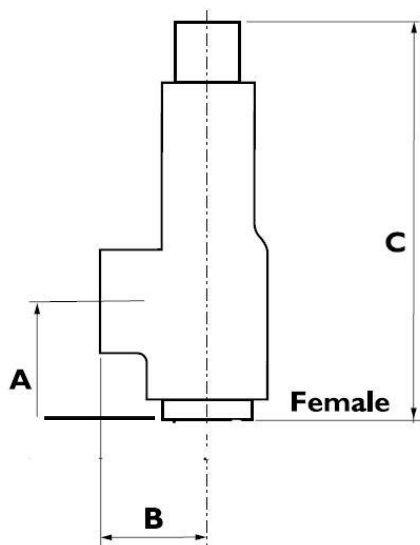


Safety Relief Valve for Steam - FIG 707

Dimensions



Valve Size	mm	Inlet (in)	Outlet (in)	A (mm)	B (mm)	C (mm)	Weight (kg)
DN15	15	1/2	1/2	40	29	111	0.6
DN20	20	3/4	3/4	46	37	140	1.0
DN25	25	1	1	56	40	163	1.5
DN32	32	1 1/4	1 1/4	67	48	183	3.0
DN40	40	1 1/2	1 1/2	67	56	216	4.5
DN50	50	2	2	79	71	268	6.0

Technical Specification

Connections Screwed BSPP Female x Female

Cap Open Lever

Pressure range 0.35 - 15.9 bar (see overleaf for full range)

Temperature range -20°C to +200°C

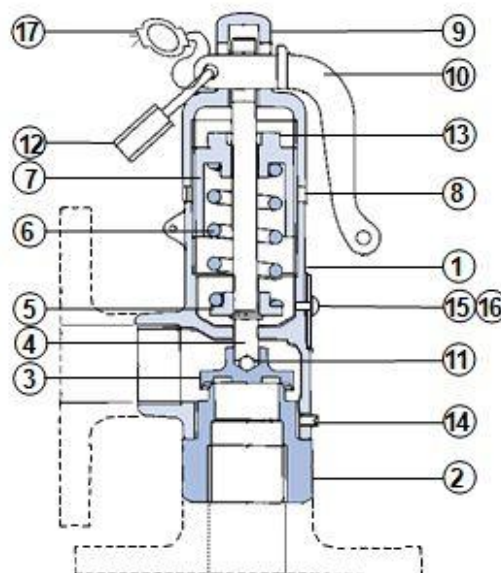
Approved to BS EN ISO 4126 Part 1

Pressure Equipment Directive (PED) ISO 9001:2008

Suitable for duty on air/gas, steam/hot water and **compatible** process liquids

Materials of Construction

1	Body	Bronze
2	Seat	Bronze
3	Disc	Stainless Steel / Aflas
4	Spindle	Stainless Steel
5	Spring cap	Stainless Steel
6	Spring	Chrome Alloy
7	Adjustment screw	Bronze
8	Locking ring	Bronze
9	Dome	Bronze
10	Lever	Bronze
11	Ball	Stainless Steel
12	Padlock	Brass
13	Bush	PTFE
14	Pinning screw	Steel
15	Nameplate	Aluminium
16	Nameplate screw	Steel
17	Lead & wire seal	Lead & Stainless Steel



Safety Relief Valve for Steam - FIG 707

Air Capacity Chart

(l/s) @ 0.3 Barg or 10% overpressure* and 15°C

BS EN ISO 4126 Pt 1 (BS6759 Pt 1:2:3)

Set Pressure (Barg)	DN15	DN20	DN25	DN32	DN40	DN50
0.35	3.93	11.4	15.0	24.7	38.7	60.6
1.0	8.28	23.9	31.6	52.0	81.5	128
2.0	13.6	39.1	51.7	85.0	133	209
3.0	18.3	52.8	69.8	115	180	282
4.0	22.9	66.3	87.6	144	226	354
5.0	27.6	79.7	105	173	272	426
6.0	32.3	93.2	123	203	317	497
7.0	36.9	107	141	232	363	569
8.0	41.6	120	159	261	409	641
9.0	46.2	134	177	290	455	713
10.0	50.9	147	194	320	501	785
12.0	60.2		230	378	593	929
12.5	66.6		239	393	616	965
14.0	69.5					
16.0	78.9					

* Minimum overpressure = 0.07 Barg at set pressure less than 1.0 Barg.

Other Gases

If you wish to use the valve on other compatible gases, the sizing details above can be used. The valve capacity will however change depending on the specific gravity of the flowing gas. Multiply the valve air capacity by $1/\sqrt{\text{SG}}$ to give the gas capacity.

SG = specific gravity (relative to air = 1).

