, PN16, DIN EN 12288

Bronze body, screwed topwork in brass with gland packing and non rising stem

### Part No. 09010.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

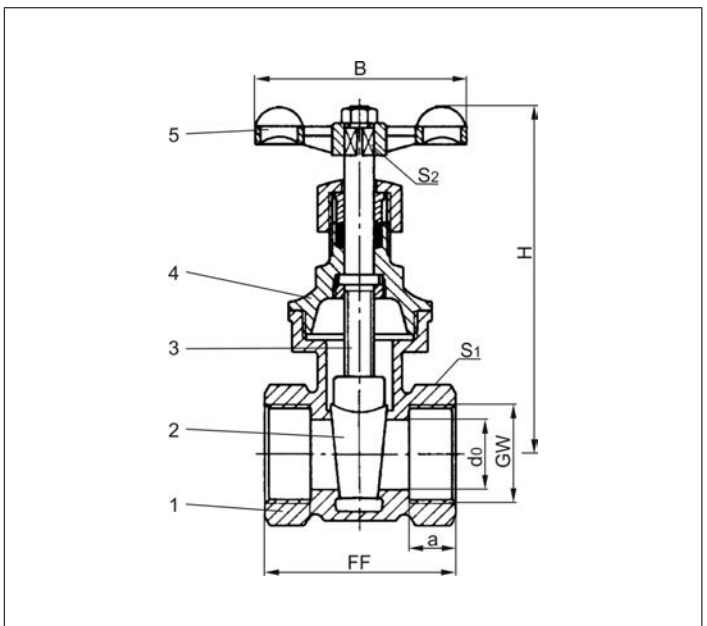
The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 12.0 bar: -10°C / +14°F (263K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Wedge	CC491K	B 62 UNS C83600
3 Stem	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Handwheel	Aluminium - diecasting	



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 09010	Technical data						
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	55	60	68	76	80	93
Height	H	85	105	115	130	150	180
Socket depth	a	15.0	16.3	19.1	21.4	21.4	25.7
Flow diameter	d <sub>0</sub>	12.0	17.5	23.2	29.0	36.0	47.0
Handwheel-Ø	B	60	70	70	80	90	110
Wrench size across flats	S <sub>1</sub>	27	32	41	50	58	70
Wrench size across flats	S <sub>2</sub>	6	7	8	9	9	11
Weight	ca. kg	0.36	0.54	0.82	1.10	1.60	2.40

Dimensions in mm.

# Gate Valves

## Type 09012



### Gate Valves, PN16, DIN EN 12288

Bronze body, screwed topwork in brass with maintenance-free gland packing (O-Ring) and non rising stem

### Part No. 09012.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

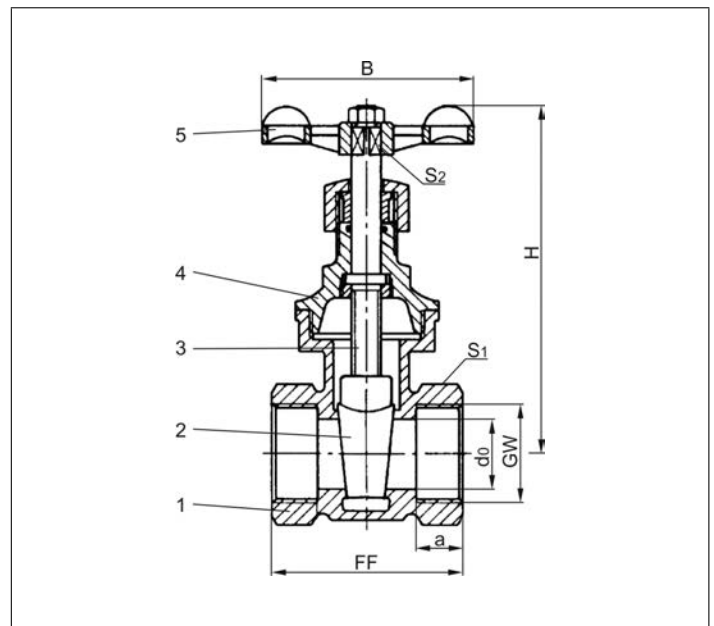
up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +180°C / +356°F (453K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Wedge	CC491K	B 62 UNS C83600
3 Stem	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Handwheel	Aluminium - diecasting	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 09012	Technical data						
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	55	60	68	76	80	93
Height	H	85	105	115	130	150	180
Socket depth	a	15.0	16.3	19.1	21.4	21.4	25.7
Flow diameter	d <sub>0</sub>	12.0	17.5	23.2	29.0	36.0	47.0
Handwheel-Ø	B	60	70	70	80	90	110
Wrench size across flats	S <sub>1</sub>	27	32	41	50	58	70
Wrench size across flats	S <sub>2</sub>	6	7	8	9	9	11
Weight	ca. kg	0.36	0.54	0.82	1.10	1.60	2.40

Dimensions in mm.

# Gate Valves

## Type 09061



### Gate Valves, PN16, DIN EN 12288

Bronze body, screwed topwork in brass with gland packing and non rising stem

### Part No. 09061.X.0160

Flanged connection acc. to DIN EN 1092-1 PN16



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

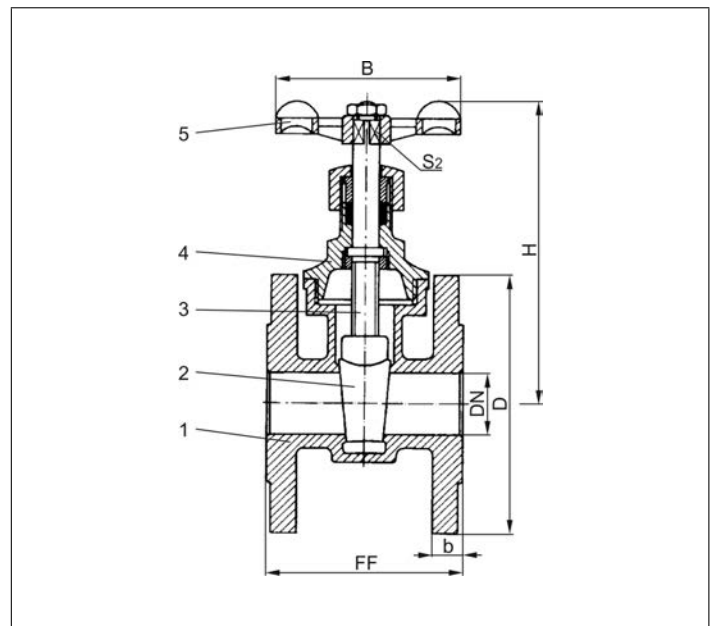
up to max. 10.0 bar: -10°C / +14°F (263K) up to +150°C / +302°F (423K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Wedge	CC491K	B 62 UNS C83600
3 Stem	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Handwheel	Aluminium - diecasting	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 09061	Technical data							
Nominal size	DN	20	25	32	40	50	65	80
Dimension code	.X.	0200	0250	0320	0400	0500	0650	0800
Face-to-face dimension	FF	75	80	90	100	110	130	150
Height	H	105	115	130	150	180	220	250
Flange diameter	D	105	115	140	150	165	185	200
Width of flange	b	12	12	14	14	16	16	18
Handwheel-Ø	B	70	70	80	80	110	150	160
Wrench size across flats	S <sub>2</sub>	7	8	9	9	11	12	13
Weight	ca. kg	1.8	2.3	3.6	4.6	6.4	9.4	12.1

Dimensions in mm.

# Gate Valves

## Type 09420



### Flanged Gate Valves, PN16, DIN EN 12288

Bronze body, screwed topwork in brass  
with maintenance-free gland packing (O-Ring)  
and non rising stem  
flanged connection acc. to DIN EN 1092-3 PN16

#### Part No. 09420.X.000000

· Standard valve

#### Part No. 09420.X.010000

· Valve with locking device without lock

#### Part No. 09420.X.020000

· Valve with locking device with lock

option:  
Locking device →



### Applications:

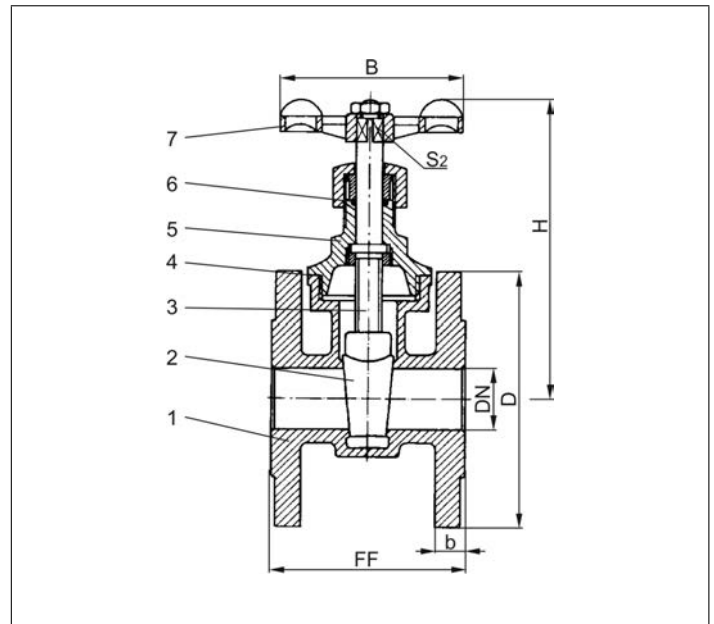
Suitable for transformer oil.

Working temperatures: -25°C / -13°F (248K) up to +120°C / +248°F (393K) and maximal 6.0 bar

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Wedge	CC491K	B 62 UNS C83600
3 Stem	CW614N	B 249 UNS C38500
4 Bonnet gasket	Klingsil C-4400	
5 Headpiece	CW614N	B 249 UNS C38500
6 O-Rings	FPM (Viton)	
7 Handwheel	Aluminium - diecasting	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 09420	Technical data							
Nominal size	DN	25	32	40	50	65	80	100
Dimension code	.X.	0250	0320	0400	0500	0650	0800	1000
Face-to-face dimension	FF	80	90	100	110	130	150	165
Height	H	120	130	150	180	225	250	300
Flange diameter	D	115	140	150	165	185	200	220
Width of flange	b	12	14	14	16	16	18	20
Handwheel-Ø	B	70	80	80	110	150	150	150
Wrench size across flats	S <sub>2</sub>	8	9	9	11	12	14	14
Weight	ca. kg	2.6	3.6	4.4	6.5	9.2	12.1	15.8

Dimensions in mm.



# Gate Valves

## Type 09420



### Flanged Gate Valves, PN16, DIN EN 12288

Bronze body, screwed topwork in brass  
with maintenance-free gland packing (O-Ring)  
and non rising stem  
flanged connection acc. to DIN EN 1092-3 PN16

#### Part No. 09420.X.100000

· Valve with opening indicator

#### Part No. 09420.X.110000

· Valve with opening indicator and locking device without lock

#### Part No. 09420.X.120000

· Valve with opening indicator and locking device with lock

option:  
Locking device →



### Applications:

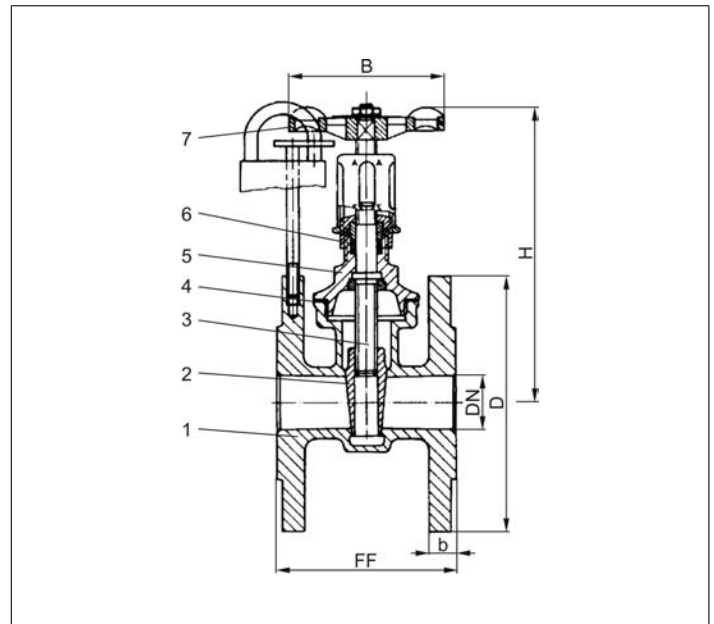
Suitable for transformer oil.

