

# NABIC®



## SAFETY, PRESSURE RELIEF & CONTROL VALVES



- Safety Relief Valves
- Pressure Relief Valves
- Combined Pressure & Temperature Relief Valves
- Anti-Vacuum Valves
- Boiler System Valves
- Pipe Interrupters
- Test Valves & Test Equipment

OUR GENIUS IS VALVES

**CRANE**

BUILDING SERVICES & UTILITIES

[www.nabicvalves.com](http://www.nabicvalves.com)

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# Quality Above All

## DESIGN

All NABIC safety valves were originally designed and tested in accordance with the requirements of BS 6759 and are now compliant with BS EN ISO 4126-1:2013.

Boilers and pressure vessels, designed to BS specifications, usually require the fitting of a safety valve which complies with BS EN ISO 4126-1:2013. NABIC valves are also designed to meet Pressure Equipment Directive guidelines - PED 97/23/EC and Article 13 of 2014/68/EU.



Pressure Equipment Directive  
PED 97/23/EC and  
Article 13 of 2014/68/EU

## MATERIALS

Materials used in NABIC safety valves form no risk to health when used in their intended manner. Each range of valves has been tested and approved for use on potable water, by the Water Regulations Advisory Scheme (WRAS).



## ASSURANCE

Crane Building Services & Utilities operate a Quality Assurance system to ISO 9001, which ensures that the quality of production is continuously monitored. All safety valves are set, tested, stamped and sealed, prior to despatch. The Company is also approved to ISO 14001 having an effective environmental management policy in place.



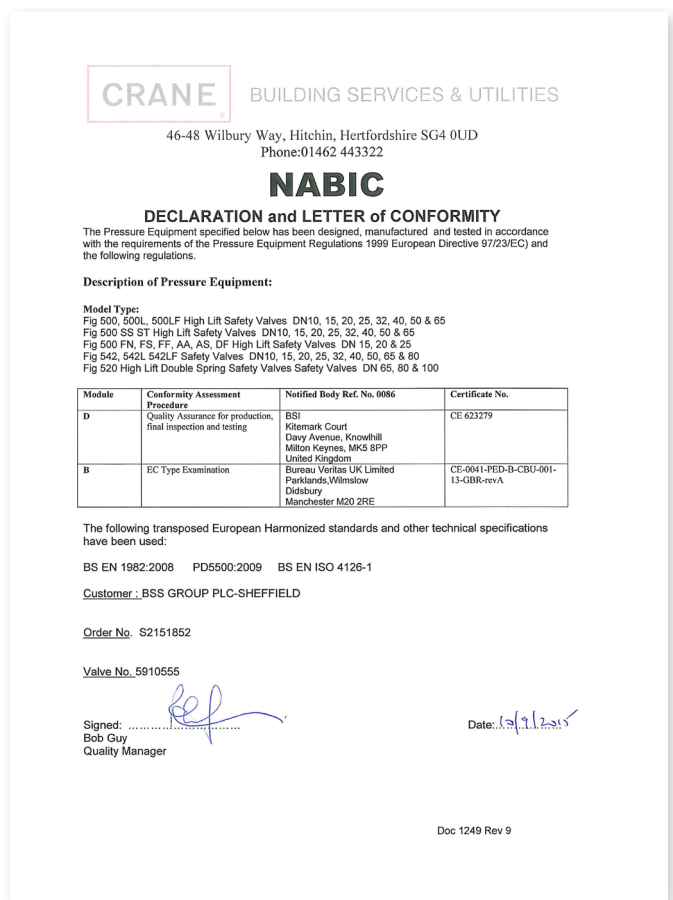
FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657

## CERTIFICATION

Pressure Test Certificate and Letters of Conformity for individual valves can be supplied when requested.

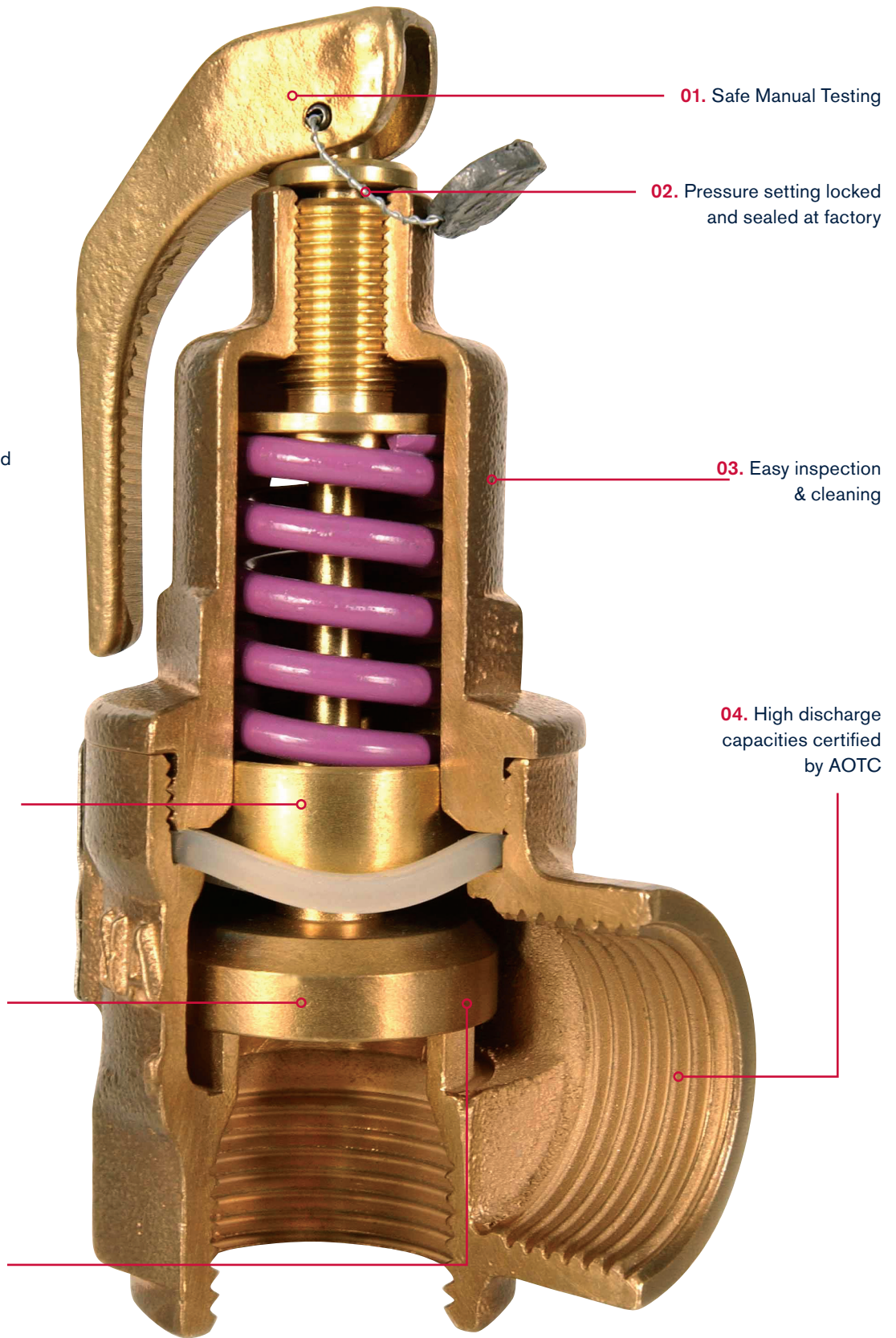


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## PERFORMANCE

Comprehensive performance tests have been carried out on each range of NABIC valves. Discharge capacities are certified by the Associated Offices Technical Committee (AOTC)



01. Safe Manual Testing

02. Pressure setting locked and sealed at factory

03. Easy inspection & cleaning

04. High discharge capacities certified by AOTC

07. Diaphragm protected working parts

06. High degree of seat tightness

05. Resilient PFTE seating design

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## Our Heritage



**NABIC roots date back to Manchester in 1864 - the Victorian age of steam and breath-taking industrial advancement.**

NABIC is an acronym for **National Boiler Insurance Company** and came into existence due to of a rising tide of boiler explosions which were causing extensive damage to commercial properties and considerable loss of life.

For instance, in 1854 there was a boiler explosion in Rochdale which killed ten people. The inquest ruled that the incident was caused by neglect - one safety valve was inoperative and the other had been over-weighted to "stop the boiler blowing off". This incident was one of many that took place across the country in the industrial heartland of England which had the biggest concentration of steam boilers in the world and started the unstoppable process of making working environments' safer.

The NABIC Company was born out of a necessity to insure commercial activities and they employed highly skilled

engineers to carry out the inspections. So it was no surprise that the new Company was also keen to look kindly on any new inventions which would help safeguard boilers. In 1863 John Smith patented a fusible plug for boilers and NABIC bought the rights in 1864 for £2000 and this provided the base for the company to grow.

NABIC commenced manufacture ensuring the quality of the fitting and offered customers a 10% reduction in premiums if they fitted them. NABIC set the trend as fusible plugs were so effective and other companies followed their lead and told their customers to request NABIC ! so the name became the industry standard, a modern day 'Hoover' for the boiler industry and still carries gravitas today.

