



542F
Bronze
Safety Relief Valve
Standard Capacity
For Steam, Water, Oil, Air & Inert Gasses
Flanged Inlet x BSP Threaded Outlet



The Nabic 542F safety valve is an extremely versatile valve, suitable for use on hot water, steam or air. Although designed primarily for protection of hot water boilers, its wide range of applications make it an ideal general purpose safety valve.

All wetted parts are manufactured from dezincification resistance materials.

Approvals, Features & Benefits

- BS6759 & BS EN ISO 4126
- WRAS approved
- Various flange drillings available
- Testing lever
- Resilient PTFE seating design
- Diaphragm protected working parts
- Set, tested and certified prior to despatch

Pressure & Temperature

Pressure range:-
0.3 to 10.5 bar

Temperature range:-
-20°C to 195°C

DN (R)	32 (1¼")	40 (1½")	50 (2")	65 (2½")	80 (3")
A	46	54	64	76	90
B	60	64	73	83	96
C	180	225	263	303	366
Weight Kg	3.00	4.40	7.15	10.00	16.41

Materials	
Body & Spring Cover	Bronze
Seat Seal	PTFE (Viton option)
Piston	Brass
Spring	Chrome Vanadium Alloy Steel (Stainless Steel option)
Adjusting Screw	Brass
Lever	Brass
Diaphragm	Silicon Rubber
Spindle	Brass
Seat Seal Holder & Retaining Plate	Bronze/Brass

When ordering, the following information is necessary to ensure that the correct size and type of valve is selected.

1. Service	2. Application
3. System working pressure	4. Set pressure
5. Required maximum Capacity	6. Connections

542F

Capacity Charts/Sizing

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1) std. litres/sec (Kdr = 0.19)					
Set Pressure (Bar)	DN32	DN40	DN50	DN65	DN80
1.0	62	97	151	256	387
2.0	94	148	230	389	590
3.0	127	198	310	523	793
4.0	159	249	389	657	995
6.0	224	350	547	925	1401
8.0	289	452	705	1192	1806
10.0	354	553	864	1460	2212
10.5	370	578	903	1527	2313

To convert to ft³/min multiply by 2.1

STEAM CAPACITY - 10% OVERPRESSURE (BS 6759) Kg/hr (Kdr = 0.19)					
Set Pressure (Bar)	DN32	DN40	DN50	DN65	DN80
1.0	168	263	411	695	1053
2.0	257	401	627	1059	1604
3.0	345	539	842	1423	2156
4.0	433	677	1057	1787	2707
6.0	610	953	1488	2515	3810
8.0	786	1229	1919	3244	4913
10.0	962	1505	2350	3972	6016
10.5	1006	1574	2457	4154	6292

To convert to lb/hr multiply by 2.2
* The minimum bore size permitted by BS specifications for steam and hot water boilers is 20mm.

HOT WATER - UNVENTED SYSTEM CAPACITY - 10% OVERPRESSURE (BS EN 4126-1) kW (Kdr = 0.19)					
Set Pressure (Bar)	DN32	DN40	DN50	DN65	DN80
1.0	106	165	258	436	660
2.0	161	251	393	664	1005
3.0	216	338	528	892	1351
4.0	271	424	663	1120	1697
6.0	382	597	933	1576	2388
8.0	493	770	1203	2033	3079
10.0	603	943	1472	2489	3770
10.5	631	986	1540	2603	3943

To convert to Btu/hr multiply by 3400

WATER - UNVENTED SYSTEM CAPACITY - 10% OVERPRESSURE (BS EN 4126-1) kg/min (Kdr = 0.19)					
Set Pressure (Bar)	DN32	DN40	DN50	DN65	DN80
1.0	136	213	332	561	850
2.0	192	301	469	793	1202
3.0	235	368	575	972	1472
4.0	272	425	664	1122	1700
6.0	333	521	813	1374	2082
8.0	385	601	939	1587	2404
10.0	430	672	1050	1774	2687
10.5	441	689	1076	1818	2754

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a rated coefficient of discharge (Kdr) 0.19, approved by AOTC.