Working temperatures: -25°C / -13°F (248K) up to +120°C / +248°F (393K) and maximal 6.0 bar

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Wedge	CC491K	B 62 UNS C83600
3 Stem	CW614N	B 249 UNS C38500
4 Bonnet gasket	Klingsil C-4400	
5 Headpiece	CW614N	B 249 UNS C38500
6 O-Rings	FPM (Viton)	
7 Handwheel	Aluminium - diecasting	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 09420	Technical data							
Nominal size	DN	25	32	40	50	65	80	100
Dimension code	.X.	0250	0320	0400	0500	0650	0800	1000
Face-to-face dimension	FF	80	90	100	110	130	150	165
Height	H	138	152	169	208	253	281	318
Flange diameter	D	115	140	150	165	185	200	220
Width of flange	b	12	14	14	16	16	18	20
Handwheel-Ø	B	70	80	80	110	150	150	150
Wrench size across flats	S <sub>2</sub>	8	9	9	11	12	14	14
Weight	ca. kg	2.7	3.7	4.9	6.7	9.4	12.5	16.2

Dimensions in mm.

# Angle Valves

## Type 01131



### Globe Valves, angle type, PN16

Bronze body, screwed topwork in brass

### Part No. 01131.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp

Available options - on request only:

- external parts nickel plated



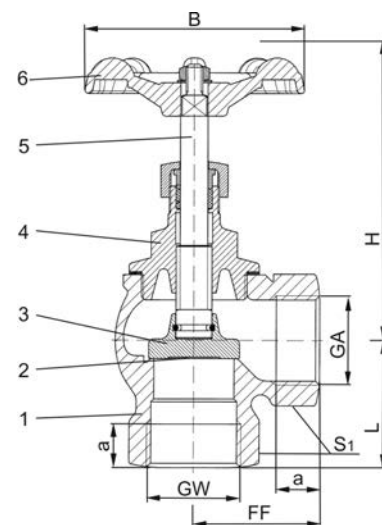
### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

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

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	PTFE	
3 Disc	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Stem	CW614N	B 283 UNS C38500
6 Handwheel	Aluminium - diecasting	



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 01131	Technical data					
Nominal size	GW	1/2	3/4	1	1-1/2	2
Dimension code	.X.	0400	0600	1000	1400	2000
Face-to-face dimension	FF	25	37.5	42.5	48	56
Length	L	25	35	36	48	56
Height	H	95	110	135	155	190
Socket depth	a	12	19	19	18	20
Thread size	GA	1/2	3/4	1	1-1/2	2
Handwheel-Ø	B	70	70	80	80	80
Wrench size across flats	S <sub>1</sub>	27	32	41	58	70
Wrench size across flats	S <sub>2</sub>	7	8	9	8	9
Weight	ca. kg	0.4	0.6	1.0	1.6	2.5

Dimensions in mm.

# Needle Valves

## Type 04010



### Needle Valves, PN40

Brass body and topwork  
with needle cone

### Part No. 04010.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

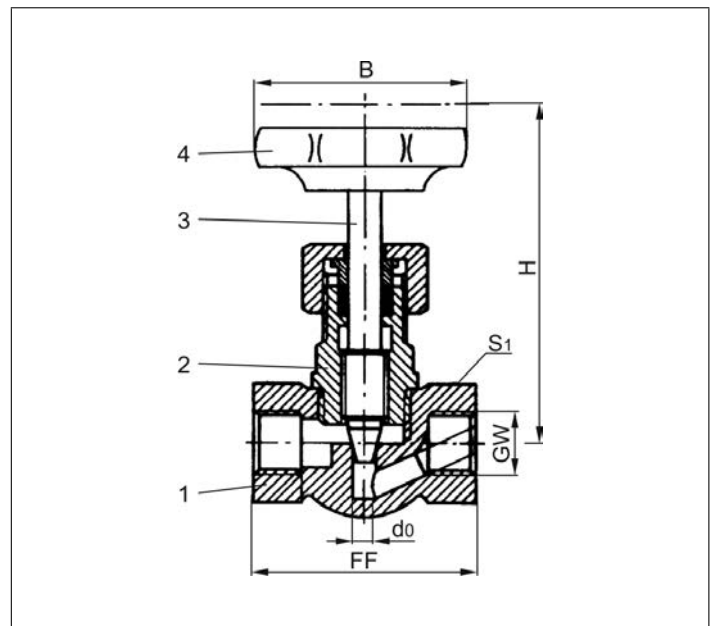
The laws, regulations and standards are to observe for the range of application.

Working temperatures: -10°C / +14°F (263K) up to +100°C / +212°F (373K)

Materials	DIN EN	ASTM
1 Body	CW614N	B 249 UNS C38500
2 Headpiece	CW612N	B 283 UNS C37700
3 Stem	CW612N	B 283 UNS C37700
4 Handwheel	Plastic	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 04010	Technical data						
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4
Dimension code	.X.	0200	0300	0400	0600	1000	1200
Face-to-face dimension	FF	50	50	50	67	75	110
Height	H	80	80	80	90	95	105
Flow diameter	d <sub>0</sub>	5.0	6.0	6.5	9.0	11.0	13.0
Handwheel-Ø	B	50	50	65	65	65	90
Wrench size across flats	S <sub>1</sub>	22	22	25	32	40	54
Weight	ca. kg	0.30	0.30	0.35	0.55	0.75	1.80
Kvs-Value	m <sup>3</sup> /h	0.4	0.6	0.6	1.0	1.6	3.0
Cv-Value	gal/min	0.5	0.7	0.7	1.1	1.8	3.5

Dimensions in mm.

# Self closing globe Valves

## Type 01028



### Self closing Globe Valve, PN16

Bronze body and lever,  
gland with FPM O-Rings

### Part No. 01028.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

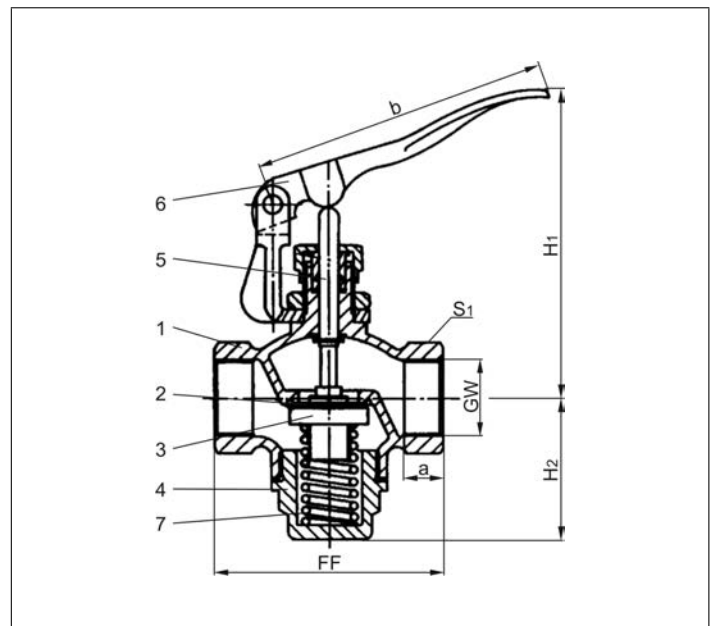
The laws, regulations and standards are to observe for the range of application.

Working temperatures: -10°C / +14°F (263K) up to +165°C / +329°F (438K)

Pay attention to pressure-temperature reduction.

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	FPM (VITON)	
3 Disc	CW612N	B 283 UNS C37700
4 Plug	CW612N	B 283 UNS C37700
5 Stem	1.4104	A 276 Grade 430F
6 Lever	CC491K	B 62 UNS C83600
7 Spring	1.4310	A 313 Grade 301

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.



Type 01028	Technical data			
Nominal size	GW	1/2	3/4	1
Dimension code	.X.	0400	0600	1000
Face-to-face dimension	FF	70	80	95
Height	H <sub>1</sub>	120	120	130
Height	H <sub>2</sub>	50	55	60
Socket depth	a	12	14	16
Length	b	123	123	123
Wrench size across flats	S <sub>1</sub>	27	33	41
Weight	ca. kg	0.8	0.9	1.4

Dimensions in mm.

# Control Valves

## Type 04020



### Control Valves, PN16, DIN 3844

Control characteristic: linear  
Bronze body, screwed topwork in brass  
with opening indicator

### Part No. 04020.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



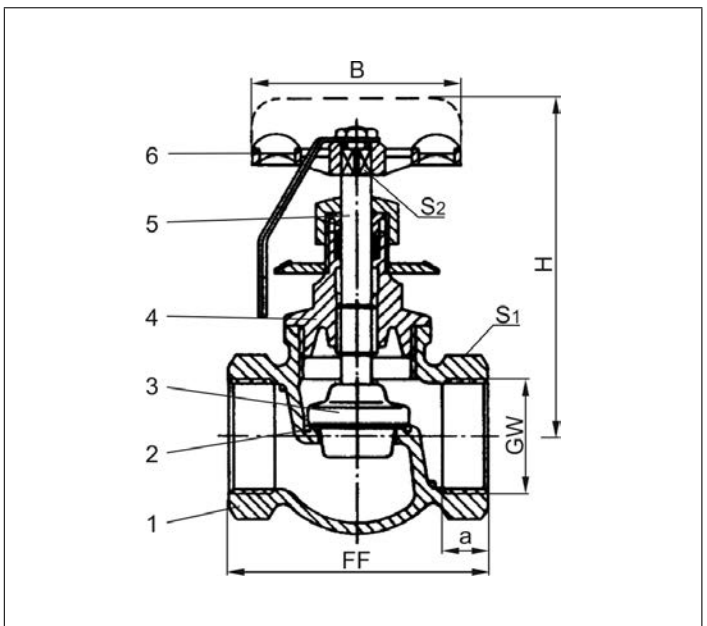
### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.  
The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)  
up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)  
up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	PTFE	
3 Control disc	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Stem	CW614N	B 283 UNS C38500
6 Handwheel	Aluminium - diecasting	



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 04020	Technical data							
Nominal size	GW	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	50	60	70	80	95	105	130
Height	H	75	85	95	105	120	130	145
Socket depth	a	10	13	14	17	19	19	23
Handwheel-Ø	B	40	50	60	70	80	90	110
Wrench size across flats	S <sub>1</sub>	22	27	32	41	50	58	70
Wrench size across flats	S <sub>2</sub>	4.5	5	6	7	8	9	9
Weight	ca. kg	0.35	0.4	0.5	0.7	1.1	1.4	2.3
Kvs-Value	m <sup>3</sup> /h	1.5	2.0	4.0	6.0	12.0	16.0	25.0

Dimensions in mm.

# Control Valves

## Type 04041



### Control Valves, PN16

Control characteristic: linear  
Bronze body, screwed topwork in brass  
with opening indicator

### Part No. 04041.X.0160

Flanged connection acc. to DIN EN 1092-1 PN16



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.  
The laws, regulations and standards are to observe for the range of application.