**To Guard Against Low Water in Steam Boilers fit-**  
*National*  
**SAFETY VALVES**

**AND**

**FUSIBLE PLUGS**

**THE NATIONAL BOILER & GENERAL INSURANCE CO. LTD.**  
(SALES DEPT.) ST. MARY'S PARSONAGE, MANCHESTER, 3.

MAKE YOUR HOT WATER BOILERS SAFE  
by fitting

**"NATIONAL"**  
PATENT  
**SAFETY VALVES**

Fig. 34

The illustration shows the National Patent Enclosed Direct Spring Loaded Valve, which is supplied in addition to the National Enclosed Dead Weight Valve. Both types are thoroughly reliable in operation, and are provided with all necessary safeguards.

**The National Boiler**  
and General Insurance Co., Ltd.  
(SALES DEPT.)  
National Buildings, St. Mary's Parsonage,  
MANCHESTER.

Illustrated Price Lists Free

for a reliable safeguard

Fig. "National" Safety Valves for Steam and Hot water Heating Boilers, Calorifiers, and Pressure Plant . . . Suitable for all types of low-pressure Heating. Fulfill the requirements of the London County Council and other authorities.

**"National"**  
SAFETY VALVES

THE NATIONAL BOILER & GENERAL INSURANCE CO. LTD.

Sales Department :  
NATIONAL BUILDINGS, ST. MARY'S PARSONAGE, MANCHESTER, 3.

**IN CASE OF FIRE**

PRESS EMERGENCY SHUT-OFF PLUNGER AND PRESS HOME TEST FREQUENTLY

**NABIC**

**CAN THE OIL SUPPLY TO YOUR BOILER HOUSE BE "SHUT-OFF" QUICKLY?**

The fitting illustrated has been specially designed for the emergency shut-off of the Fire Valve and to permit regular testing of the Fire Valve. It should be placed as near to the Boiler House door as possible.

The **NABIC** Quick Release Fitting is suitable for use with oil firing equipment, dampers and fire screens, etc. In addition, it can be adapted for many uses in the factory where remote control is required.

Write for full particulars to our Sales Dept.  
NATIONAL & VULCAN ENGINEERING INSURANCE GROUP

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### FIG 500 HIGH LIFT SAFETY VALVE

#### FEATURES & BENEFITS

The NABIC 500 is designed primarily for use on unvented hot water heating systems, where a high capacity, emergency steam relief capability is required. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved (1 bar and above).

- Size Range: DN10 - DN65
- Resilient PTFE seating design with high degree of seat tightness
- Easy inspection and cleaning
- High discharge capacity
- Diaphragm protected parts
- Available with Viton seat design
- Padlock available (complies with M&E3)
- Pressure setting locked and sealed
- Drain plug fitted on DN32 and above



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### MEDIUM

Hot water, steam, compressed air and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
10	3/8"	1/2"	26	21	101	0.32
15	1/2"	3/4"	33	20	120	0.53
20	3/4"	1"	39	24	132	0.76
25	1"	1 1/4"	45	30	155	1.35
32	1 1/4"	1 1/2"	54	36	201	2.35
40	1 1/2"	2"	64	41	241	4.20
50	2"	2 1/2"	76	47	267	6.80
65	2 1/2"	3"	90	60	330	12.50

#### PIPE CONNECTIONS

Screwed female inlet and outlet connections. Outlet connection is one size larger than inlet connection. Threaded connections are 'Rp' parallel to BS EN 10226-1. NPT connections are available upon request.

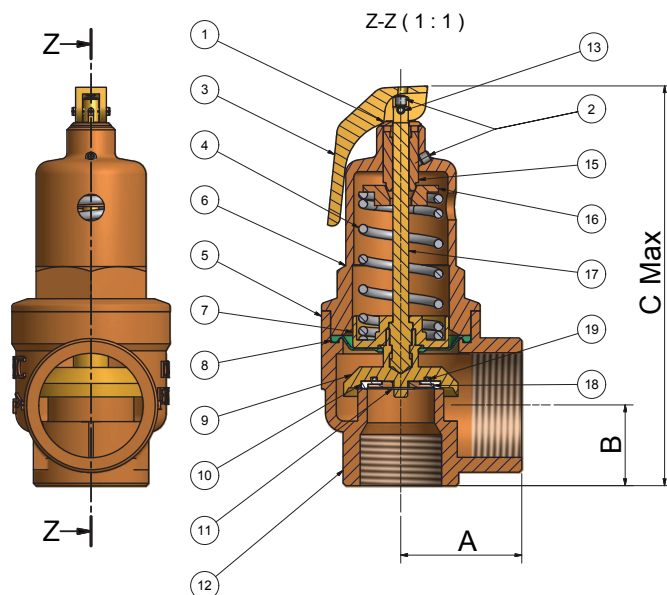
#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal (Not shown)	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657

FM00311 ISO 9001

Pressure Equipment Directive  
PED 97/23/EC and Article 13 of 2014/68/EU

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# FIG 500 HIGH LIFT SAFETY VALVE

## DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500 capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	std. litres/sec (Kdr=0.479)							
	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	18	34	61	95	156	244	381	644
2.0	28	52	93	145	238	372	581	982
3.0	38	70	125	195	320	500	780	1319
4.0	47	88	157	245	401	628	980	1656
6.0	67	124	221	345	565	883	1379	2331
8.0	86	160	284	445	728	1139	1778	3006
10.0	105	196	348	545	892	1394	2178	3681
12.5	130	241	428	670	1096	1714	2677	4524

To convert to ft<sup>3</sup>/min multiply by 2.1.

STEAM - 10% OVERPRESSURE (BS 6759)								
SET PRESSURE BAR	Kg/hr (Kdr=0.479)							
	*DN10	*DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	50	93	166	259	425	664	1037	1752
2.0	76	142	253	395	647	1012	1580	2670
3.0	103	191	340	531	869	1359	2123	3588
4.0	129	240	427	667	1092	1707	2666	4506
6.0	182	338	600	938	1537	2402	3752	6341
8.0	234	436	774	1210	1981	3098	4838	8177
10.0	287	534	948	1482	2426	3793	5924	10013
12.5	352	657	1165	1821	2982	4663	7281	12307

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.

Capacities given for the smaller sizes in the tables, are for applications outside the scope of these standards.



## FIG 500 HIGH LIFT SAFETY VALVE

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	kW (Kdr=0.479)							
	* DN10	* DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	31	59	104	162	266	416	650	1098
2.0	48	89	158	248	405	634	990	1673
3.0	64	120	213	333	545	852	1330	2248
4.0	81	151	267	418	684	1070	1670	2824
6.0	114	212	376	588	963	1505	2351	3974
8.0	147	273	485	758	1242	1941	3032	5124
10.0	180	335	594	929	1520	2377	3712	6275
12.5	221	411	730	1141	1869	2922	4563	7713

To convert to Btu/hr multiply by 3,400

The capacities tabulated are for unvented (pressurised or sealed) heating systems.

For vented systems we generally recommend the use of Fig 542 Safety Relief Valves.

Fig 500 Safety Valves can be used for high output systems where its greater discharge capacity is advantageous.

For unvented hot water supply systems, Fig 500T Combined Pressure & Temperature Relief Valves should be used.

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	kg/min water (Kdr=0.479)							
	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	40	75	134	209	343	536	837	1414
2.0	57	107	189	296	485	758	1183	2000
3.0	70	131	232	363	594	928	1449	2450
4.0	81	151	268	419	685	1072	1674	2829
6.0	99	185	328	513	840	1313	2050	3465
8.0	115	213	379	592	969	1516	2367	4001
10.0	128	239	423	662	1084	1695	2646	4473
12.5	143	267	473	740	1212	1895	2959	5001

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a derated coefficient of discharge (Kdr) 0.479, approved by AOTC.

### FIG 500F HIGH LIFT SAFETY VALVE

#### FEATURES & BENEFITS

The NABIC 500F is ideal for use on unvented hot water heating systems, where a high capacity, emergency steam relief capability is required. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved.

- Size Range: DN20 - DN65
- Resilient PTFE seating design with high degree of seat tightness
- Easy inspection and cleaning
- High Discharge capacity
- Diaphragm protected parts
- Available with Viton seat design
- Padlock available
- Pressure setting locked and sealed
- Drain plug fitted on size DN32 and above



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
20	Flanged	1"	39	52	162	1.70
25	Flanged	1 1/4"	45	60	185	2.45
32	Flanged	1 1/2"	54	64	231	3.87
40	Flanged	2"	64	73	273	4.60
50	Flanged	2 1/2"	76	83	303	10.10
65	Flanged	3"	90	96	366	15.00

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal (Not shown)	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton

#### MEDIUM

Hot water, steam, compressed air and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

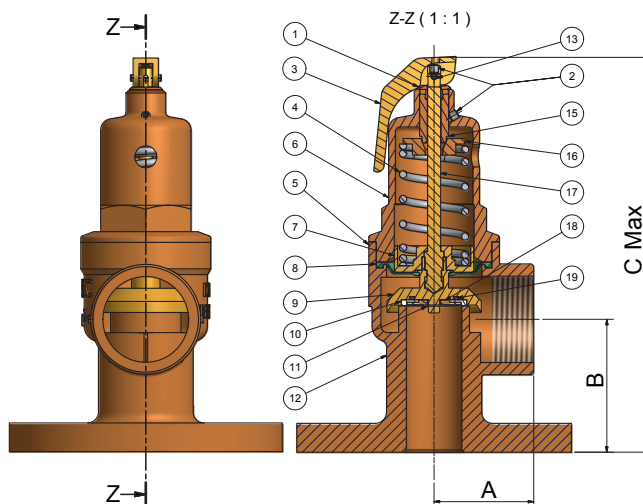
#### PIPE CONNECTIONS

Flanged inlet connections size DN20 upwards. Threaded female outlet connection Rp (BSP) to BS EN 10226-1. Most flange standards can be accommodated.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive  
PED 97/23/EC and  
Article 13 of 2014/68/EU

