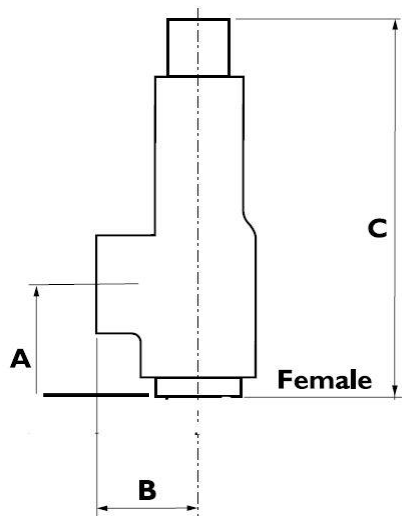


Safety Relief Valve (WRAS) - FIG 707

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

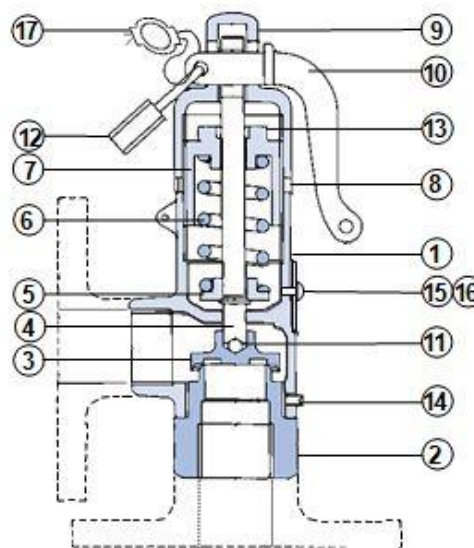
Suitable for duty on air and water

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 +95°C
Approved to BS EN ISO 4126 Part 1	
Pressure Equipment Directive (PED) ISO 9001:2008	

Materials of Construction

1	Body	Bronze
2	Seat	Bronze
3	Disc	Stainless Steel / EPDM
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 (WRAS) - 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).

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.

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).

Safety Relief Valve (WRAS) - FIG 707

Unset Pressure Range

Valve Size	Spring Colour mm	Red 0.35-1.0 bar	Blue 1.0-1.7 bar	Orange 1.7-2.4 bar	Orange 1.7-3.5 bar	Orange/Blue 2.4-3.5 bar	Orange/Blue 2.4-4.1 bar	Green/White 3.5-5.5 bar
DN15	15	66520931	66520942	66520953		66520964		66520975
DN20	20	66521014	66521025		66521036			
DN25	25	66521110	66521121	66521132			66521143	
DN32	32	66521198	66521206	66521217			66521228	
DN40	40	66521283	66521294	66521302			66521313	
DN50	50	66521368	66521379	66521390			66521409	

Valve Size	Spring Colour mm	Orange/Blue 3.5-6.9 bar	Purple 4.1-5.5 bar	Green/White 5.5-8.3 bar	Purple 6.9-10.3 bar	Green/Blue 8.3-12.5 bar	White/Blue 8.3-15.9 bar
DN15	15			66520986			66520997
DN20	20	66521047			66521058		
DN25	25		66521154	66521165		66521176	
DN32	32		66521239	66521250		66521261	
DN40	40		66521324	66521335		66521346	
DN50	50		66521420	66521431		66521442	

Preset Pressure Range

Valve Size	mm	2.0 bar	2.1 bar	2.5 bar	3.0 bar	3.1 bar	3.5 bar	4.0 bar
DN15	15	66520001	66520698	66520706	66520012	66520023	66520034	66520045
Valve Size	mm	4.5 bar	5.0 bar	5.5 bar	6.0 bar	7.0 bar	8.0 bar	
DN15	15	66520056	66520067	66520078	66520089	66520108	66520119	
Valve Size	mm	1.0 bar	1.1 bar	1.4 bar	1.5 bar	1.8 bar	2.0 bar	2.1 bar
DN20	20	66520130	66520739	66520750	66520141	66520761	66520152	66520772
Valve Size	mm	2.2 bar	2.5 bar	2.8 bar	2.9 bar	3.0 bar	3.1 bar	3.4 bar
DN20	20	66520163	66520174	66520185	66520802	66520196	66520204	66520215
Valve Size	mm	3.5 bar	3.7 bar	4.0 bar	4.5 bar	5.0 bar	6.0 bar	7.0 bar
DN20	20	66520226	66520237	66520248	66520259	66520270	66520281	66520292
Valve Size	mm	8.0 bar						
DN20	20	66520300						
Valve Size	mm	1.1 bar	1.4 bar	1.5 bar	1.8 bar	2.0 bar	2.1 bar	2.5 bar
DN25	25	66520835	66520846	66520311	66520857	66520322	66520868	66520333
Valve Size	mm	2.8 bar	3.0 bar	3.1 bar	3.2 bar	3.5 bar	3.7 bar	4.0 bar
DN25	25	66520890	66520344	66520355	66520366	66520377	66520388	66520399
Valve Size	mm	4.5 bar	5.0 bar	5.5 bar	6.0 bar	6.5 bar	7.0 bar	8.0 bar
DN25	25	66520407	66520418	66520429	66520440	66520451	66520462	66520473
Valve Size	mm	3.0 bar	3.3 bar	3.5 bar	4.0 bar	4.5 bar	5.0 bar	6.0 bar
DN32	32	66520484	66520495	66520503	66520514	66520525	66520536	66520547
Valve Size	mm	3.0 bar	3.1 bar	3.5 bar	4.0 bar	4.5 bar	4.9 bar	
DN40	40	66520558	66520569	66520580	66520591	66520610	66520621	
Valve Size	mm	2.5 bar	3.0 bar	3.1 bar	3.5 bar	4.0 bar	6.0 bar	
DN50	50	66520643	66520654	66520665	66520676	66520687	66520632	

Safety Relief Valve (WRAS) - FIG 707

Springs for BOSS 707

Spring Colour		Red	Blue	Orange	Orange	Orange/Blue	Orange/Blue	Orange/Blue
Valve Size	mm	0.35-1.0 bar	1.0-1.7 bar	1.7-2.4 bar	1.7-3.5 bar	2.4-3.5 bar	2.4-4.1 bar	3.5-6.9 bar
DN15	15	66521464	66521527	66521593		66521656		
DN20	20	66521475	66521538		66521601			66521667
DN25	25	66521486	66521549	66521612			66521678	
DN32	32	66521497	66521560	66521623			66521689	
DN40	40	66521505	66521571	66521634			66521708	
DN50	50	66521516	66521582	66521645			66521719	
Spring Colour		Green/White	Purple	Green/White	Purple	Green/Blue	Green/Blue	White/Blue
Valve Size	mm	3.5-5.5 bar	4.1-5.5 bar	5.5-8.3 bar	6.9-10.3 bar	8.3-10.3 bar	8.3-12.5 bar	8.3-15.9 bar
DN15	15	66521730		66521796				66521859
DN20	20				66521741			
DN25	25		66521752	66521815			66521881	
DN32	32		66521763	66521826		66521892		
DN40	40		66521774	66521837		66521900		
DN50	50		66521785	66521848		66521911		
Spring Colour		White/Blue	Green/White	Red/Orange	Red/Orange	Red/Orange	Yellow/Blue	
Valve Size	mm	10.3-12.5 bar	10.3-13.8 bar	12.5-19.3 bar	13.8-20.7 bar	15.9-19.3 bar	20.7-24.1 bar	
DN15	15					66521922		
DN20	20		66521804		66521870		66521933	
DN25	25			66521944				
DN32	32	66521955						
DN40	40	66521966						
DN50	50	66521977						