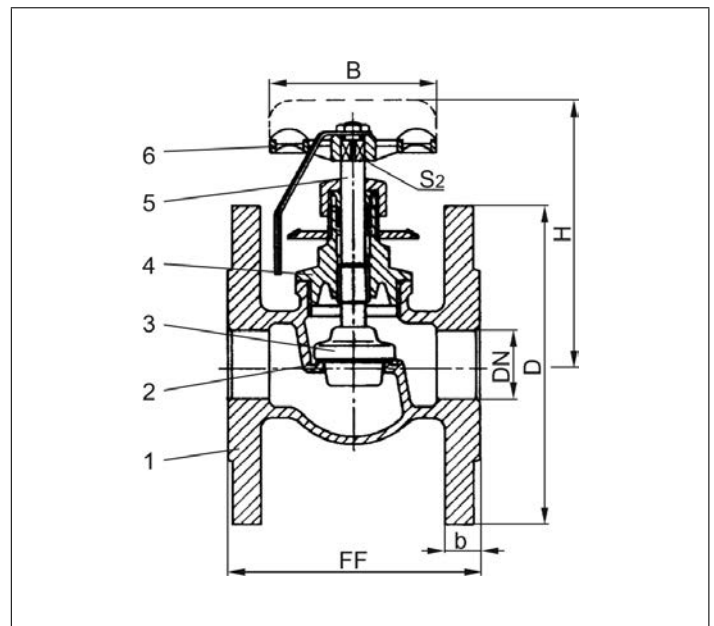
Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)  
up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)  
up to max. 6.0 bar: -10°C / +14 (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	PTFE	
3 Control disc	CW614N	B 283 UNS C38500
4 Headpiece	CW614N	B 283 UNS C38500
5 Stem	CW614N	B 283 UNS C38500
6 Handwheel	Aluminium - diecasting	

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 04041	Technical data						
Nominal size	DN	15	20	25	32	40	50
Dimension code	.X.	0150	0200	0250	0320	0400	0500
Face-to-face dimension	FF	65	80	90	95	110	125
Height	H	85	95	105	120	130	145
Flange diameter	D	95	105	115	140	150	165
Width of flange	b	10	12	12	14	14	16
Handwheel-Ø	B	50	60	70	80	90	110
Wrench size across flats	S <sub>2</sub>	5	6	7	8	9	9
Weight	ca. kg	1,4	2,0	2,6	3,9	4,5	6,6
Kvs-Value	m <sup>3</sup> /h	2,0	4,0	6,0	12,0	16,0	25,0

Dimensions in mm.

# Check Valves

## Type 05011, Type 05012



### Check Valves, PN16, DIN EN 3845-2

Bronze body, screwed cap in brass

#### Part No. 05011.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp  
Disc with FPM seal

#### Part No. 05012.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp  
Disc with PTFE seal

Available options - on request only:

- Disc with EPDM seal
- Disc with NBR seal



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

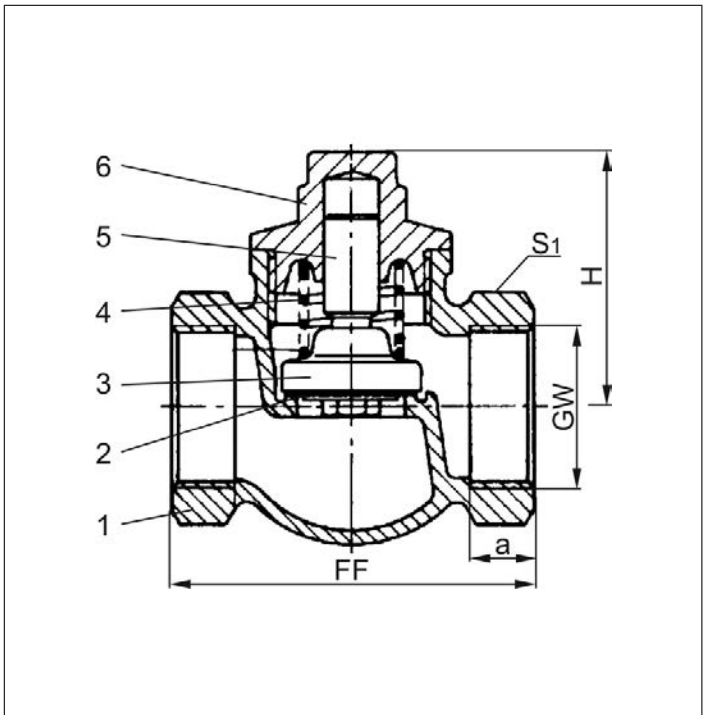
Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Seal Type 05011	FPM	
2 Seal Type 05012	PTFE	
3 Disc	CW614N	B 283 UNS C38500
4 Spring	1.4310	A 313 Grade 301
5 Guide piece	CW614N	B 283 UNS C38500
6 Cap	CW614N	B 283 UNS C38500



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05011 & 05012	Technical data								
	Nominal size	GW	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0300	0400	0600	1000	1200	1400	2000	
Face-to-face dimension	FF	50	60	70	80	95	105	130	
Height	H	40	40	50	55	55	65	75	
Socket depth	a	10	13	14	17	19	19	23	
Wrench size across flats	S <sub>1</sub>	22	27	32	41	50	58	70	
Weight	ca. kg	0.2	0.3	0.4	0.6	0.9	1.3	2.0	

Dimensions in mm.

# Check Valves

## Type 05083



### Check Valves, PN16

Bronze body, screwed cap in brass

#### Part No. 05083.X.0160

Flanged connection acc. to DIN EN 1092-1 PN16

Disc with FPM seal

Available options - on request only:

- Disc with PTFE seal



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

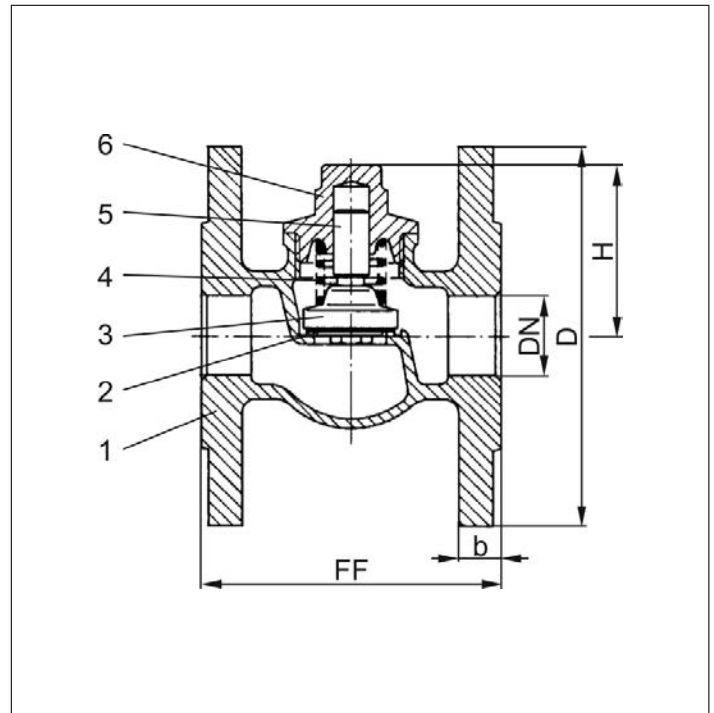
up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Valve seal	FPM	
3 Disc	CW614N	B 283 UNS C38500
4 Spring	1.4310	A 313 Grade 301
5 Guide piece	CW614N	B 283 UNS C38500
6 Cap	CW614N	B 283 UNS C38500

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05083	Technical data					
Nominal size	DN	20	25	32	40	50
Dimension code	.X.	0200	0250	0320	0400	0500
Face-to-face dimension	FF	80	90	95	110	125
Height	H	50	55	55	65	75
Flange diameter	D	105	115	140	150	165
Width of flange	b	12	12	14	14	16
Weight	ca. kg	1.9	2.6	3.7	4.3	6.4

Dimensions in mm.



# Check Valves

## Type 05082

### Check Valves, PN16

Bronze body and cap  
metal to metal seated

### Part No. 05082.X.0160

Flanged connection acc. to DIN EN 1092-1 PN16



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

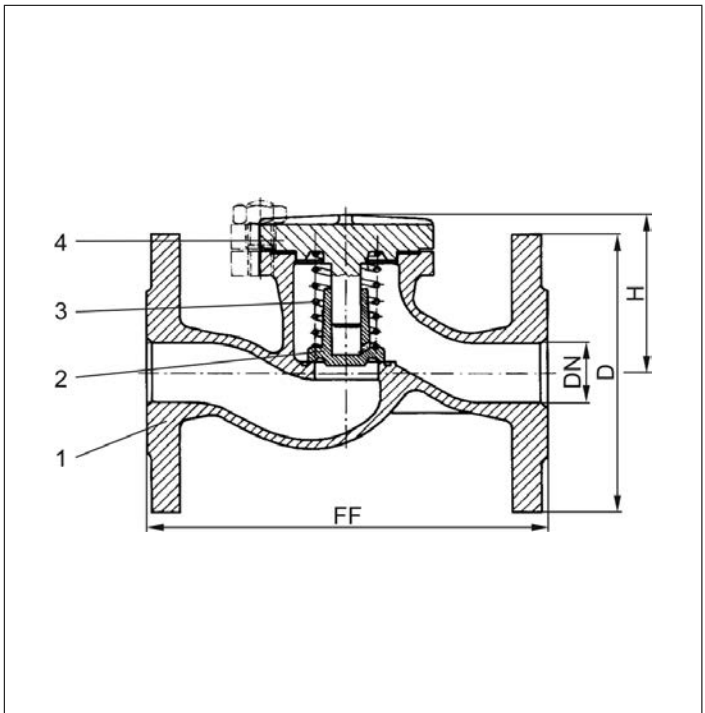
Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Disc	CC491K	B 62 UNS C83600
3 Spring	1.4310	A 313 Grade 301
4 Cap	CC491K	B 62 UNS C83600



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05082	Technical data										
Nominal size	DN	20	25	32	40	50	65	80	100	125	150
Dimension code	.X.	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	150	160	180	200	230	290	310	350	400	480
Height	H	70	75	80	90	100	110	130	150	170	190
Flange diameter	D	105	115	140	150	165	185	200	220	250	285
Weight	ca. kg	4.0	5.0	6.0	8.5	11.0	15.0	20.0	25.0	40.0	55.0

Dimensions in mm.

# Check Valves

## Type 05110

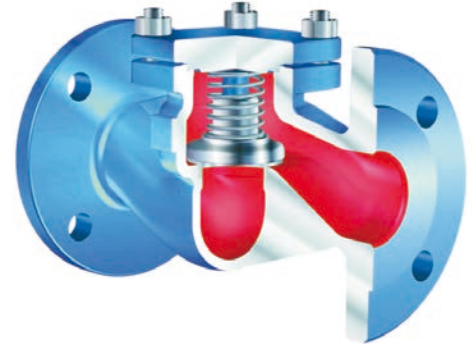


### Check Valves, PN16

Body and cap in cast iron  
seat and disc in stainless steel, metal to metal seated

### Part No. 05110.X.0000

Flanged connection acc. to DIN EN 1092-1 PN16  
face-to-face dimension acc. to DIN EN 558-1, Reihe 1



### Applications:

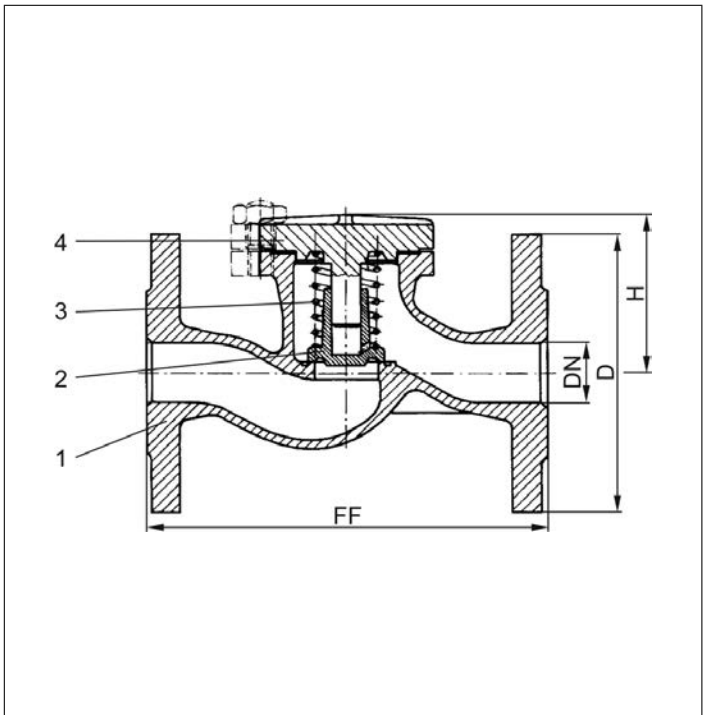
Suitable for non-toxic, non-inflammable fluids, gases and vapours.  
The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 13.0 bar: -10°C / +14°F (263K) up to +225°C / +437°F (498K)

Materials	DIN EN	ASTM
1 Body	0.6025	A 48-83 Gr. 35B
2 Disc	1.4021	A 276 Grade 420
3 Spring	1.4310	A 313 Grade 301
4 Cap	0.6025	A 48-83 Gr. 35B



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05110	Technical data											
Nominal size	DN	15	20	25	32	40	50	65	80	100	125	150
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	130	150	160	180	200	230	290	310	350	400	480
Height	H	70	70	80	80	85	95	110	130	155	165	215
Flange diameter	D	95	105	115	140	150	165	185	200	235	270	300
Weight	ca. kg	2.4	3.0	3.8	5.7	7.4	10.3	15.2	20.4	31.0	49.0	69.0

Dimensions in mm.