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# FIG 500F HIGH LIFT SAFETY VALVE

## DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500F capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)						
SET PRESSURE BAR	std. litres/sec (Kdr=0.479)					
	DN20	DN25	DN32	DN40	DN50	DN65
1.0	61	95	156	244	381	644
2.0	93	145	238	372	581	982
3.0	125	195	320	500	780	1319
4.0	157	245	401	628	980	1656
6.0	221	345	565	883	1379	2331
8.0	284	445	728	1139	1778	3006
10.0	348	545	892	1394	2178	3681
12.5	428	670	1096	1714	2677	4524

To convert to ft<sup>3</sup>/min multiply by 2.1

STEAM - 10% OVERPRESSURE (BS 6759)						
SET PRESSURE BAR	Kg/hr (Kdr=0.479)					
	DN20	DN25	DN32	DN40	DN50	DN65
1.0	166	259	425	664	1037	1752
2.0	253	395	647	1012	1580	2670
3.0	340	531	869	1359	2123	3588
4.0	426	667	1092	1707	2666	4506
6.0	600	938	1537	2402	3752	6341
8.0	774	1210	1981	3098	4838	8177
10.0	948	1482	2426	3793	5924	10013
12.5	1165	1821	2982	4663	7281	12307

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.

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## FIG 500F HIGH LIFT SAFETY VALVE

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)						
SET PRESSURE BAR	kW (Kdr=0.479)					
	DN20	DN25	DN32	DN40	DN50	DN65
1.0	104	162	266	416	650	1098
2.0	158	248	405	634	990	1673
3.0	213	333	545	852	1330	2248
4.0	267	418	684	1070	1670	2824
6.0	376	588	963	1505	2351	3974
8.0	485	758	1242	1941	3032	5124
10.0	594	929	1520	2377	3712	6275
12.5	730	1141	1869	2922	4563	7713

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)						
SET PRESSURE BAR	kg/min water (Kdr=0.479)					
	DN20	DN25	DN32	DN40	DN50	DN65
1.0	134	209	343	536	837	1414
2.0	189	296	485	758	1183	2000
3.0	232	363	594	928	1449	2450
4.0	268	419	685	1072	1674	2829
6.0	328	513	840	1313	2050	3465
8.0	379	592	969	1516	2367	4001
10.0	423	662	1084	1695	2646	4473
12.5	473	740	1212	1895	2959	5001

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a derated coefficient of discharge (Kdr) 0.479, approved by AOTC.

### FIG 500SS HIGH LIFT SAFETY VALVE

#### FEATURES & BENEFITS

The NABIC Fig 500SS has been designed for applications where the properties of Stainless steel are required for the service fluid being used, but the working environment does not necessitate a full stainless steel valve. It can be supplied with a test lever or as a sealed dome version. Designed and tested to BS EN ISO 4126-1.

- Size Range: DN15 - DN65
- Diaphragm protected working parts
- Ease of inspection and cleaning
- Resilient PTFE design with high degree of seat tightness
- Stainless steel wetted parts with PTFE to metal seating
- Available with Viton seat design
- Padlock available (complies with M&E3)
- Pressure setting locked and sealed

#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### DIMENSIONS

SIZE DN	R BSPT Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)
15	3/4"	3/4"	34	46	141
20	1"	1"	39	54	159
25	1 1/4"	1 1/4"	46	63	183
32	1 1/2"	1 1/2"	54	68	228
40	2"	2"	64	81	271
50	2 1/2"	2 1/2"	76	95	315
65	3"	3"	90	110	380

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton
20	Seat Adaptor	Stainless Steel, BS 970 316S11

#### APPROVALS



FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657



Pressure Equipment Directive  
PED 97/23/EC and Article 13 of 2014/68/EU



#### MEDIUM

Hot water, steam, air, all other fluids to be checked with Technical Department.

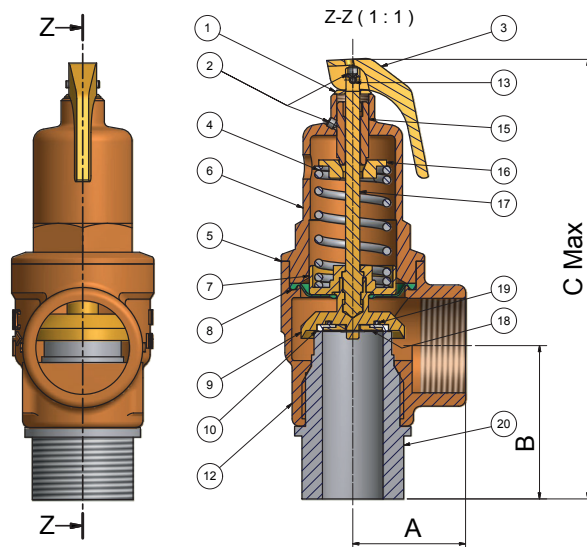
#### PIPE CONNECTIONS

Threaded male inlet connection R (BSPT) to BS EN 10226-2.  
Threaded female outlet connections Rp (BSP) to BS EN 10226-1.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



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# FIG 500SS HIGH LIFT SAFETY VALVE

## DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500SS capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)							
SET PRESSURE BAR	std.litres/sec (Kdr=0.479)						
	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	34	61	95	156	244	381	644
2.0	52	93	145	238	372	581	982
3.0	70	125	195	320	500	780	1319
4.0	88	157	245	401	628	980	1656
6.0	124	221	345	565	883	1379	2331
8.0	160	284	445	728	1139	1778	3006
10.0	196	348	545	892	1394	2178	3681
12.5	241	428	670	1096	1714	2677	4524

To convert to ft<sup>3</sup>/min multiply by 2.1.

STEAM CAPACITY - 10% OVERPRESSURE (BS 6759)							
SET PRESSURE BAR	kg/hr (Kdr=0.479)						
	*DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	93	166	259	425	664	1037	1752
2.0	142	253	395	647	1012	1580	2670
3.0	191	340	531	869	1359	2123	3588
4.0	240	426	667	1092	1707	2666	4506
6.0	338	600	938	1537	2402	3752	6341
8.0	436	774	1210	1981	3098	4838	8177
10.0	534	948	1482	2426	3793	5924	10013
12.5	657	1165	1821	2982	4663	7281	12307

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.

Capacities given for the smaller sizes in the tables, are for applications outside the scope of these standards.

WATER CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)							
SET PRESSURE BAR	kg/min (Kdr=0.479)						
	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	75	134	209	343	536	837	1414
2.0	107	189	296	485	758	1183	2000
3.0	131	232	363	594	928	1449	2450
4.0	151	268	419	685	1072	1674	2829
6.0	185	328	513	840	1313	2050	3465
8.0	213	379	592	969	1516	2367	4001
10.0	239	423	662	1084	1695	2646	4473
12.5	267	473	740	1212	1895	2959	5001

To convert to galls/min multiply by 0.22.

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a derated coefficient of discharge (Kdr) 0.479, approved by AOTC.

For valves without diaphragm and completely leak proof (no vent hole), reduce flow capacity by 30% i.e. multiply stated capacities by 0.7.

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### FIG 500ST HIGH LIFT SAFETY VALVE

#### FEATURES & BENEFITS

The NABIC Fig 500ST has been designed for applications where the properties of Stainless steel are required for the service fluid being used, but the working environment does not necessitate a full stainless steel valve. It can be supplied with a test lever or as a sealed dome version. Designed and tested to BS EN ISO 4126-1.

- Size Range: DN15 - DN65
- Diaphragm protected working parts
- Resilient PTFE design with high degree of seat tightness
- Stainless steel wetted parts with PTFE to metal seating
- Easy inspection and cleaning
- Pressure setting locked and sealed
- Padlock available (complies with M&E3)
- Available with Viton seat design
- Available with hygienic clamp fitting to BS 4825

#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### DIMENSIONS

SIZE DN	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	D (mm)
15	3/4"	34	46	141	50.5
20	1"	39	54	159	50.5
25	1 1/4"	46	63	183	50.5
32	1 1/2"	54	68	228	64
40	2"	64	81	271	64
50	2 1/2"	76	95	315	77.5
65	3"	90	110	380	91

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton
20	Seat Adaptor	Stainless Steel, BS 970 316S11

#### APPROVALS



FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657



Pressure Equipment Directive PED 97/23/EC and Article 13 of 2014/68/EU

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#### MEDIUM

Hot water, steam, air. All other fluids to be checked with Technical Department.

