

723/6 & 733/6

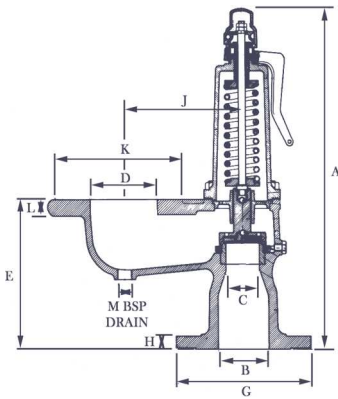
Cast Steel Safety Relief Valve Double High Lift

For Steam, Water, Oil, Air & Gasses

PN16/25/40, ANSI 150/300 & BS10 F/H Inlet Flanged*
PN10/16/25, ANSI 125/150 & BS10 E/F Outlet Flanged*

(*Dependent on series, specify when enquiring)

Bailey Birkett



The 720 and 730 series of double (twin) high lift safety valves combine a top guided design, to provide an unobstructed seat bore, with a floating disc that aligns correctly under all working conditions.

The spring is protected from the effects of high temperature steam when discharging, and the adjustable blow down ring ensures good reseating performance.

Various material options enable the valve to be applied to steam, air, gas and liquid duty on boilers, pressure vessels, calorifiers, air compressors or pipeline installations.

Approvals, Features & Benefits

- BS6759 Part 1, 2 & 3
- Double seated for higher capacities
- Guaranteed pressure tightness
- Drain plug
- Adjustable blow-down ring
- Accurate disc alignment
- Lock & lever or dome top
- Set, tested and certified prior to despatch

Pressure & Temperature

Pressure range:-

723/726 : 0.25 to 13 bar

733/736 : 0.25 to 24 bar

Temperature range:-

-20°C to 230°C

DN	40	50	65	80	100
A** (726 - Lever)	389 (452)	498 (498)	570 (660)	670 (702)	843 (911)
A** (723 - Dome)	354 (416)	463 (463)	522 (613)	621 (652)	784 (852)
A (736 - Lever)	452	498	660	702	911
A (733 - Dome)	412	463	613	652	852
B	63.5	76	89	102	152
C	38	51	63.5	76	102
D	76	102	127	152	203
E	197	229	279	295	381
G	190.5	209.6	254	254	317.5
H	25.4	28.6	31.8	31.8	36.5
J	156	181	219	238	292
K	195	227	268	285	340
L	28.6	31.8	34.9	292	41.3
M (BSP)	3/8"	1/2"	1/2"	1/2"	1/2"
Orifice (mm ²)	2280	4054	6334	9120	16214
Weight KG	25	38	58	83	149

** Dimensions in brackets when 723/736 valve is set between 10.7 - 13 bar (with the exception of DN50)

Media	Kdr
Steam	0.198
Hot Water (>100°C)	0.198
Air/Gases	0.198
Liquid	0.209

Materials	
Body	Cast Steel
Cover	Cast Iron
Valve Disc Holder & Guide	Bronze
Valve Disc & Seat Ring	Stainless Steel
Spindle	HT Brass / Stainless Steel
Spring	Steel
Dome & Lever	Iron

733/6 & 733/6

Capacity Charts/Sizing

COMPRESSED AIR CAPACITY - FREE AIR m ³ /min					
Set Pressure (Bar)	DN40	DN50	DN65	DN80	DN100
0.25*	11.52	20.48	32.00	46.08	81.92
0.5*	14.58	25.92	40.44	58.26	103.60
1.0	20.88	37.12	58.00	83.40	148.60
1.5	26.08	46.40	72.40	104.40	185.40
2	28.98	51.50	81.00	115.80	206.00
3	36.56	65.00	101.60	146.20	260.00
4	39.32	69.90	109.20	157.30	279.80
5	47.18	83.84	131.00	188.60	335.40
6	53.26	94.64	147.80	213.00	378.60
7	60.84	108.00	169.00	242.20	432.60
8	68.40	121.60	190.00	273.80	486.80
9	76.00	135.00	211.20	304.00	540.60
10	83.60	148.60	232.40	334.40	594.80
12	98.80	175.60	274.60	395.20	702.60
14	114.00	202.60	316.60	456.00	810.80
16	129.20	229.60	358.80	516.60	918.60
18	144.40	256.60	401.00	577.40	1026.80
20	159.50	283.70	443.20	638.00	1134.80
22	174.80	310.40	485.40	698.80	1242.80
24	189.80	337.40	527.60	759.60	1350.80

*Capacities for 0.25 & 0.5 bar may be multiplied 1.15, providing a pressure rise of 0.07 barg is allowed.

STEAM CAPACITY - kg/h					
Set Pressure (Bar)	DN40	DN50	DN65	DN80	DN100
0.25	346	614	960	1382	2458
0.5	414	736	1150	1656	2944
1.0	550	978	1530	2202	3918
1.5	688	1222	1910	2750	4890
2	824	1464	2290	3298	5864
3	1098	1952	3050	4392	7810
4	1372	2438	3810	5486	9756
5	1646	2924	4570	6580	11702
6	1918	3410	5330	7674	13647
7	2192	3896	6090	8768	15594
8	2466	4382	6852	9864	17540
9	2740	4870	7612	10958	19486
10	3014	5356	8372	12052	21432
12	3560	6328	9892	14240	25324
14	4108	7300	11412	16430	29216
16	4656	8274	12932	18618	33108
18	5202	9246	14452	20806	37000
20	5750	10218	15974	22996	40892
22	6298	11192	17494	25184	44784
24	6844	12164	19014	27372	48676

WATER CAPACITY - 25% Overpressure l/min					
Set Pressure (Bar)	DN40	DN50	DN65	DN80	DN100
0.25	218	388	608	876	1558
0.50	308	550	860	1238	2202
1.0	436	778	1216	1752	3114
1.5	536	952	1488	2146	3814
2	618	1100	1720	2478	4406
3	758	1348	2106	3036	5396
4	874	1556	2432	3504	6230
5	978	1740	2718	3918	6966
6	1072	1906	2978	4292	7630
7	1158	2060	3218	4636	8242
8	1236	2202	3440	4956	8810
9	1312	2334	3648	5258	9346
10	1384	2462	3846	5542	9852
12	1514	2696	4212	6070	10792
14	1636	2912	4550	6558	11656
16	1750	3114	4864	7010	12460
18	1856	3302	5158	7436	13216
20	1956	3480	5438	7838	13932
22	2052	3652	5704	8220	14612
24	2142	3814	5956	8586	15262

HOT WATER BOILERS - kW**					
Set Pressure (Bar)	DN40	DN50	DN65	DN80	DN100
0.25	50	80	116	200	400
0.50	88	152	260	348	640
1.0	180	316	500	720	1280
1.5	278	450	754	1084	1930
2	362	646	1010	1440	2560
3	534	970	1490	2150	3820
4	710	1280	1990	2870	5120
5	900	1594	2490	3580	6380
6	1080	1910	2990	4300	7650
7	1260	2256	3500	5050	8990
8	1442	2574	4010	5780	10250
9	1622	2900	4514	6500	11540
10	1806	3212	5020	7210	12860
12	2170	3860	6020	8630	15410
14	2522	4500	7000	10080	17940
16	2882	5124	8016	11530	20500
18	3244	5770	9014	12980	23060
20	3602	6406	10000	14420	25630
22	3962	7036	11014	15840	28160
24	4326	7684	12000	17290	30710

**Based on BS 759:1975 for Externally Pressurised Boilers

Above tables not in accordance with BS 6759.