# Check Valves

## Type 05115



### Check Valves, PN40

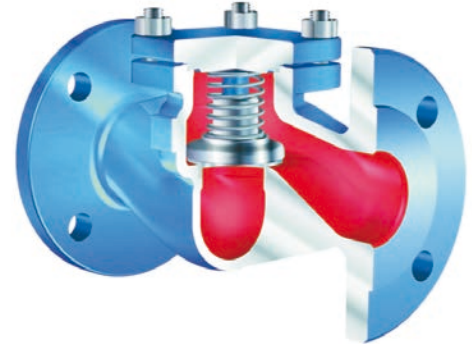
Body in cast steel

seat and disc in stainless steel, metal to metal seated

### Part No. 05115.X.0000

Flanged connection acc. to DIN EN 1092-1 PN40

face-to-face dimension acc. to DIN EN 558-1, Reihe 1



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

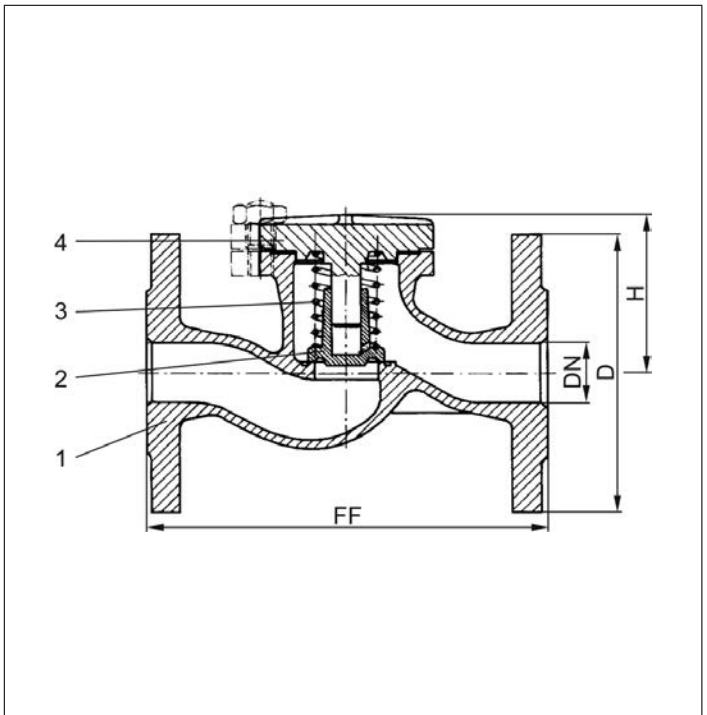
Working temperatures and pressures:

up to max. 40.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 33.0 bar: -10°C / +14°F (263K) up to +225°C / +437°F (498K)

up to max. 21.0 bar: -10°C / +14°F (263K) up to +400°C / +752°F (673K)

Materials	DIN EN	ASTM
1 Body	1.0619	A 216 Grade WCB
2 Disc	1.4021	A 276 Grade 420
3 Spring	1.4310	A 313 Grade 301
4 Cap DN15 - 65	1.0402	A 576 Grade 1020
5 Cap DN80 - 150	1.0425	no reference



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05115	Technical data											
Nominal size	DN	15	20	25	32	40	50	65	80	100	125	150
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	130	150	160	180	200	230	290	310	350	400	480
Height	H	70	70	80	80	85	95	110	130	155	165	215
Flange diameter	D	95	105	115	140	150	165	185	200	235	270	300
Weight	ca. kg	3.8	4.9	5.9	7.1	10.4	12.3	22.7	28.5	40.0	64.0	90.0

Dimensions in mm.

# Check Valves

## Type 05040



### Check Valves, swing type, PN16

Bronze body, screwed cap in brass  
Female thread connection (G) acc. to ISO 7-1 Rp

#### Part-No. 05040.X.0000

Metal to metal seated

#### Part-No. 05040.X.0200

Disc with silicone seal

#### Part-No. 05040.X.0600

Disc with EPDM seal

#### Part-No. 05040.X.0700

Disc with FPM seal



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.  
The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +80°C / +176°F (353K)

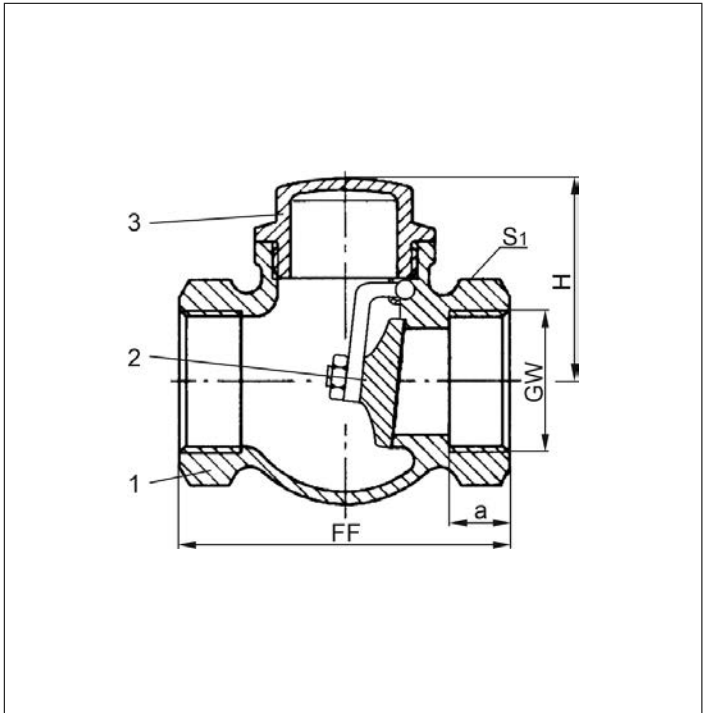
up to max. 10.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Swing	CW614N	B 283 UNS C38500
3 Cap	CW614N	B 283 UNS C38500

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05040	Technical data							
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2
Dimension code	.X.	0400	0600	1000	1200	1400	2000	2400
Face-to-face dimension	FF	60	70	80	95	105	130	160
Height	H	40	49	56	60	70	80	105
Flow diameter	d <sub>0</sub>	13	17	22	28	31	46	60
Socket depth	a	12	13	15	16	18	20	20
Wrench size across flats	S <sub>1</sub>	27	34	41	51	55	70	90
Weight	ca. kg	0.28	0.45	0.70	0.96	1.40	2.10	3.70
Kvs-Value	m <sup>3</sup> /h	5.5	10.2	20.2	34.7	44.9	104.0	175.0

Dimensions in mm.

# Check Valves

## Type 05338



**Check Valves, disc type, PN40 / class 300**

Body in stainless steel

**Part No. 05338.X.0000**

Metal to metal seated

with closing spring,

for mounting between two flanges acc. to  
DIN PN10, PN16, PN25 or PN40

ASME class 125, class 150 or class 300



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 49.6 bar: -200°C / -328°F (73K)

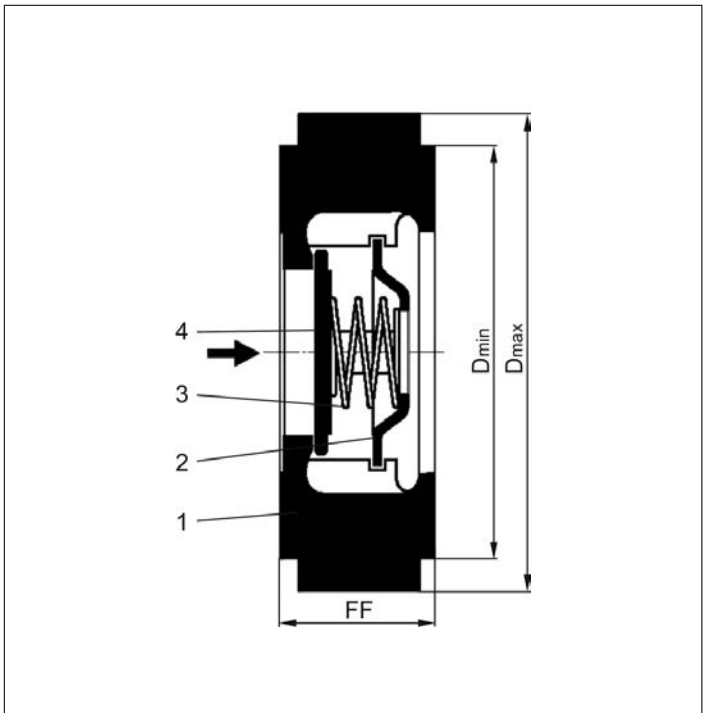
up to max: 35.8 bar: +200°C / +392°F (473K)

up to max. 24.0 bar: +550°C / +1022°F (823K)

Materials	DIN EN	ASTM
1 Body	1.4408	A 351 CF 8M
2 Spring cap	1.4571	A 276 Grade 316Ti
3 Spring	1.4571	A 313 Grade 316Ti
4 Disc	1.4571	A 276 Grade 316Ti

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 05338	Technical data									
Nominal size	DN	15	20	25	32	40	50	65	80	100
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000
Face-to-face dimension	FF	16	19	22	28	31.5	40	46	50	60
Disc diameter	D <sub>min</sub>	44	53	64	70	83	96	110	128	151
Disc diameter	D <sub>max</sub>	67	76	82	93	104	118	136	158	186
Weight	ca. kg	0.27	0.38	0.52	0.80	1.12	1.78	2.43	3.37	5.34
Kvs-Value	m <sup>3</sup> /h	2.7	5.8	10.3	17.8	27.0	42.0	68.0	88.0	112.0
Cv-Value	gal/min	3.1	6.7	11.9	20.6	31.3	48.7	78.9	102.1	129.9

Dimensions in mm.

# Pressure reducing Valves

## Type 08010

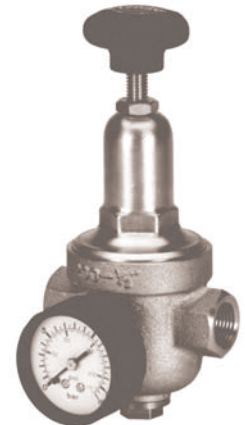


### Pressure Reducing Valves

Bronze body, with balanced seat, disc with NBR seal, pressure gauge connection G1/4, inlet pressure: up to max. 25.0 bar outlet pressure: 1.5 up to 8.0 bar greatest reducing ratio: 10 : 1

### Part No. 08010.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



### Applications:

Suitable for compressed air, nitrogen and similar non-inflammable, non-toxic gases. Working temperature: -10°C / +14°F (263K) up to +75°C / +167°F (348K)

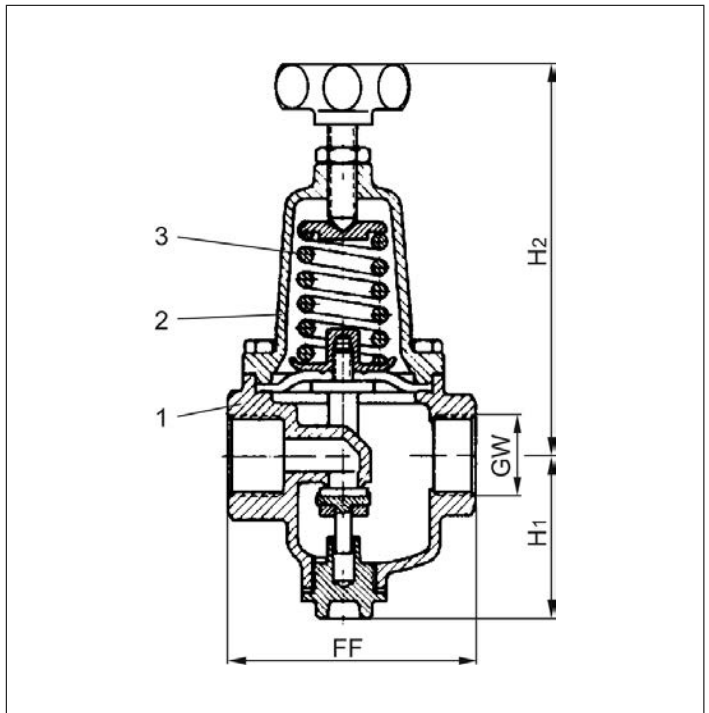
Picture:

Accessory pressure gauge - not included with valve

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Bonnet (GW 1/4 - 1)	CW614N	B 249 UNS C38500
2 Bonnet (GW 1-1/4 - 2)	0.6025	A 48-83 Gr. 35B
3 Spring	1.1200	A 227

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08010	Technical data									
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000	
Face-to-face dimension	FF	70	70	85	85	95	104	108	147	
Height	H <sub>1</sub>	48	48	48	48	55	61	61	64	
Height	H <sub>2</sub>	110	110	120	120	155	200	200	260	
Weight	ca. kg	0.85	0.85	1.10	1.10	1.60	3.60	3.65	7.00	

Dimensions in mm.