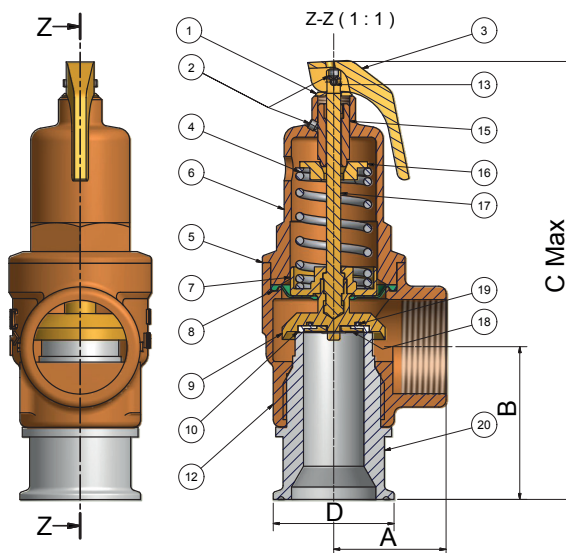
#### PIPE CONNECTIONS

Hygienic clamp fitting inlet connection to BS 4825. Threaded female outlet connections Rp (BSP) to BS EN 10226-1.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



# FIG 500ST HIGH LIFT SAFETY VALVE

## DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500ST capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)							
SET PRESSURE BAR	std. litres/sec (Kdr=0.479)						
	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	34	61	95	156	244	381	644
2.0	52	93	145	238	372	581	982
3.0	70	125	195	320	500	780	1319
4.0	88	157	245	401	628	980	1656
6.0	124	221	345	565	883	1379	2331
8.0	160	284	445	728	1139	1778	3006
10.0	196	348	545	892	1394	2178	3681
12.5	241	428	670	1096	1714	2677	4524

To convert to ft<sup>3</sup>/min multiply by 2.1.

STEAM - 10% OVERPRESSURE (BS 6759)							
SET PRESSURE BAR	kg/hr (Kdr=0.479)						
	*DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	93	166	259	425	664	1037	1752
2.0	142	253	395	647	1011	1580	2670
3.0	191	340	531	870	1359	2123	3588
4.0	240	427	667	1092	1706	2666	4506
6.0	338	600	938	1537	2402	3752	6341
8.0	436	774	1210	1981	3098	4838	8177
10.0	534	948	1482	2426	3793	5924	10013
12.5	657	1165	1821	2982	4663	7281	12307

The minimum bore size permitted by BS specifications for steam and hot water boilers is 20mm.

Capacities given for the smaller sizes in the tables, are for applications outside the scope of these standards.

WATER CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)							
SET PRESSURE BAR	kg/min (Kdr=0.479)						
	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	75	134	209	343	536	837	1414
2.0	107	189	296	485	758	1183	2000
3.0	131	232	363	594	928	1449	2450
4.0	151	268	419	685	1072	1674	2829
6.0	185	328	513	840	1313	2050	3465
8.0	213	379	592	969	1516	2367	4001
10.0	239	423	662	1084	1695	2646	4473
12.5	267	473	740	1212	1895	2959	5001

To convert to galls/min multiply by 0.22.

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a derated coefficient of discharge (Kdr) 0.479, approved by AOTC.

For valves without diaphragm and completely leak proof (no vent hole), reduce flow capacity by 30% i.e. multiply stated capacities by 0.7.

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### FIG 520 HIGH LIFT SAFETY VALVE

#### FEATURES & BENEFITS

The NABIC Fig 520 flanged valve has been designed primarily for use on unvented hot water heating systems, where a high capacity, emergency steam relief capability is required. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved.

- Size Range: DN65 - DN100
- Resilient PTFE seating design with high degree of seat tightness
- Separate outlets reduce effects of back pressure
- High discharge capacity
- Available with Viton seat design
- Padlock available (complies with M&E3)
- Pressure setting locked and sealed
- Diaphragm protected working parts

#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Inlet	Ro BSP Outlet	ØA	B (mm)	C (mm)	D (mm)	E (mm)	RD
65	Flange	2"	40	350	152	175	64	1/4"
80	Flange	2 1/2"	50	390	166	195	76	1/4"
100	Flange	3"	65	480	205	210	90	3/8"

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton
20	Seat	Bronze, BS EN 1982 CC491K
21	Seat O-Ring	Viton
22	Drain Plug	Brass, BS EN 12164 CW609N

#### APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive - PED 2014/68/EU



#### MEDIUM

Hot water, steam, compressed air and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

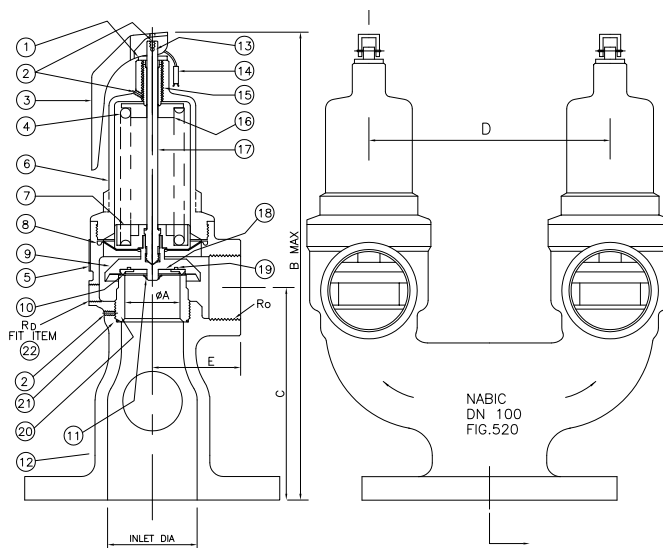
#### PIPE CONNECTIONS

Flanged inlet connections. Threaded female outlet connections, Rp (BSP) parallel to BS EN 10226-1. Most flange standards can be accommodated.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



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## FIG 520 HIGH LIFT SAFETY VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 520 capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)			
SET PRESSURE BAR	std. litres/sec (Kdr=0.479)		
	DN65	DN80	DN100
1.0	488	762	1288
2.0	744	1161	1963
3.0	999	1561	2638
4.0	1255	1960	3313
6.0	1766	2758	4662
8.0	2278	3557	6012
10.0	2789	4355	7362
12.5	3428	5353	9049

To convert to ft<sup>3</sup>/min multiply by 2.1.

STEAM - 10% OVERPRESSURE (BS6759)			
SET PRESSURE BAR	kg/hr (Kdr=0.479)		
	DN65	DN80	DN100
1.0	1328	2073	3504
2.0	2023	3159	5340
3.0	2718	4245	7176
4.0	3414	5331	9011
6.0	4805	7503	12683
8.0	6196	9675	16354
10.0	7586	11847	20025
12.5	9325	14563	24615

To convert to lb/hr multiply by 2.2.

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## FIG 520 HIGH LIFT SAFETY VALVE

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)			
SET PRESSURE BAR	Kw (Kdr=0.479)		
	DN65	DN80	DN100
1.0	832	1299	2196
2.0	1268	1980	3346
3.0	1704	2660	4497
4.0	2139	3341	5647
6.0	3011	4702	7948
8.0	3883	6063	10249
10.0	4754	7424	12549
12.5	5844	9126	15425

To convert to Btu/hr multiply by 3,400.

The capacities tabulated are for unvented (pressurised or sealed) heating systems.

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)			
SET PRESSURE BAR	kg/min water (Kdr=0.479)		
	DN65	DN80	DN100
1.0	1072	1674	2829
2.0	1516	2367	4001
3.0	1856	2899	4900
4.0	2143	3347	5658
6.0	2625	4100	6929
8.0	3031	4734	8001
10.0	3389	5292	8946
12.5	3789	5917	10002

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a derated coefficient of discharge (Kdr) 0.479, approved by AOTC.

### FIG 542 SAFETY RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 542 is a versatile valve and although designed primarily for the 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. Designed and tested to BS EN ISO 4126 -1. WRAS approved (1 bar and above).

- Size Range: DN15 - DN80
- Resilient PTFE seating design with high degree of seat tightness
- Easy inspection and cleaning
- Available with Viton seat design
- Padlock available
- Pressure setting locked and sealed
- Drain plug fitted on sizes DN40 and above
- Diaphragm protected parts



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.3 to 10.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP Inlet & Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
15	1/2"	30	23	113	0.35
20	3/4"	34	23	118	0.53
25	1"	39	27	132	0.80
32	1 1/4"	46	33	153	1.33
40	1 1/2"	54	38	198	2.30
50	2"	64	46	236	4.20
65	2 1/2"	76	55	275	7.80
80	3"	90	65	335	12.50

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal (Not shown)	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton

#### MEDIUM

Hot water, steam, compressed air and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

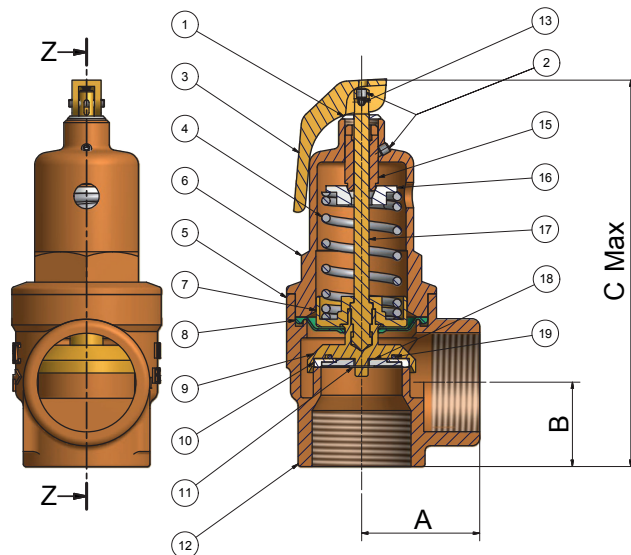
#### PIPE CONNECTIONS

Threaded female inlet and outlet connections. Inlet and outlet connections are of equal size. Threaded connections are Rp (BSP) parallel to BS EN 10226-1. NPT connections are available upon request.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive PED 97/23/EC and Article 13 of 2014/68/EU

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## FIG 542 SAFETY RELIEF VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 542 capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	std. litres/sec (Kdr=0.19)							
	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80
1.0	14	24	38	62	97	151	256	387
2.0	21	37	58	94	148	230	389	590
3.0	28	50	77	127	198	310	523	793
4.0	35	62	97	159	249	389	657	995
6.0	49	88	137	224	350	547	925	1401
8.0	64	113	176	289	452	705	1192	1806
10.0	78	128	216	354	553	864	1460	2212
10.5	81	145	226	370	578	903	1527	2313

To convert to ft<sup>3</sup>/min multiply by 2.1.

