Safety Valves
Type 50051.0004

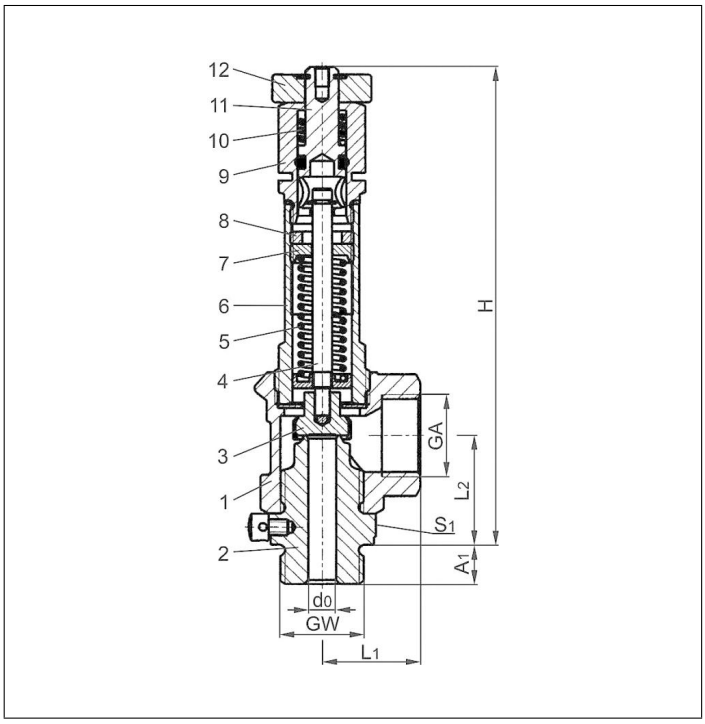
Safety Valves, angle type, bronze
Lloyds Register Approval LR-TA 92/20011

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



Type 50051.0004	Technical data	
Nominal size	**GW**	**1/2**
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 - gas	α_w	0.68
Coefficient of discharge - fluid	α_w	0.53

Dimensions in mm.

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Discharge capacities
Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:
Air in m^3/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^2)	38.48	38.48
	Medium	**Air**	**Water**
6.0		136	3422
7.0		155	3697
8.0		176	3952
9.0		195	4192
10.0		216	4419
11.0		235	4634
12.0		255	4840
13.0		275	5038
14.0		295	5228
15.0		315	5412