# Pressure reducing Valves

## Type 08011



### Pressure Reducing Valves

Bronze body, with balanced seat,  
disc with NBR seal, pressure gauge connection G1/4,  
with piston control

inlet pressure: up to max. 40.0 bar

outlet pressure: 1.5 up to 20.0 bar

greatest reducing ratio: 6 : 1

### Part No. 08011.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



### Applications:

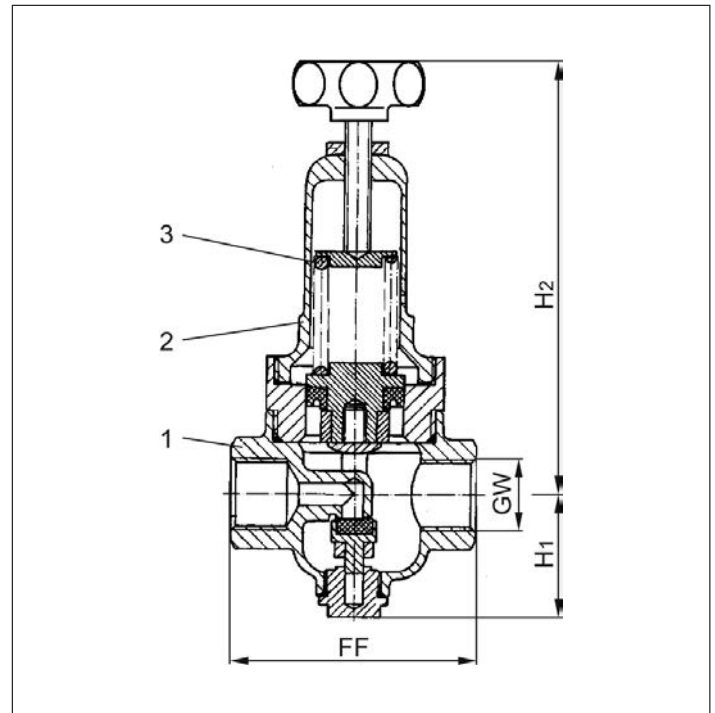
Suitable for compressed air, nitrogen and similar non-inflammable, non-toxic gases.

Working temperature: -10°C / +14°F (263K) up to +75°C / +167°F (348K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Bonnet (GW 1/4 - 1)	CW614N	B 249 UNS C38500
2 Bonnet (GW 1-1/4 - 2)	0.6025	A 48-83 Gr. 35B
3 Spring	1.1200	A 227

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08011	Technical data									
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000	
Face-to-face dimension	FF	70	70	85	85	95	104	108	147	
Height	H <sub>1</sub>	48	48	48	48	55	61	61	64	
Height	H <sub>2</sub>	130	130	140	140	185	230	230	295	
Weight	ca. kg	1.20	1.15	1.70	1.70	2.65	5.95	6.10	9.80	

Dimensions in mm.

# Pressure reducing Valves

## Type 08012

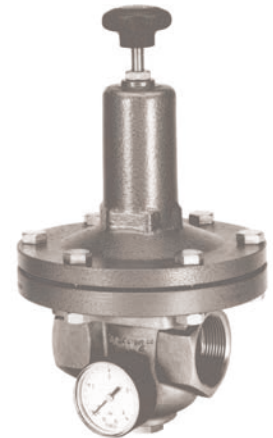


### Pressure Reducing Valves

Bronze body, with balanced seat, disc with NBR seal, pressure gauge connection G1/4, inlet pressure: up to max. 25.0 bar outlet pressure: 0.2 up to 2.0 bar greatest reducing ratio: 20 : 1

### Part No. 08012.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp



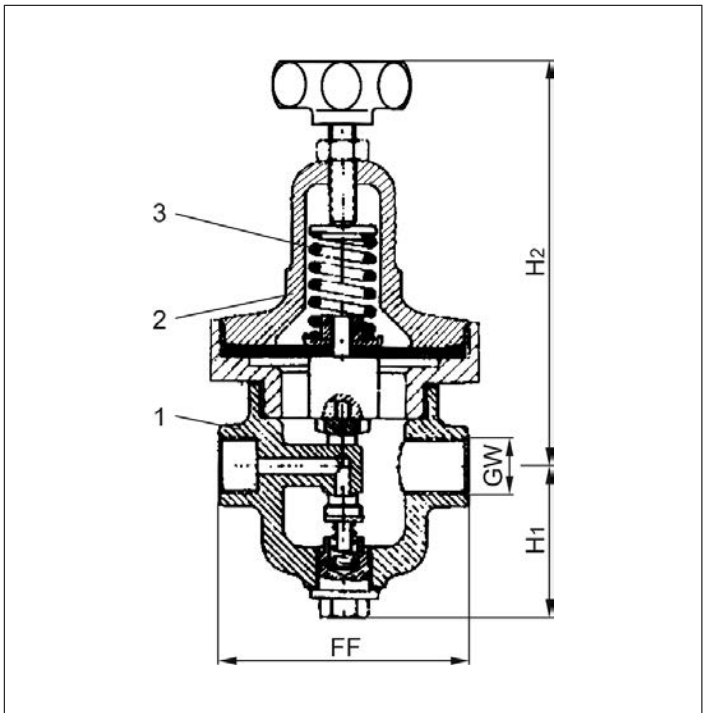
### Applications:

Suitable for compressed air, nitrogen and similar non-inflammable, non-toxic gases. Working temperature: -10°C / +14°F (263K) up to +75°C / +167°F (348K)

Picture:

Accessory pressure gauge - not included with valve

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Bonnet (GW 1/4 - 1)	CW614N	B 249 UNS C38500
2 Bonnet (GW 1-1/4 - 2)	CC491K	B 62 UNS C83600
3 Spring	1.1200	A 227



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08012	Technical data									
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000	
Face-to-face dimension	FF	70	70	85	85	95	104	108	147	
Height	H <sub>1</sub>	47	47	47	47	55	60	60	66	
Height	H <sub>2</sub>	155	155	220	220	250	300	300	300	
Weight	ca. kg	1.0	1.0	2.65	2.65	4.2	7.75	12.0	13.1	

Dimensions in mm.



# Pressure reducing Valves

## Type 08015



### Pressure Reducing Valves

Bronze body, with balanced seat, disc with NBR seal, pressure gauge connection G1/4, inlet pressure: up to max. 40.0 bar outlet pressure: 1.0 up to 10.0 bar

### Part No. 08015.X.0000

Female thread connection (G) acc. to ISO 7-1 Rp

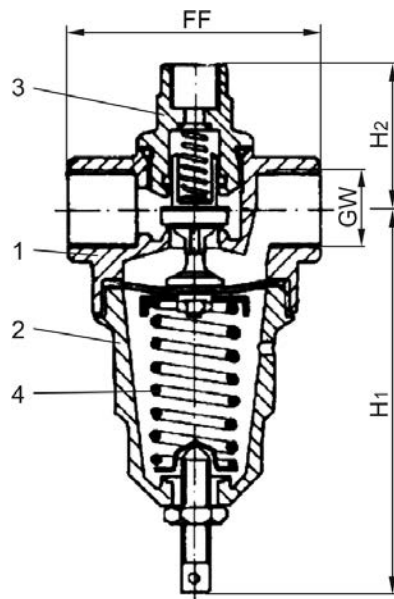


### Applications:

Suitable for compressed air, nitrogen and similar non-inflammable, non-toxic gases.

Working temperature: -10°C / +14°F (263K) up to +70°C / +158°F (343K)

Materials	DIN EN	ASTM
1 Body	CW612N	B 283 UNS C37770
2 Bonnet	synthetic material	
3 Headpiece	CW612N	B 283 UNS C37770
4 Spring	1.1200	A 227



**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08015	Technical data									
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2	
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000	
Face-to-face dimension	FF	50	50	65	80	95	105	115	130	
Height	H <sub>1</sub>	90	90	105	105	150	160	200	210	
Height	H <sub>2</sub>	34	34	36	42	57	57	72	72	
Weight	ca. kg	0.30	0.30	0.45	0.60	1.35	1.80	2.90	3.80	

Dimensions in mm.

# Pressure reducing Valves

## Type 08023



### Pressure Reducing Valves

Bronze body, with balanced seat, disc with NBR seal, pressure gauge connection G1/4, inlet pressure: up to max. 25.0 bar outlet pressure: 0.6 up to 7.0 bar

### Part No. 08023.X.0000

Union connections with male thread (G) acc. to ISO 228/1



### Applications:

Suitable for water, non-viscous liquids, compressed air, and similar non-inflammable, non-toxic gases.

Working temperature: -10°C / +14°F (263K) up to +90°C / +194°F (368K)

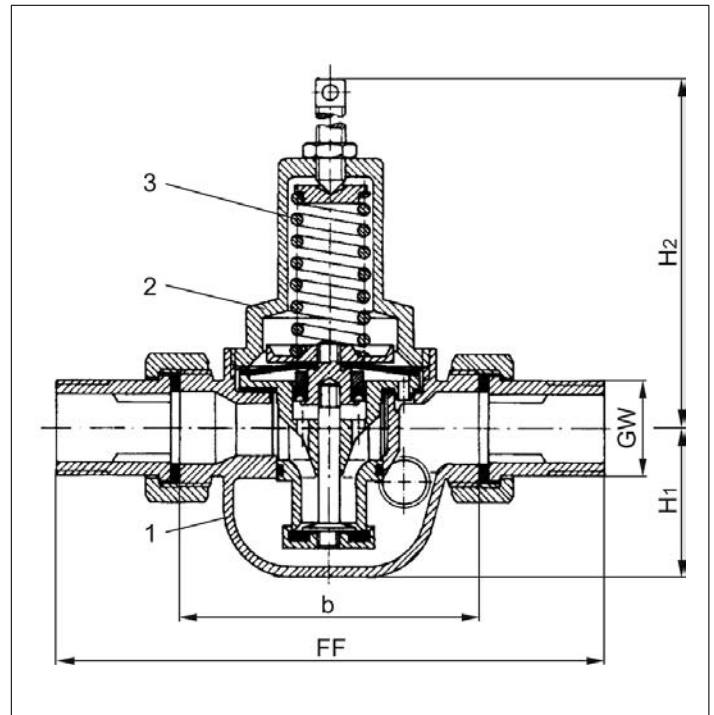
Picture:

Accessory pressure gauge - not included with valve

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Bonnet	CC491K	B 62 UNS C83600
3 Spring	1.1200	A 227

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08023	Technical data						
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	130	160	180	185	225	260
Body length	b	68	92	98	98	128	148
Height	H <sub>1</sub>	30	42	46	46	52	75
Height	H <sub>2</sub>	110	110	150	160	190	265
Weight	ca. kg	0.80	1.30	1.70	1.90	3.60	6.70

Dimensions in mm.