STEAM - 10% OVERPRESSURE (BS 6759)								
SET PRESSURE BAR	Kg/hr (Kdr=0.19)							
	* DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80
1.0	37	66	103	168	263	411	695	1053
2.0	56	100	157	257	401	627	1059	1604
3.0	76	135	211	345	539	842	1423	2156
4.0	95	169	264	433	677	1057	1787	2707
6.0	134	238	372	610	953	1488	2515	3810
8.0	173	307	480	786	1229	1919	3244	4913
10.0	212	376	588	962	1505	2350	3972	6016
10.5	222	393	615	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.

Capacities given for DN15 size in the tables are for applications outside the scope of these standards.

## FIG 542 SAFETY RELIEF VALVE

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	kW (Kdr=0.19)							
	* DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80
1.0	23	41	64	106	165	258	436	660
2.0	35	63	98	161	251	393	664	1005
3.0	48	84	132	216	338	528	892	1351
4.0	60	106	166	271	424	663	1120	1697
6.0	84	149	233	382	597	933	1576	2388
8.0	108	192	301	493	770	1203	2033	3079
10.0	133	236	368	603	943	1472	2489	3770
10.5	139	246	385	631	986	1540	2603	3943

To convert to Btu/hr multiply by 3400.

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	kg/min water (Kdr=0.19)							
	* DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80
1.0	30	53	83	136	213	332	561	850
2.0	42	75	117	192	301	469	793	1202
3.0	52	92	144	235	368	575	972	1472
4.0	60	106	166	272	425	664	1122	1700
6.0	73	130	203	333	521	813	1374	2082
8.0	85	150	235	385	601	939	1587	2404
10.0	95	168	263	430	672	1050	1774	2687
10.5	97	172	269	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 derated coefficient of discharge (Kdr) 0.19, approved by AOTC.



### FIG 542F SAFETY RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 542F is a versatile flanged valve and although designed primarily for the 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. Designed and tested to BS EN ISO 4126 -1. WRAS approved.

- Size Range: DN32 - DN80
- Resilient PTFE seating design with high degree of seat tightness
- Easy inspection and cleaning
- Available with Viton seat design
- Padlock available
- Pressure setting locked and sealed
- Drain plug fitted on sizes DN40 and above
- Diaphragm protected parts

#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.3 to 10.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
32	Flanged	1 1/4"	46	60	180	3.00
40	Flanged	1 1/2"	54	64	225	4.40
50	Flanged	2"	64	73	263	7.15
65	Flanged	2 1/2"	76	83	303	10.00
80	Flanged	3"	90	96	366	16.41

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal (Not shown)	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
19	O-Ring	Viton



#### MEDIUM

Hot water, steam, compressed air and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

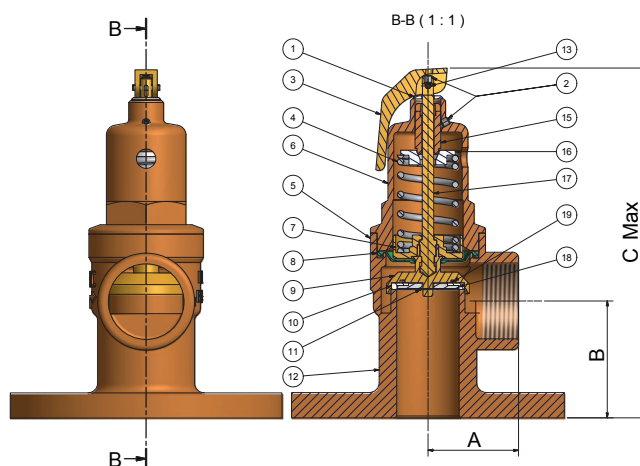
#### PIPE CONNECTIONS

Flanged inlet connections. Threaded female outlet connections, Rp (BSP) parallel to BS EN 10226-1. Most flange standards can be accommodated.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive PED 97/23/EC and Article 13 of 2014/68/EU

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## FIG 542F SAFETY RELIEF VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 542F capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)					
SET PRESSURE BAR	std. litres/sec (Kdr=0.19)				
	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 ft<sup>3</sup>/min multiply by 2.1.

STEAM - 10% OVERPRESSURE (BS 6759)					
SET PRESSURE BAR	Kg/hr (Kdr=0.19)				
	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.

## FIG 542F SAFETY RELIEF VALVE

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)					
SET PRESSURE BAR	Kw (Kdr=0.19)				
	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 - 10% OVERPRESSURE (BS EN 4126-1)					
SET PRESSURE BAR	Kg/min (Kdr=0.19)				
	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 derated coefficient of discharge (Kdr) 0.19, approved by AOTC.

### FIG 500FN PRESSURE RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC 500FN safety valve is 316 Stainless Steel construction, designed and tested to BS EN ISO 4126 -1, fitted with resilient PTFE to metal seating design. To improve flow, the internal surface finish of the body is of a high level by utilising the latest casting techniques.

- Size Range: DN15 - DN25
- High discharge capacity
- Pressure tight on discharge side
- Corrosion resistant and suitable for difficult liquids or gases
- Pressure setting locked and sealed



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)
0.4 to 11	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP Inlet & Outlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)
15	1/2"	3/4"	33	24	119
20	3/4"	1"	45	60	132
25	1"	1 1/4"	54	64	157

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Leak Proof Dome	Stainless Steel, BS 970 316S11
2	Locknut	Stainless Steel, BS 970 316S11
3	Dome 'O' Ring	Viton
4	Spring	Stainless Steel, BS 2056 302S26
5	Label	Yellow kapton
6	Spring Cover	Stainless Steel, BS 3146 ANC 4BFC
7	Piston	Stainless Steel, BS 970 316S11
8	Cover Seal	Viton
9	Seat Seal Holder	Stainless Steel, BS 970 316S11
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Stainless Steel, BS 3146 ANC 4BFC
13	Adjusting Screw	Stainless Steel, BS 970 316S11
14	Spring Plate	Stainless Steel, BS 970 316S12
15	Spindle	Stainless Steel, BS 970 316S13
16	Seat Seal Retaining Plate	Stainless Steel, BS 970 316S14
17	O-Ring	Viton

#### MEDIUM

Liquids, acids and gases. For specific technical requirements. Check with Technical Department.

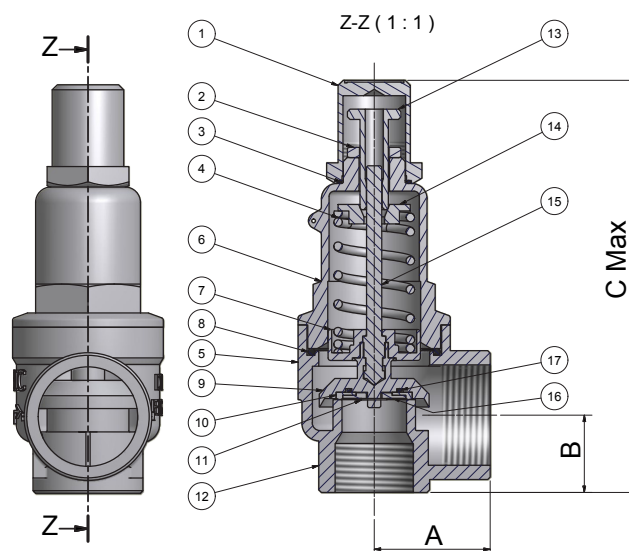
#### PIPE CONNECTIONS

Screwed female inlet and outlet connections. Outlet connection is one size larger than inlet connection. Threaded connections are Rp (BSP) parallel to BS EN 10226-1.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



#### APPROVALS



FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657



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## FIG 500FN PRESSURE RELIEF VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500FN capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)			
SET PRESSURE BAR	std. litres/sec (Kdr=0.275)		
	DN15	DN20	DN25
1.0	20	35	55
2.0	30	53	83
3.0	40	72	112
4.0	51	90	141
6.0	71	127	198
8.0	92	163	255
10.0	113	200	313
11.0	123	218	341

To convert to ft<sup>3</sup>/min multiply by 2.1.

STEAM - 10% OVERPRESSURE (BS EN ISO 4126-1:2004)			
SET PRESSURE BAR	kg/hr (Kdr=0.275)		
	DN15	DN20	DN25
1.0	54	95	149
2.0	82	145	227
3.0	110	195	305
4.0	138	245	383
6.0	194	345	539
8.0	250	444	695
10.0	307	544	851
11.0	335	594	929

To convert to lb/hr multiply by 2.2.



## FIG 500FN PRESSURE RELIEF VALVE

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)			
SET PRESSURE BAR	Kw (Kdr=0.275)		
	DN15	DN20	DN25
1.0	34	60	93
2.0	51	91	142
3.0	69	122	191
4.0	86	153	240
6.0	122	216	338
8.0	157	278	435
10.0	192	341	533
11.0	210	372	582

To convert to Btu/hr multiply by 3400.