Water Capacity Chart

(l/min) @ 10% overpressure* @ 20°C

BS6759 Pt 3

Set Pressure (Barg)	DN15	DN20	DN25	DN32	DN40	DN50
0.35	10.3	29.8	39.4	64.8	102	159
1.0	16.7	48.3	63.8	105	164	258
2.0	23.6	68.3	90.2	148	233	364
3.0	28.9	83.6	110	182	285	446
4.0	33.4	96.5	128	210	329	515
5.0	37.4	108	143	235	368	576
6.0	40.9	118	156	257	403	631
7.0	44.2	128	169	278	435	682
8.0	47.3	137	180	297	465	729
9.0	50.1	145	191	315	493	773
10.0	52.8	153	202	332	520	815
12.0	57.9		221	363	570	893
12.5	59.1		226	371	581	911
14.0	62.5					
16.0	66.8					

* Minimum overpressure = 0.07 Barg at set pressure less than 0.7 Barg.

Other Liquids

If you wish to use the valve on other compatible liquids, the sizing details above can be used. The valve capacity will however change depending on the specific gravity of the flowing liquid. Multiply the valve water capacity by $1/\sqrt{\text{SG}}$ to give the liquid capacity.

SG = specific gravity (relative to water = 1).

Saturated Steam Capacity Chart

kg/h

BS EN ISO 4126 Pt 1 (BS6759 Pt 1:2:3 @ 10% overpressure*)

Set Pressure (Barg)	DN15	DN20	DN25	DN32	DN40	DN50
0.35	9.68	28.0	37.0	60.8	95.3	149
1.0	22.6	65.2	86.2	142	222	348
2.0	35.9	104	137	225	353	553
3.0	47.8	138	182	300	470	737
4.0	59.3	171	226	372	583	914
5.0	76.6	221	292	481	753	1181
6.0	89.0	257	340	559	876	1372
7.0	99.9	289	381	627	983	1540
8.0	112	324	428	705	1104	1731
9.0	123	355	469	771	1208	1893
10.0	135	390	515	848	1329	2082
12.0	157		600	987	1548	2425
12.5	167		637	1048	1642	2573
14.0	182					
16.0	201					

* Minimum overpressure = 0.07 Barg at set pressure less than 0.7 Barg.

Hot Water Capacity Chart (kW)

For a Pressurised (unvented) system

BS6759 Pt1 @ 10% overpressure*

Set Pressure (Barg)	DN15	DN20	DN25	DN32	DN40	DN50
0.35	6.88	19.9	26.3	43.2	67.7	106
1.0	14.0	40.5	53.5	88.0	138	216
2.0	22.9	66.3	87.5	144	226	354
3.0	30.9	89.4	118	194	304	477
4.0	38.8	112	148	244	382	599
5.0	46.7	135	178	293	460	720
6.0	54.6	158	208	343	537	842
7.0	62.5	181	239	392	615	964
8.0	70.4	203	269	442	693	1085
9.0	78.3	226	299	491	770	1207
10.0	86.2	249	329	541	848	1329
12.0	102		389	640	1003	1572
12.5	106		404	665	1042	1633
14.0	118					
16.0	133					

* Minimum overpressure = 0.07 Barg at set pressure less than 0.7 Barg.

Note

Pressurised (unvented) hot water systems have the entire discharge capacity handled solely by the valve.

Open vented systems take into account the discharge capacities of the vent. Hence the equivalent discharge of the valve/system is considered to be double the above chart capacities.

Safety Relief Valve for Steam - FIG 707

Unset Pressure Range

Valve Size	mm	Pressure (Bar)						
		0.35-1.0	1.0-1.7	1.7-2.4	1.7-3.5	2.4-3.5	2.4-4.1	3.5-5.5
DN15	15	66550008	66550019	66550030		66550041		66550052
DN20	20	66550096	66550104		66550115			
DN25	25	66550181	66550192	66550200			66550211	
DN32	32	66550266	66550277	66550288			66550299	
DN40	40	66550351	66550362	66550373			66550384	
DN50	50	66550436	66550447	66550458			66550469	

Valve Size	mm	Pressure (Bar)					
		3.5-6.9	4.1-5.5	5.5-8.3	6.9-10.3	8.3-12.5	8.3-15.9
DN15	15			66550063			66550074
DN20	20	66550126			66550137		
DN25	25		66550222	66550233		66550244	
DN32	32		66550307	66550318		66550329	
DN40	40		66550395	66550403		66550414	
DN50	50		66550480	66550491		66550510	

Springs for BOSS 707

Spring Colour		Red	Blue
Valve Size	mm	0.35-1.0 bar	1.0-1.7 bar
DN15	15	66521464	
DN20	20	66521475	
DN25	25	66521505	
DN32	32	66521516	
DN40	40		66521571
DN50	50		66521582