# Strainer

## Type 08180, Type 08181



### Strainer, PN16

Y-type pattern, Bronze body,  
stainless steel strainer screen,  
female thread connection (G) acc. to ISO 7-1 Rp

#### Part No. 08180.X.0000

screen with 0.6 mm mesh

#### Part No. 08181.X.0000

screen with 0.25 mm mesh



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 16.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

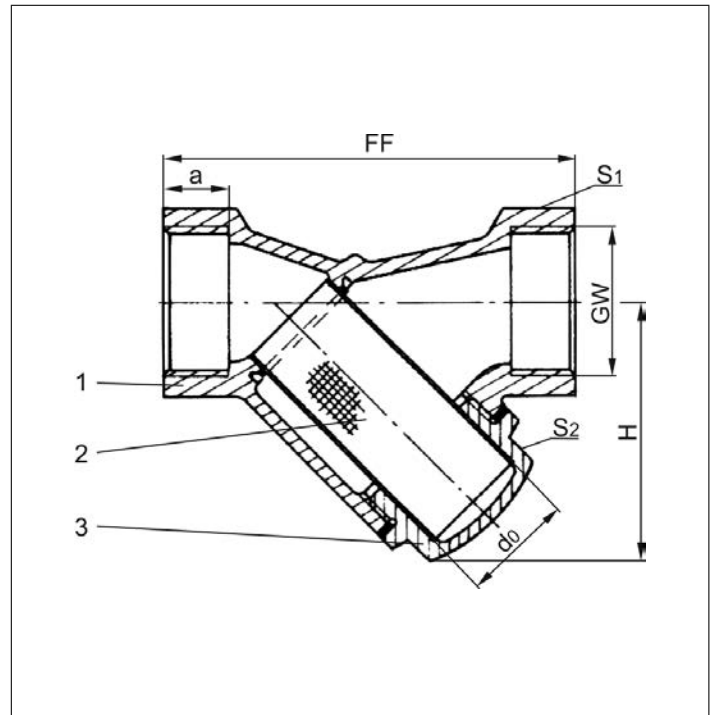
up to max. 10.0 bar: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

up to max. 6.0 bar: -10°C / +14°F (263K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASTM
1 Body	CC491K	B 62 UNS C83600
2 Screen	1.4300	A 276 Grade 302
3 Plug	CW614N	B 283 UNS C38500

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08180 & 08181	Technical data								
Nominal size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	55	55	65	75	90	110	120	150
Height	H	37	37	38	44	57	67	73	85
Socket depth	a	9	9	11	12	14	16	18	202
Flow diameter	d <sub>0</sub>	11	11	12	18	24	31	37	45
Wrench size across flats	S <sub>1</sub>	22	22	27	32	41	50	58	70
Wrench size across flats	S <sub>2</sub>	17	17	19	22	27	36	41	50
Weight	ca. kg	0.20	0.20	0.25	0.35	0.50	0.85	1.00	1.70

Dimensions in mm.

# Strainer

## Type 08161



### Strainer, PN16

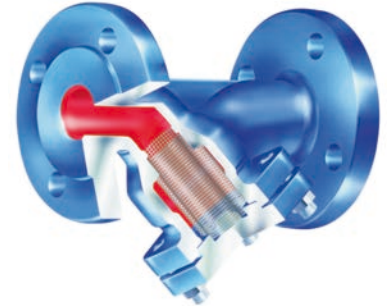
Body and cap in cast iron  
Y-type pattern, stainless steel strainer screen

### Part No. 08161.X.0000

Flanged connection acc. to DIN EN 1092-1 PN16  
face-to-face dimension acc. to DIN EN 558-1, Reihe 1

Available options - on request only:

- screen with 0.25 mm mesh



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.  
The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

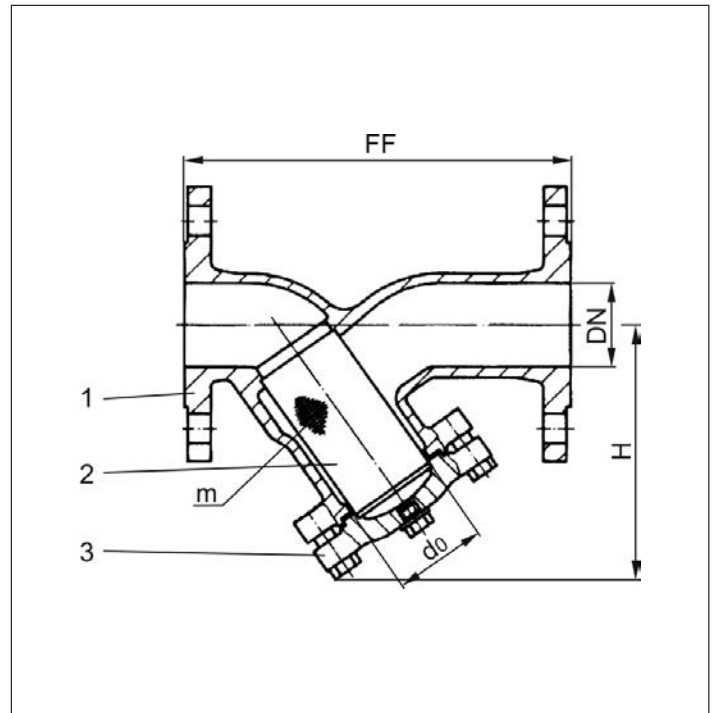
up to max. 16.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

up to max. 13.0 bar: -10°C / +14°F (263K) up to +200°C / +437°F (473K)

Materials	DIN EN	ASTM
1 Body	0.6025	A 48-83 Gr. 35B
2 Screen	1.4301	A 276 Grade 304
3 Cap	0.6025	A 48-83 Gr. 35B

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08161	Technical data											
Nominal size	DN	15	20	25	32	40	50	65	80	100	125	150
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	130	150	160	180	200	230	290	310	350	400	480
Height	H	90	100	115	125	150	160	180	215	235	275	305
Flange diameter	D	95	105	115	140	150	165	185	200	220	250	285
Flow diameter	d <sub>0</sub>	23	28	36	42	50	61.5	78.5	89.5	109.5	137.5	160
Mesh	m	1.0	1.0	1.0	1.0	1.0	1.0	1.25	1.25	1.6	1.6	1.6
Weight	ca. kg	3.0	4.0	5.0	7.0	9.0	12.0	16.0	21.0	30.0	43.0	61.0

Dimensions in mm.

# Strainer

## Type 08170



### Strainer, PN40

Body in cast steel

Y-type pattern, stainless steel strainer screen

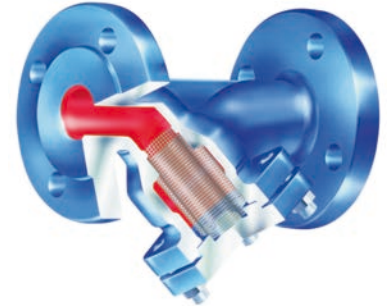
### Part No. 08170.X.0000

Flanged connection acc. to DIN EN 1092-1 PN40

face-to-face dimension acc. to DIN EN 558-1, Reihe 1

Available options - on request only:

- screen with 0.25 mm mesh



### Applications:

Suitable for non-toxic, non-inflammable fluids, gases and vapours.

The laws, regulations and standards are to observe for the range of application.

Working temperatures and pressures:

up to max. 40.0 bar: -10°C / +14°F (263K) up to +120°C / +248°F (393K)

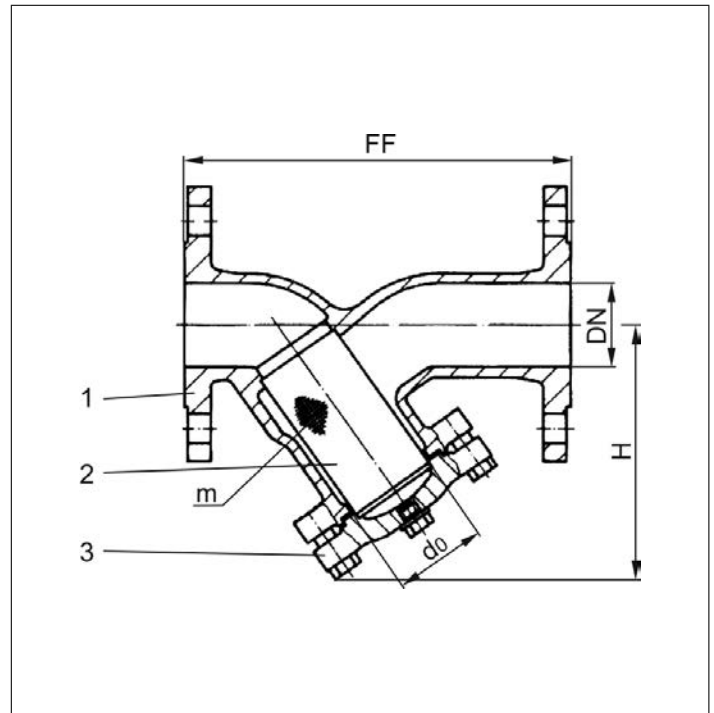
up to max. 33.0 bar: -10°C / +14°F (263K) up to +225°C / +437°F (498K)

up to max. 21.0 bar: -10°C / +14°F (263K) up to +400°C / +752°F (673K)

Materials	DIN EN	ASTM
1 Body	0.0619	A 216 Grade WCB
2 Screen	1.4301	A 276 Grade 304
3 Cap DN15 - 65	1.0460	A 105 Grade II
3 Cap DN80 - 150	1.0425	no reference

**Essential:** When ordering or requesting an offer please indicate flow medium, working pressure and working temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Type 08170	Technical data											
Nominal size	DN	15	20	25	32	40	50	65	80	100	125	150
Dimension code	.X.	0150	0200	0250	0320	0400	0500	0650	0800	1000	1250	1500
Face-to-face dimension	FF	130	150	160	180	200	230	290	310	350	400	480
Height	H	90	100	115	125	150	160	180	215	235	275	305
Flange diameter	D	95	105	115	140	150	165	185	200	235	270	300
Flow diameter	d <sub>0</sub>	23	28	36	42	50	61.5	78.5	89.5	109.5	137.5	160
Mesh	m	1.0	1.0	1.0	1.0	1.0	1.0	1.25	1.25	1.6	1.6	1.6
Weight	ca. kg	4.0	5.0	6.0	8.0	10.0	13.0	19.0	24.5	35.0	51.0	71.0

Dimensions in mm.

## Nonferrous materials

DIN EN new		DIN old		ASTM
CC490K	CuSn3Zn8Pb5-C	RG2	2.1098	-
CC491K	CuSn5Zn5Pb5-C	RG5	2.1096.01	B 62 UNS C83600
CC493K	CuSn7Zn4Pb7-C	RG7	2.1090	B 505 UNS C93200
CW450K	CuSn4	CUSN4	2.1016	B 103 UNS C51100
CW452K	CuSn6	CUSN6	2.1020	B 159 UNS C51900
CW453K	CuSn8	CUSN8	2.1030	B 103 UNS C52100
CW507L	CuZn36	CUZN36	2.0335	B 111 UNS C27000
CW508L	CuZn37	CUZN37	2.0321	B 111 UNS C27200
CW509L	CuZn40	CUZN40	2.0360	B 111 UNS C28000
CW610N	CuZn39Pb0,5	CUZN39PB	2.0372	B 111 UNS C36500
CW612N	CuZn39Pb2	MS58	2.0380.10	B 283 UNS C37770
CW614N	CuZn39Pb3	MS58	2.0401.08	B 283 UNS C38500
CW617N	CuZn40Pb2	MS58	2.0402.20	B 283 UNS C38000
CW710R	CuZn35Ni3Mn2AlPb	CUZN35NI	2.0540	-
CW713R	CuZn37Mn3Al2PbSi	CUZN40AL	2.0552	-
CW718R	CuZn39Mn1AlPbSi	CUZN40AL	2.0561	-
CW720R	CuZn40Mn1Pb1	CUZN40MN	2.0580	-
CW723R	CuZn40Mn2Fe1	CUZN40MN	2.0572	-