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)			
SET PRESSURE BAR	kg/min (Kdr=0.275)		
	DN15	DN20	DN25
1.0	54	77	120
2.0	61	109	170
3.0	75	133	208
4.0	87	154	240
6.0	106	188	294
8.0	123	217	340
10.0	137	243	380
11.0	144	255	399

In the above tables, discharge capacities have been calculated in accordance with BS EN 4126-1 & BS 6759, using a derated coefficient of discharge (Kdr) 0.275, approved by AOTC.

### FIG 500L PRESSURE RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 500L is designed primarily for use where high tightness is required on the discharge side. A sealed spring cover prevents the possibility of back pressure leakage through the top of the valve. The lift is progressively proportional to flow. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved (1 bar and above).

- Size Range: DN10 - DN65
- Resilient PTFE seating design with high degree of seat tightness
- Pressure tight on discharge side
- Suitable for liquids and inert gases
- Available with Viton seat design
- Pressure setting locked and sealed
- Drain plug fitted on DN32 and above



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### MEDIUM

Hot water, steam, compressed air, inflammable liquids and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
10	3/8"	1/2"	26	21	106	0.38
15	1/2"	3/4"	33	20	123	0.70
20	3/4"	1"	39	24	136	0.93
25	1"	1 1/4"	45	30	155	1.42
32	1 1/4"	1 1/2"	54	36	201	2.50
40	1 1/2"	2"	64	41	236	4.63
50	2"	2 1/2"	76	47	267	7.00
65	2 1/2"	3"	90	60	330	12.50

#### PIPE CONNECTIONS

Screwed female inlet and outlet connections. Outlet connection is one size larger than inlet connection. Threaded connections are Rp parallel to BS EN 10226-1. NPT connections are available upon request.

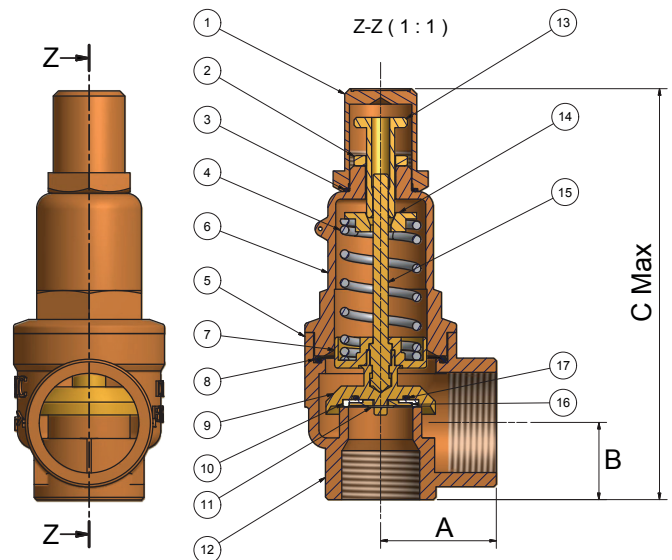
#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Leak Proof Dome	Bronze, BS EN 1982 CC491K
2	Locknut	Brass, BS EN 12164 CW609N
3	Dome 'O' Ring	Viton
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Cover Seal	Viton
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Adjusting Screw	Brass, BS EN 12164 CW609N
14	Spring Plate	Brass, BS EN 12164 CW609N
15	Spindle	Brass, BS EN 12164 CW721R
16	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
17	O-Ring	Viton

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657



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# FIG 500L PRESSURE RELIEF VALVE

## DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500L capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)								
SET PRESSURE BAR	std. litres/sec							
	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	13	25	44	69	112	176	274	464
2.0	20	38	67	105	171	268	418	707
3.0	27	51	90	141	230	360	562	950
4.0	34	64	113	177	289	452	706	1193
6.0	48	90	159	248	407	636	993	1679
8.0	62	115	205	320	525	820	1281	2165
10.0	76	141	251	392	642	1004	1568	2651
12.5	93	174	308	482	790	1235	1928	3259

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE								
SET PRESSURE BAR	litres/min							
	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	29	54	96	151	247	386	603	1019
2.0	41	77	136	213	349	546	853	1441
3.0	51	94	167	261	428	668	1044	1765
4.0	58	109	193	302	494	772	1205	2037
6.0	71	133	236	369	605	945	1476	2496
8.0	83	154	273	426	698	1092	1705	2881
10.0	92	172	305	477	781	1220	1906	3222
12.5	103	192	341	533	873	1364	2131	3602

To convert to galls/min multiply by 0.22.

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### FIG 500LF PRESSURE RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 500LF is designed primarily for use where high tightness is required on the discharge side. A sealed spring cover prevents the possibility of back pressure leakage through the top of the valve. The lift is progressively proportional to flow. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved.

- Size Range: DN20 - DN65
- Resilient PTFE seating design with high degree of seat tightness
- Pressure tight on discharge side
- Suitable for liquids and inert gases
- Available with Viton seat design
- Pressure setting locked and sealed
- Drain plug fitted on DN32 and above

#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.4 to 12.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
20	Flanged	1"	39	52	164	1.70
25	Flanged	1 1/4"	45	60	185	2.45
32	Flanged	1 1/2"	54	64	229	3.87
40	Flanged	2"	64	73	268	4.60
50	Flanged	2 1/2"	76	83	303	10.10
65	Flanged	3"	90	96	366	15.00

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Leak Proof Dome	Bronze, BS EN 1982 CC491K
2	Locknut	Brass, BS EN 12164 CW609N
3	Dome 'O' Ring	Viton
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Cover Seal	Viton
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Adjusting Screw	Brass, BS EN 12164 CW609N
14	Spring Plate	Brass, BS EN 12164 CW609N
15	Spindle	Brass, BS EN 12164 CW721R
16	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
17	O-Ring	Viton

#### APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive  
PED 97/23/EC and  
Article 13 of 2014/68/EU



#### MEDIUM

Hot water, steam, compressed air, inflammable liquids and inert gasses, CO<sub>2</sub> (to 20°C), ethylene glycol, potable water.

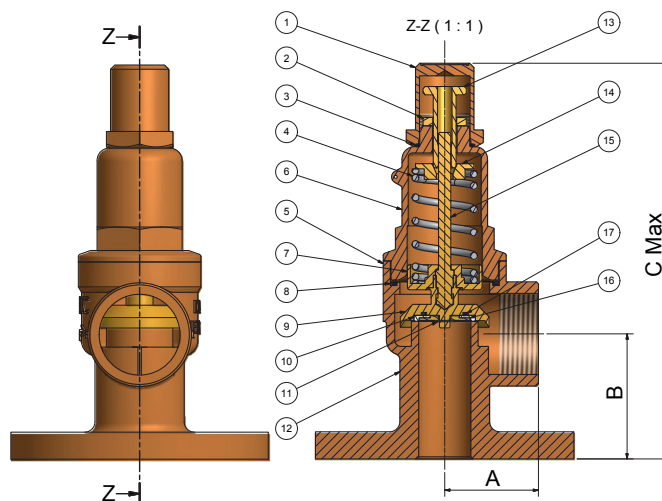
#### PIPE CONNECTIONS

Flanged inlet connections. Threaded outlet connections, Rp parallel to BS EN 10226-1. Most flange standards can be accommodated.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



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## FIG 500LF PRESSURE RELIEF VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 500LF capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)						
SET PRESSURE BAR	std. litres/sec (Kdr=0.345)					
	DN20	DN25	DN32	DN40	DN50	DN65
1.0	44	69	112	176	274	464
2.0	67	105	171	268	418	707
3.0	90	141	230	360	562	950
4.0	113	177	289	452	706	1193
6.0	159	248	407	636	993	1679
8.0	205	320	525	820	1281	2165
10.0	251	392	642	1004	1568	2651
12.5	308	482	790	1235	1928	3259

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)						
SET PRESSURE BAR	litres/min (Kdr=0.345)					
	DN20	DN25	DN32	DN40	DN50	DN65
1.0	96	151	247	386	603	1019
2.0	136	213	349	546	852	1441
3.0	167	261	428	668	1044	1765
4.0	193	302	494	772	1205	2037
6.0	236	369	605	945	1476	2495
8.0	273	426	698	1092	1705	2881
10.0	305	477	781	1220	1906	3222
12.5	341	533	873	1365	2131	3602

To convert to galls/min multiply by 0.22.

The above discharge capacities have been calculated in accordance with BS EN 4126-1, using a derated coefficient of discharge of (Kdr) 0.345.

### FIG 542L PRESSURE RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 542L is designed primarily for use where high tightness is required on the discharge side. A sealed spring cover prevents the possibility of back pressure leakage through the top of the valve. The lift is progressively proportional to flow. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved (1 bar and above).