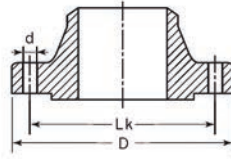
## Ferrous materials

DIN EN new		DIN old	ASTM
1.1200	Spring steel	Carbon steel	A 227
1.4021	C20Cr13	1.4021	A 276 Grade 420
1.4034	X45Cr13	1.4034	A 276 Grade 420
1.4057	X17CrNi16-2	1.4057	A 276 Grade 431
1.4104	X14CrMoS17	1.4104	A 276 Grade 430F
1.4112	X90CrMoV18	1.4112	A 276 Grade 440B
1.4122	X39CrMo17-1	1.4122	-
1.4300	X12CrNi18-8	1.4300	A 276 Grade 302
1.4301	X5CrNi18-10	1.4301	A 276 Grade 304
1.4305	X8CrNiS18-9	1.4305	A 276 Grade 303
1.4306	X2CrNi19-11	1.4306	A 312 TP 304L
1.4308	G-X6CrNi18-9	1.4308	A 351 CF8
1.4310	X10CrNi18-8	1.4310	A 313 Grade 301
1.4401	X5CrNiMo17-12-2	1.4401	A 276 Grade 316
1.4404	X2CrNiMo17-12-2	1.4404	A 276 Grade 316L
1.4408	GX5CrNiMo19-11-2	1.4408	A 351 CF 8M
1.4409	G-X2NiCrMo28-20-2	1.4409	A 351 CF 3M
1.4541	X6CrNiTi18-10	1.4541	A 276 Grade 321
1.4568	X7CrNiAl17-7	1.4568	A 313 Grade 631
1.4571	X6CrNiMoTi17-12-2	1.4571	A 313 Grade 316Ti
1.4552	G-X7CrNiNb18-9	1.4552	A 351 CF 8C
1.4923	X22CrMoV12-1	1.4923	A 193 Grade B6
1.4980	X5CrNiTi26-15	1.4980	A 286 Grade 660
1.5415	16Mo3	-	A 182 Grade F1
1.7225	42CrMo4	1.7225	A 194 Grade 7
1.7258	24CrMo5	1.7258	A 194 Grade B7
1.7335	13CrMo4-5	1.7335	A 182 Grade F12
1.7380	10CrMo9-10	1.7380	A 182 Grade F22
1.7709	21CrMoV5-7	1.7709	-

# Dimensions of DIN flanges



**DN** = Nominal diameter  
**D** = Diameter of flange  
**Lk** = Diameter of bolt circle  
**n** = Number of holes  
**d** = Diameter of holes



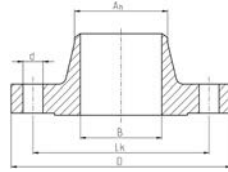
DN		PN 6				PN 10				PN 16				PN 25				PN 40			
		D	Lk	n	d	D	Lk	n	d	D	Lk	n	d	D	Lk	n	d	D	Lk	n	d
10	3/8"	75	50	4	11	90	60	4	14	90	60	4	14	90	60	4	14	90	60	4	14
15	1/2"	80	55	4	11	95	65	4	14	95	65	4	14	95	65	4	14	95	65	4	14
20	3/4"	90	65	4	11	105	75	4	14	105	75	4	14	105	75	4	14	105	75	4	14
25	1"	100	75	4	11	115	85	4	14	115	85	4	14	115	85	4	14	115	85	4	14
32	1-1/4"	120	90	4	14	140	100	4	18	140	100	4	18	140	100	4	18	140	100	4	18
40	1-1/2"	130	100	4	14	150	110	4	18	150	110	4	18	150	110	4	18	150	110	4	18
50	2"	140	110	4	14	165	125	4	18	165	125	4	18	165	125	4	18	165	125	4	18
65	2-1/2"	160	130	4	14	185	145	4	18	185	145	4	18	185	145	8	18	185	145	8	18
80	3"	190	150	4	18	200	160	8	18	200	160	8	18	200	160	8	18	200	160	8	18
100	4"	210	170	4	18	220	180	8	18	220	180	8	18	235	190	8	22	235	190	8	22
125	5"	240	200	8	18	250	210	8	18	250	210	8	18	270	220	8	26	270	220	8	26
150	6"	265	225	8	18	285	240	8	22	285	240	8	22	300	250	8	26	300	250	8	26
200	8"	320	280	8	18	340	295	8	22	340	295	8	22	360	310	12	26	375	320	12	30

DN		PN 63				PN 100				PN 160				PN 250				PN 320			
		D	Lk	n	d	D	Lk	n	d	D	Lk	n	d	D	Lk	n	d	D	Lk	n	d
10	3/8"	100	70	4	14	100	70	4	14	100	70	4	14	125	85	4	18	125	85	4	18
15	1/2"	105	75	4	14	105	75	4	14	105	75	4	14	130	90	4	18	130	90	4	18
20	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	1"	140	100	4	18	140	100	4	18	140	100	4	18	150	105	4	22	160	115	4	22
32	1-1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	1-1/2"	170	125	4	22	170	125	4	22	170	125	4	22	185	125	4	26	195	145	4	26
50	2"	180	135	4	22	195	145	4	26	195	145	4	26	200	150	8	26	210	160	8	26
65	2-1/2"	205	160	4	22	220	170	8	26	220	170	8	26	230	180	8	26	255	200	8	30
80	3"	215	170	4	22	230	180	8	26	230	180	8	26	255	200	8	30	275	220	8	30
100	4"	250	200	4	22	265	210	8	30	265	210	8	30	300	235	8	30	300	265	8	36

# Dimensions of ANSI flanges



- DN** = Nominal diameter
- D** = Diameter of flange
- Lk** = Diameter of bolt circle
- n** = Number of holes
- d** = Diameter of holes
- B** = Flange bore
- A<sub>n</sub>** = Outside diameter butt weld



				Class 150				Class 300			
DN		B	A <sub>n</sub>	D	Lk	n	d	D	Lk	n	d
15	1/2"	15.8	21.3	90	60.3	4	15.9	95	66.7	4	15.9
20	3/4"	20.9	26.7	100	69.9	4	15.9	115	82.6	4	19.0
25	1"	26.6	33.4	110	79.4	4	15.9	125	88.9	4	19.0
32	1-1/4"	35.1	42.2	115	88.9	4	15.9	135	98.4	4	19.0
40	1-1/2"	40.9	48.3	125	98.4	4	15.9	155	114.3	4	22.2
50	2"	52.5	60.3	150	120.7	4	19.1	165	127.0	8	19.0
65	2-1/2"	62.7	73.0	180	139.7	4	19.1	190	149.2	8	22.2
80	3"	77.9	88.9	190	152.4	4	19.1	210	168.3	8	22.2
100	4"	102.3	114.3	230	190.5	8	19.1	255	200.0	8	22.2
125	5"	128.2	141.3	255	215.9	8	22.2	280	235.0	8	22.2
150	6"	154.1	168.3	280	241.3	8	22.2	320	269.9	12	22.2
200	8"	202.7	219.1	345	298.5	8	22.2	380	330.2	12	25.4



# CERTIFICATE



Management system as per  
**DIN EN ISO 9001 : 2008**

In accordance with TÜV NORD CERT procedures, it is hereby certified that

**HEROSE GMBH**  
**ARMATUREN UND METALLE**  
Elly-Heuss-Knapp-Straße 12  
23843 Bad Oldesloe  
Germany



with the site **HEROSE Valves Co., Ltd., Building 18, JinGang Industry Park,  
Dalian Economy & Technology Development Park No. 49, Dalian 116600, China**

applies a management system in line with the above standard for the following scope

**Development, Manufacture and Sales of  
Industrial Valves and Pressure Safety Valves**

Certificate Registration No. 78 100 023710  
Audit Report No. 3513 7037

Valid until 2017-08-14  
Initial certification 2002

**Kaas**  
Certification Body  
at TÜV NORD CERT GmbH

Essen, 2014-08-15

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH

Langemarckstrasse 20

45141 Essen







[www.tuev-nord-cert.com](http://www.tuev-nord-cert.com)



TGA-ZM-07-06-00

Nowadays, product approvals are essential for many customer applications. Below is an excerpt of our most important certifications. A detailed list can be found at [herose.com](http://herose.com).

## Type approvals

Approval company	Approval	Mark
TÜV	CE LNG (DIN EN 12567) Firesafe (DIN EN ISO 10497)	
National Board	ASME / UV	
AQSIQ	CCC	
DIN GOST TÜV	EAC	
TSSA	CRN	
AAR		

## Classification societies



Bureau  
Veritas



China  
Classification  
Society



Det Norske Veritas/  
Germanischer  
Lloyd



Lloyd's Register



American Bureau  
of Shipping

# Overview ASME Approvals

## Safety Valves



HEROSE Type	Inlet	D <sub>0</sub>	Certificate No.	Media
06216/06217	1/2"	12 mm	91178	Vapours and Gases
06216/06217	3/4"	15 mm	91112	Vapours and Gases
06216/06217	1"	20 mm	91123	Vapours and Gases
06216/06217	1-1/4"	25 mm	91134	Vapours and Gases
06216/06217	1-1/2"	32 mm	91145	Vapours and Gases
06216/06217	2"	40 mm	91156	Vapours and Gases
06310/06311	3/4" up to 1"	9/13/17.5 mm	37112	Vapours and Gases
06310/06311	3/4" up to 1"	9/13/17.5 mm	37101	Fluids
06315/06316	1/2" up to 3/4"	10 mm	37213	Vapours and Gases
06315/06316	1/2" up to 3/4"	10 mm	37189	Fluids
06345/06346/06347	DN25 up to DN150	23 bis 125 mm	37044	Vapours and Gases
06345/06346/06347	DN25 up to DN150	23 bis 125 mm	37055	Fluids
06383/06388/06413/06418	1/2" up to 3/4"	7 mm	91011	Vapours and Gases
06383/06388/06413/06418	1/2" up to 3/4"	10.5 mm	91088	Vapours and Gases
06383/06388/06413/06418	1"	15 mm	91077	Vapours and Gases
06383/06388/06413/06418	1-1/4" up to 1-1/2"	23 mm	91101	Vapours and Gases

### General notes on application, types and identification of safety valves

**Application:** A safety valve is a valve which opens automatically to prevent a predetermined gauge pressure being exceeded and which recloses after decrease in pressure.

**Definitions:** DIN EN ISO 4126-1 und AD 2000 Merkblatt A2 specifies different types and terms for safety valves. Please see below an extract of this standard.

**Standard safety valve:** A standard safety valve is a valve which, following opening, reaches the degree of lift necessary for the mass flow to be discharged within a pressure rise of not more than 10%. No further requirements are made for the opening characteristics.

**Full lift safety valve:** A full lift safety valve is a valve which, after commencement of lift, opens rapidly within a 5% pressure rise up to the full lift as limited by the design. The amount of lift up to the rapid opening (proportional range) shall not be more than 20% of the total lift.

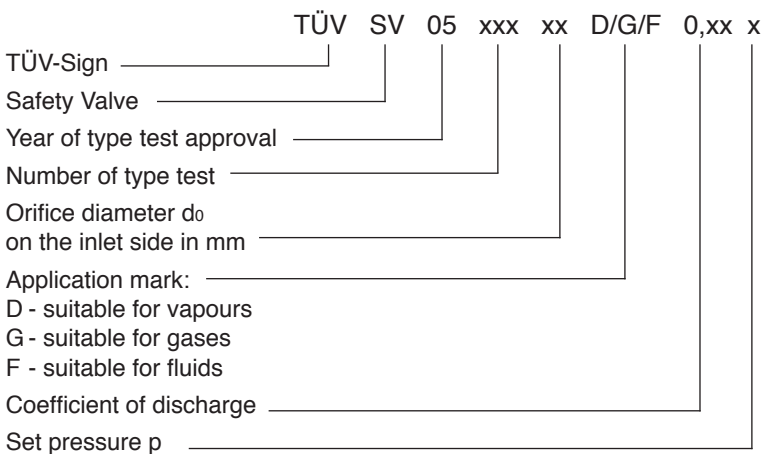
**Set pressure:** The set pressure is the gauge pressure at which under operating conditions direct loaded safety valves commence to lift.

**Test pressure:** The test pressure is the gauge pressure at which under test stand conditions (atmospheric back pressure) direct loaded safety valve commence to lift.

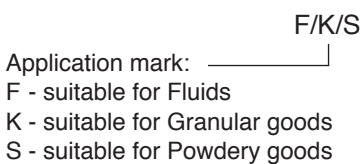
**Opening pressure:** The opening pressure is the gauge pressure at which the lift is sufficient to discharge the predetermined flowing capacity; it is equal to the set pressure plus opening pressure difference.

**Reseating pressure:** The reseating pressure is the gauge pressure at which the direct loaded safety valve is reclosed.

### Marking of type tested safety valves



### Marking of the Types 06505, 06506



# Safety Valves

## Advice for installing



### Advice for installing of safety valves

Special care is necessary when installing the safety valves in order to ensure the proper functioning of the valve.

#### Please note the following instructions carefully:

1. Safety valves should not be handled roughly during the transport, storage or assembly, e.g. using unsuitable tools.
2. Care should be taken that foreign bodies do not enter the valve. For this reason the plastic caps covering the connection openings should be removed directly before assembly.
3. Spring loaded safety valves are to be connected in such a way that the spring cap is placed standing vertically upwards.  
Spring loaded safety valves, which implies the note „suitable for horizontal installation“ can be assembled in horizontal position. The outlet flow direction has to be top down then.
4. The connecting piping must be free from dirt, rust, welding slag and other foreign bodies.
5. In the case of safety valves with female thread the connection pipes or fittings should not be screwed too deeply into the housing. No sealing material is allowed to enter the valve.
6. The blow-off pipes must be set at a descending gradient in order that the collection of the substance flowing through is avoided, and no condensation or sweating accumulation takes places in the body of the valve.
7. The lifting device should only be set in operation when operating pressure is switched on.
8. Adjustments to the test pressure of the valves, subject to governmental regulations, should only be done in our works or under the supervision of the responsible control authorities.

# Safety Valves

## Advice for ordering



### Advice for ordering of safety valves

Ordering safety valves please declare additional to Part No. and dimension the following informations:

- **type of the medium**
- **temperature of medium**
- **set pressure**

All orders are subject to our conditions of Sale 07/2014.

### Design and materials

All rights are reserved for design changes, e.g. upon entering force of new regulations, and for the use of other, equivalent materials.

Illustrations, weights and measures are without obligation.

The following Conditions shall apply for all purchase contracts and contracts for work and services between us and our commercial contract partners (hereinafter referred to as: the Customer) as well as for our offers, even if we do not explicitly refer to these in individual cases. Deviations from these shall only be binding for us if we have explicitly confirmed this in writing. The Customer's purchasing terms and conditions shall not be binding for us, even if we do not explicitly object to these.

## 1. Offer and conclusion of order

Our offer remains non-binding with regard to the price, quantity, delivery data and possibility of delivery until the order has been confirmed in writing. Ancillary agreements shall only be effective if we have confirmed these in writing.

## 2. Scope of delivery

The scope of delivery is finalised in the confirmation of the order. For goods which are not catalogue items, a tolerance in the quantity of 10% more or less items is permitted.

## 3. Delivery and delivery periods

The delivery period commences when all details of the order have been confirmed, however not until the fulfilment of the Customer's contractual obligations. The delivery period shall be deemed to have been completed if the goods have left the warehouse prior to its expiry, or, if dispatch is delayed for reasons for which the Customer is responsible, with the notification of readiness for dispatch within the agreed delivery period.

Compliance with the delivery period is conditional on correct and timely deliveries to us.

Partial deliveries which are in good time and in suitable quantities are permissible and can be invoiced separately.

If the fulfilment of our obligation for delivery is prevented by force majeure, labour disputes or other events which are not within our sphere of influence - regardless of whether these occur with us or our sub-suppliers - the fulfilment of our obligation for delivery shall be extended for the duration of the disturbance. If delivery is rendered impossible due to such an event, or is not reasonable for one of the parties, both parties shall be entitled to withdraw. In case of arrears or impossibility of delivery for which we are responsible, the customer shall be entitled to withdraw the order according to the statutory conditions. Art. 14 of these Terms and Conditions shall apply in the case of claims for compensation.

If dispatch is delayed at the wish of the customer, commencing one month after notification of readiness for delivery, the costs which are incurred due to storage, however at least 1% of the invoiced amount shall be invoiced to the customer.

## 4. Prices

All prices are ex stock plus the statutory VAT. The prices which are valid on the day of delivery apply. Packaging, loading costs, customs duties etc. shall be borne by the customer.

## 5. Shipping

Dispatch and shipping of the goods shall be at the account and risk of the customer.

## 6. Transfer of risk

The risk shall be transferred to the customer as soon as the goods have left our company. If the dispatch of the goods is delayed due to the customer, the risk shall be transferred with the notification of readiness for delivery.

## 7. Terms of payment

The invoiced amounts are payable in cash within 14 days after the date of the invoice with 2% discount of the net value of the goods, or within 30 days without deduction. Discounts may not be deducted for new invoices, as long as older invoices which are due for payment have not been settled.

In case of arrears or for the time of deferment of receivables, the statutory interest on arrears shall be charged, regardless of any further claims for compensation. If it becomes apparent subsequent to the conclusion of the contract that our claim for payment is endangered by lack of solvency on the part of the Customer, all of our outstanding invoices shall become due for payment immediately. In this case, we shall be entitled to make outstanding deliveries conditional on cash payment or the provision of a security. Any further statutory claims shall remain unprejudiced by this. Offsetting is only permissible with regard to undisputed or legally established counterclaims. The Customer is only entitled to exercise a right of retention if the claim is based on the same contractual relationship.

The same shall apply for the retention of payments.

## 8. Reservation of title

Goods which have been delivered remain our property until payment of all of our outstanding claims, including ancillary costs and interest. This shall also apply to the cashing of cheques for payment of such claims. In case of current accounts, the reservation of title is deemed to be security for our balance claim. Modification or processing of the goods subject to reservation of title shall be performed on our behalf, without this giving rise to any obligations for us.

In the case of processing, combination or mixing of our goods with other goods which are not our property, we shall be entitled to co-ownership of the new goods in the relationship of the invoice value of the goods subject to reservation of title to the value of the other processed goods at the time of processing, combination or mixing. If the Customer obtains the sole ownership of the new goods, he herewith transfers co-ownership of the new goods in the relationship of the other processed goods at the time of processing, combination or mixing and shall keep the said goods on our behalf with due business diligence.

Resale of the delivered goods, regardless of whether these are unprocessed, or have been processed, combined or mixed is only permitted in the normal course of business with reservation of title, and only then, if the claims resulting from the resale are ceded to us. The Customer is prohibited from pledging or transferring the goods as security, as is the agreement of a prohibition of assignment and an assignment without our consent in the context of factoring. The Customer shall inform us without delay in case of seizure or any other impairment of our entitlements by third parties. The Customer hereby assigns to us in advance, all claims to which he is entitled now or at a later date from the resale or for whatever legal reason with regard to the goods which we have delivered. We accept the said assignment. The value of the goods subject to reservation of title is our invoice amount plus a security surcharge of 10%, which however remains without effect if this is precluded by the rights of third parties. In the case of resale of our goods after processing, combination or mixing, or the resale of the new goods which result from processing, combination or mixing, the claim against the Customer's buyer shall be assigned to the amount of the invoice value of our processed, combined or mixed goods. This shall also apply in the case of resale after our goods have become an essential part of another good after combination or processing with other goods which are not our property. If the value of the securities which are provided to us exceeds a total of 10%, we shall be obliged to release securities of our choice if so requested by the Customer. With the payment of our claims, ownership of the goods subject to reservation of title and the assigned claims shall be transferred to the Customer. Until this is revoked by us, the Customer is entitled to collect the purchase price on our behalf. On demand, the Customer shall be obliged to notify the assignment to his buyer and to provide the necessary information and to surrender the documents which are necessary for us to enforce our claims against the said buyer.

## 10. Liability for defects

The warranty rights of the Customer are conditional on him having fulfilled his obligations for examination and complaint according to Art 377 HGB (German Commercial Code).

Increases or reductions in weight due to the casting process do not entitle the Customer to complain. If the item being purchased is defective, we can remedy the defect or deliver a replacement, at our discretion. If we remedy the defect, we shall bear all expenses necessary to remedy the defect, especially the costs of transport, travel, work and material unless they are increased due to the fact that the item being purchased was taken to a place other than the place of performance. The Customer may withdraw from the contract or demand a reduction if after having been set a reasonable period of grace we fail to provide a subsequent delivery or correction, if correction has finally failed, if we refuse the said correction or if this is unreasonable to the Customer. If there is only an insignificant fault and the goods can be utilised by the Customer without disadvantage, he is only entitled to a reduction in the purchase price.

For new products, the warranty period is 1 year from the date of delivery. No warranty is assumed for used products. The period of limitation in case of a delivery recourse according to Art. 478, 479 BGB is not affected by the regulations of the two previous provisions. Compensation claims due to an injury to life, limb or health which are due to a fault, or according to product liability law are also not restricted by the aforementioned regulations. Other claims for compensation under warranty law are also not restricted by this regulation in the case of gross negligence, wilful action or breach of major contractual obligations. Clause 14 of these Terms and Conditions applies.

## 11. Return delivery

Return deliveries which are not based on a legal claim may only be made with carriage paid with our explicit consent. As compensation for the costs which we incur for any return delivery, we reserve the right to an appropriate deduction from the net value of the goods in the credit note of at least 20% of the net value of the goods.

## 12. Catalogues

Illustrations in our catalogues and brochures are not binding with regard to the design. We reserve the right to changes to the design, insofar as these is necessary for technical reasons and do not impair the purpose of the contract. Deviations from the specified dimensions and weights are permissible, if the said do not impair the contractual purpose and quality.

## 13. Copyright

We reserve ownership and copyright for catalogues, illustrations, drawings, samples and other documents. These may not be made accessible to third parties without our consent and must be returned to us immediately on demand. If an order which is placed with us on the basis of submitted drawings or models infringes against third party patent rights, design rights or trademarks, the Customer shall bear all responsibility for this and shall be liable to us for any claims for damages or loss of profit and shall indemnify us against any claims by third parties, unless he is not responsible for the infringement.

## 14. General liability

We shall only be liable in the case of wilful action or gross negligence. In the case of a breach of major contractual obligations we shall also be liable for simple negligence. Major contractual obligations are those, whose fulfilment enables the proper fulfilment of the contract and on whose fulfilment the purchaser may normally rely and does rely. Except for the case of wilful intent, our liability shall be restricted to damage which is typical for the contract and which is reasonably foreseeable.

The aforementioned limitation of liability shall not apply in the case of injury to life, limb or health and in cases of liability under product liability laws.

The Customers claims for the compensation of expenses pursuant to Section 284 BGB are excluded to the extent that the claim for damages in lieu of performance is excluded pursuant to the foregoing provisions. The aforementioned restriction of liability shall also apply in favour of our employees, bodies and other agents.

## 15. Place of performance, place of jurisdiction, applicable law, miscellaneous

The place of performance for all claims arising from this contract is our registered office. The place of jurisdiction for all disputes with businessmen, legal entities under public law or special funds under public law, or with persons who do not have a general jurisdiction in Germany, is our registered office. However, we are entitled to bring an action against the Customer at the Customers registered place of business.

These Conditions shall be governed by the laws of the Federal Republic of Germany to the exclusion of the UN Convention of the International Sale of Goods (CISG).





## CRYOGENIC



### Globe valves, control valves, check valves and fillsystems for Cryogenic Service

Media: liquefied gases such as oxygen, nitrogen, argon, krypton and LNG  
 Sizes: DN10 (3/8") to DN50 (2") (gunmetal/brass)  
 DN10 (3/8") to DN200 (8") (stainless steel)  
 Temperature: -255°C (-427°F) to +120°C (+248°F)  
 Pressure: up to 50 bar (725 psi)



### Safety valves for Cryogenic Service

Media: liquefied gases such as oxygen, nitrogen, argon, carbon dioxide and LNG  
 Sizes: DN6 (1/4") to DN50 (2")  
 Temperature: -270°C (-454°F) to +400°C (+752°F)  
 Pressure: 0.2 bar (3 psi) to 250 bar (3626 psi)

## INDUSTRY



### Safety valves for gases, vapours and fluids

Media: Gases, vapours, fluids, liquefied gases, refrigerants and dusty media  
 Sizes: DN6 (1/4") to DN50 (2")  
 Temperature: -270°C (-454°F) to +400°C (+752°F)  
 Pressure: 0.2 bar (3 psi) to 250 bar (3626 psi)



### DIN EN valves made of gunmetal/brass

Media: non-flammable and non-toxic fluids, gases and vapours  
 Sizes: DN6 (1/4") to DN150 (6")  
 Temperature: -10°C (+14°F) to +200°C (+392°F)  
 Pressure: up to 16 bar (232 psi)

## ENERGY



### Drain valves, three-way valves, ball valves and gate valves for oil-immersed transformers

Media: Transformer oil  
 Sizes: DN15 (1/2") to DN250 (10")  
 Temperature: -50°C (-58°F) to +120°C (+248°F)  
 Pressure: up to 16 bar (232 psi)

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