- Size Range: DN15 - DN80
- Resilient PTFE seating design with high degree of seat tightness
- Pressure tight on discharge side
- Suitable for liquids and inert gases
- Available with Viton seat design
- Pressure setting locked and sealed
- Drain plug fitted on sizes DN40 and above



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)
0.3 to 10.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP Inlet & Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
15	1/2"	30	23	113	0.50
20	3/4"	34	23	118	0.70
25	1"	39	27	132	0.93
32	1 1/4"	46	33	158	1.50
40	1 1/2"	54	38	200	2.41
50	2"	64	46	239	4.32
65	2 1/2"	76	55	285	8.24
80	3"	90	65	345	12.60

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Leak Proof Dome	Bronze, BS EN 1982 CC491K
2	Locknut	Brass, BS EN 12164 CW609N
3	Dome 'O' Ring	Viton
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Cover Seal	Viton
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Adjusting Screw	Brass, BS EN 12164 CW609N
14	Spring Plate	Brass, BS EN 12164 CW609N
15	Spindle	Brass, BS EN 12164 CW721R
16	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
17	O-Ring	Viton

#### MEDIUM

Hot water, steam, compressed air, inflammable liquids and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

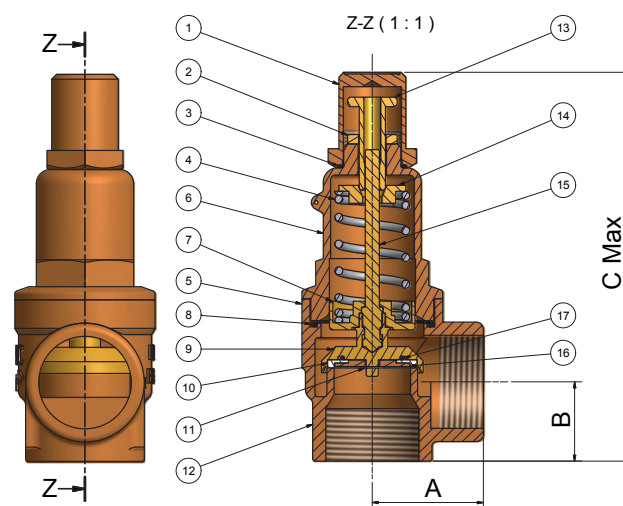
#### PIPE CONNECTIONS

Screwed female inlet and outlet connections. Inlet and outlet connections are of equal size. Threaded connections are 'Rp' BSP parallel to BS EN 10226-1. NPT connections are available upon request.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



#### APPROVALS



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## FIG 542L PRESSURE RELIEF VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 542L capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)							
SET PRESSURE BAR	std. litres/sec						
	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	10	18	28	46	72	113	191
2.0	16	28	43	71	110	172	291
3.0	21	37	58	95	148	231	391
4.0	26	46	73	119	186	291	491
6.0	37	65	102	167	262	409	691
8.0	48	84	132	216	338	527	891
10.5	61	108	169	277	432	675	1141

WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS EN 4126-1)							
SET PRESSURE BAR	kg/min						
	DN15	DN20	DN25	DN32	DN40	DN50	DN65
1.0	22	40	62	102	159	248	419
2.0	32	56	88	144	225	351	593
3.0	39	69	107	176	275	430	726
4.0	45	79	124	203	318	496	839
6.0	55	97	152	249	389	608	1027
8.0	63	112	176	287	449	702	1186
10.5	72	129	201	329	515	804	1359

To convert to galls/min multiply by 0.22.

### FIG 542LF PRESSURE RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 542LF is designed primarily for use where high tightness is required on the discharge side. A sealed spring cover prevents the possibility of back pressure leakage through the top of the valve. The lift is progressively proportional to flow. All wetted parts are manufactured from dezincification resistance materials. Designed and tested to BS EN ISO 4126 -1. WRAS approved.

- Size Range: DN32 - DN80
- Resilient PTFE seating design with high degree of seat tightness
- Pressure tight on discharge side
- Suitable for liquids and inert gases
- Available with Viton seat design
- Pressure setting locked and sealed
- Drain plug fitted on DN40 and above



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.3 to 10.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	WEIGHTS (kg)
32	Flanged	1 1/4"	46	60	185	3.00
40	Flanged	1 1/2"	54	64	226	4.40
50	Flanged	2"	64	73	266	7.15
65	Flanged	2 1/2"	76	83	313	10.00
80	Flanged	3"	90	96	376	16.41

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Leak Proof Dome	Bronze, BS EN 1982 CC491K
2	Locknut	Brass, BS EN 12164 CW609N
3	Dome 'O' Ring	Viton
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Cover Seal	Viton
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Adjusting Screw	Brass, BS EN 12164 CW609N
14	Spring Plate	Brass, BS EN 12164 CW609N
15	Spindle	Brass, BS EN 12164 CW721R
16	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
17	O-Ring	Viton

#### MEDIUM

Hot water, steam, compressed air and inert gasses, CO2 (to 20°C), ethylene glycol, potable water.

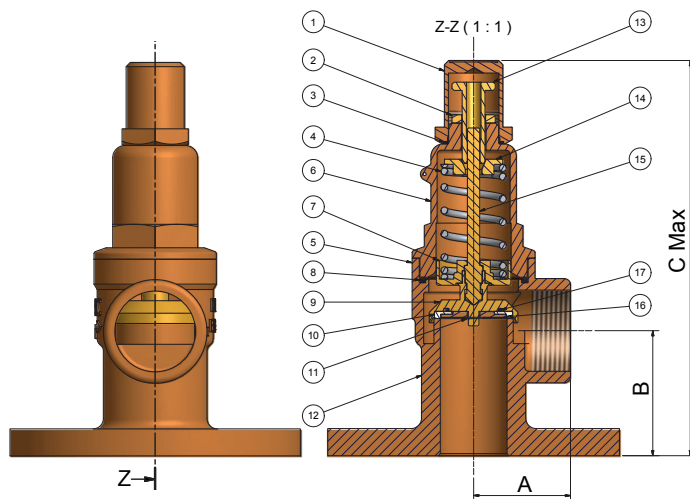
#### PIPE CONNECTIONS

Flanged inlet connections. Threaded female outlet connections, Rp (BSP) parallel to BS EN 10226-1. Most flange standards can be accommodated.

#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive - PED 2014/68/EU

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## FIG 542LF PRESSURE RELIEF VALVE

### DISCHARGE CAPABILITIES

The discharge capacity of a safety valve must be equal to or greater than the output of the boiler or system it is protecting. To ensure that the correct method of sizing is used, reference should be made to the relevant BS specification for the design of the boiler or system. Fig 542LF capacities are tabulated below to assist selection.

AIR CAPACITY - 10% OVERPRESSURE (BS EN 4126-1)					
SET PRESSURE BAR	std. litres/sec (Kdr=0.142)				
	DN32	DN40	DN50	DN65	DN80
1.0	46	72	113	191	289
2.0	71	110	172	291	441
3.0	95	148	231	391	592
4.0	119	186	291	491	744
6.0	167	262	409	691	1047
8.0	216	338	527	891	1350
10.5	277	432	675	1141	1729

WATER - 10% OVERPRESSURE (BS EN 4126-1)					
SET PRESSURE BAR	kg/min (Kdr=0.142)				
	DN32	DN40	DN50	DN65	DN80
1.0	102	159	248	419	635
2.0	144	225	351	593	898
3.0	176	275	430	726	1100
4.0	203	318	496	839	1270
6.0	249	389	608	1027	1556
8.0	287	449	702	1186	1796
10.5	329	515	804	1359	2058

The above discharge capacities have been calculated in accordance with BS EN 4126-1, using a derated coefficient of discharge of (Kdr) 0.142.

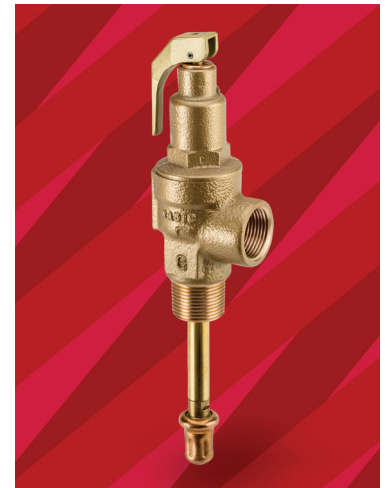


### FIG 500T COMBINED PRESSURE & TEMPERATURE RELIEF VALVE

#### FEATURES & BENEFITS

The NABIC Fig 500T provides protection against excess temperature as well as pressure protection. It automatically discharges hot water to prevent a predetermined set pressure and/or temperature being exceeded. Each of the lift mechanisms is independent of each other. Designed and tested to BS EN 4126, BS 6283 (when 50% of BS EN ISO 4126 -1 ratings at 1 bar or temperature ratings are used). WRAS approved (1 bar and above).

- Size Range: DN15 - DN50
- Resilient Viton soft seat design
- Powerful thermostat
- Pressure setting locked and sealed
- Drain plug fitted on DN32 and above



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
0.4 to 12.5	-20 to 95

#### MEDIUM

Hot water only.

#### DIMENSIONS & WEIGHTS

SIZE DN	R BSPT Inlet	Rp BSP Outlet	A (mm)	B (mm)	C (mm)	D (mm)	WEIGHTS (kg)
15	3/4"	3/4"	33	81	48	229	0.72
20	1"	1"	39	81	47	238	1.00
25	1 1/4"	1 1/4"	45	88	56	269	1.54
32	1 1/2"	1 1/2"	54	127	62	354	3.00
40	2"	2"	64	127	71	398	4.50
50	2 1/2"	2 1/2"	76	127	82	429	7.78

#### PIPE CONNECTIONS

Threaded male inlet connection R (BSPT) to BS EN 10226-2. Threaded female outlet connections Rp (BSP) to BS EN 10226-1.

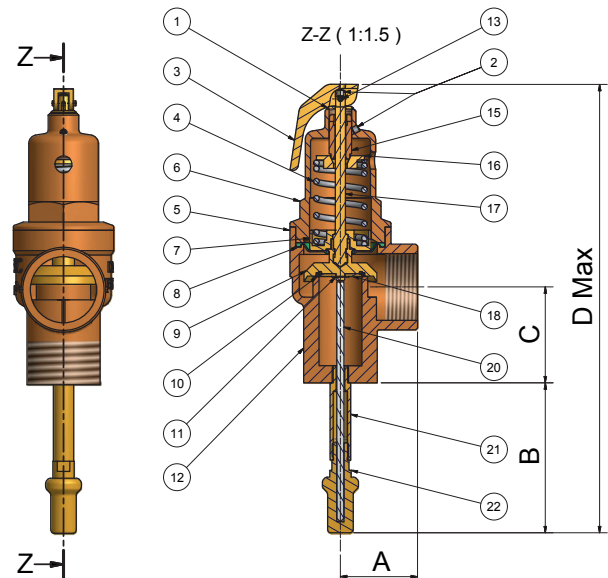
#### PRODUCT TESTING

All valves are shell and seat tested (to confirm set pressure) before leaving the factory and all valves are supplied pre-set with a tamper proof seal. Pressure Test Certificate and Letters of Conformity available on request.

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Thrust Washer	Brass, BS EN 12164 CW609N
2	Grubscrew	Steel
3	Test Lever	Brass, BS EN 1982 CC754S
4	Spring	Chrome Vanadium Alloy Steel, BS 2803 735 A50 HS (Stainless Steel, BS 2056 302S26 Opt)
5	Label	Yellow kapton
6	Spring Cover	Bronze, BS EN 1982 CC491K
7	Piston	Brass, BS EN 12164 CW609N
8	Diaphragm	Silicon Rubber
9	Seat Seal Holder	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
10	Seat Seal	PTFE (Viton Opt)
11	Starlock Washer	Stainless Steel
12	Body	Bronze, BS EN 1982 CC491K
13	Lever Pin	Steel
14	Lead Seal	Lead
15	Adjusting Screw	Brass, BS EN 12164 CW609N
16	Spring Plate	Brass, BS EN 12164 CW609N
17	Spindle	Brass, BS EN 12164 CW721R
18	Seat Seal Retaining Plate	Bronze, BS EN 1982 CC491K / Brass BS EN 12164 CW602N (DZR)
20	Push Rod	Stainless Steel, BS 970 316 S31
21	Adaptor	Brass, BS EN 12164 CW602N (DZR)
22	Thermostat	Copper/Brass BS EN 12164 CW602N (DZR)

#### DIMENSIONAL DRAWING



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# FIG 500T COMBINED PRESSURE & TEMPERATURE RELIEF VALVE

## TEMPERATURE RATING

The discharge capacity of the safety valve must be equal to or greater than the output of the boiler or system it is protecting. Two methods of sizing are employed for combined pressure and temperature relief valves; one, based on the pressure element of the valve, the other based on the temperature element. To ensure that the correct method is used, reference should be made to the relevant BS specification to the design of the boiler or system. If in doubt, choose the method which produces the lower rating.

SIZE	DN15	DN20	DN25	DN32	DN40	DN50
kW	25	45	65	105	165	255

To convert to Btu/hr multiply by 3400.

The above discharge capabilities represent approximately 45% of the relief capability of the valve, when steam at the pressure of 1 bar causes the thermostat to open the valve.

## DISCHARGE CAPABILITIES

Fig 500T capacities are tabulated below to assist selection.

HOT WATER - UNVENTED SYSTEM - 10% OVERPRESSURE (BS 6759)						
SET PRESSURE BAR	kW					
	DN15	DN20	DN25	DN32	DN40	DN50
1.0	46	81	127	208	326	509
2.0	70	124	194	317	496	775
3.0	94	167	260	427	667	1041
4.0	118	209	327	536	837	1308
6.0	166	294	460	754	1179	1841
8.0	214	380	594	972	1520	2373
10.0	262	465	727	1190	1861	2906
12.5	322	571	894	1463	2287	3572

To convert to Btu/hr multiply by 3400.

The above discharge capabilities have been calculated in accordance with BS 6759:Part 1, using a derated coefficient of discharge (Kdr) of 0.479.

They represent the steam relief capability of the pressure element of the valve at 10% overpressure.

## APPROVALS



ISO 14001 Reg No. EMS 78657



FM00311 ISO 9001



Pressure Equipment Directive PED 97/23/EC and Article 13 of 2014/68/EU

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### FIG 568 ANTI-VACUUM VALVE

#### FEATURES & BENEFITS

The NABIC Fig 568 gunmetal Anti-Vacuum Valve is set to open at a vacuum pressure of 50mbar. A dust cap prevents entry of foreign matter. WRAS approved.

- Size Range: DN15 - DN50
- PTFE to metal seating
- Gunmetal
- Viton to metal seating available.

#### INSTALLATION

Fig 568 Anti-Vacuum valves are used to protect drying cylinders, storage cylinders, calorifiers and tankers from collapse due to internal vacuum. They are also used on the steam systems, to assist condensate drainage and to prevent suction of contents from vats. Vacuum Valves are normally fitted vertically, at the top of the vessel or pipeline being protected, horizontal revolving cylinders however should have a Fig 568 fitted at each end, diametrically opposite one another. The operation of valves in service should be checked every twelve months.

#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
13.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	A (mm)	B (mm)	C BSPT (mm)	D-HEX	WEIGHT KG
15	58	35	1/2"	24	0.10
20	61	36	3/4"	30	0.16
25	66	39	1"	36	0.26
32	76	43	1 1/4"	46	0.52
40	90	51	1 1/2"	52	0.77
50	94	58	2"	65	1.22

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body	Bronze, BS EN 1982:1999 CB/CC491K
2	Seat Seal Holder	Brass, BE EN 12164:2011 CW602N
3	Spindle	Brass, BS EN 12164:2011 CW614N
4	Cap	Brass, BS EN 12164:2011 CW614N
5	Spring	Stainless Steel BS2056 302S26
6	Seat Seal	PTFE
7	Seat Seal Retaining Plate	Brass, BS EN 12164:2011 CW602
8	O-Ring	Viton E60C

#### APPROVALS



ISO 14001 Reg No. EMS 78657

FM00311 ISO 9001



#### MEDIUM

Hot water, steam, air.

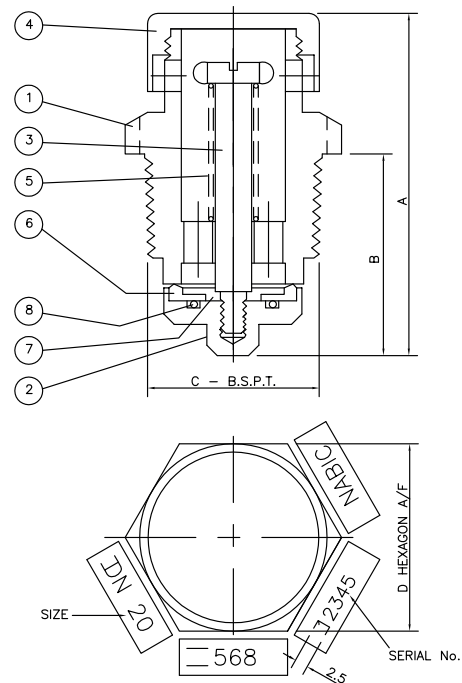
#### PIPE CONNECTIONS

BSPT (R) BS EN 10226-2. Male connections, R1/2, R3/4", R1", R1 1/4", R1 1/2" and R2" available.

#### PRODUCT TESTING

All valves are 100% production tested.

#### DIMENSIONAL DRAWING



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## FIG 568 ANTI-VACUUM VALVE

### DISCHARGE CAPABILITIES

The capacity of an anti-vacuum valve should be equal to or greater than the rate of the vacuum formation in the vessel being protected. To assist selection, reference should be made to BS 853 cl 10.3 or to the capacities of the Fig 568 tabulated below:

AIR						
std. litres/sec						
VACUUM PRESSURE mBar	DN15	DN20	DN25	DN32	DN40	DN50
250	2	5	10	21	32	52
500	3	9	17	32	53	71

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### FIG 568SS ANTI-VACUUM VALVE

#### FEATURES & BENEFITS

The NABIC Fig 568SS stainless steel Anti-Vacuum Valve is set to open at a vacuum pressure of 50mbar. A dust cap prevents entry of foreign matter. WRAS approved.

- Size Range: DN15 - DN50
- PTFE to metal seating
- Stainless steel
- Viton to metal seating available.

#### INSTALLATION

Fig 568SS Anti-Vacuum valves are used to protect drying cylinders, storage cylinders, calorifiers and tankers from collapse due to internal vacuum. They are also used on the steam systems, to assist condensate drainage and to prevent suction of contents from vats. Vacuum Valves are normally fitted vertically, at the top of the vessel or pipeline being protected, horizontal revolving cylinders however should have a Fig 568SS fitted at each end, diametrically opposite one another. The operation of valves in service should be checked every twelve months.

#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX PRESSURE (bar)	MIN - MAX TEMPERATURE (°C)
13.5	-20 to 195

#### DIMENSIONS & WEIGHTS

SIZE DN	A (mm)	B (mm)	C BSPT (mm)	D-HEX	WEIGHT KG
15	58	35	1/2"	24	0.10
20	61	36	3/4"	30	0.16
25	66	39	1"	36	0.26
32	76	43	1 1/4"	46	0.52
40	90	51	1 1/2"	52	0.77
50	94	58	2"	65	1.22

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body	316 Stainless steel
2	Seat Seal Holder	316 Stainless steel
3	Spindle	316 Stainless steel
4	Cap	316 Stainless steel
5	Spring	Stainless Steel BS2056 302S26
6	Seat Seal	PTFE
7	Seat Seal Retaining Plate	316 Stainless steel
8	O-Ring	Viton E60C

#### APPROVALS



FM00311 ISO 9001

ISO 14001 Reg No. EMS 78657



#### MEDIUM

Hot water, steam, air.

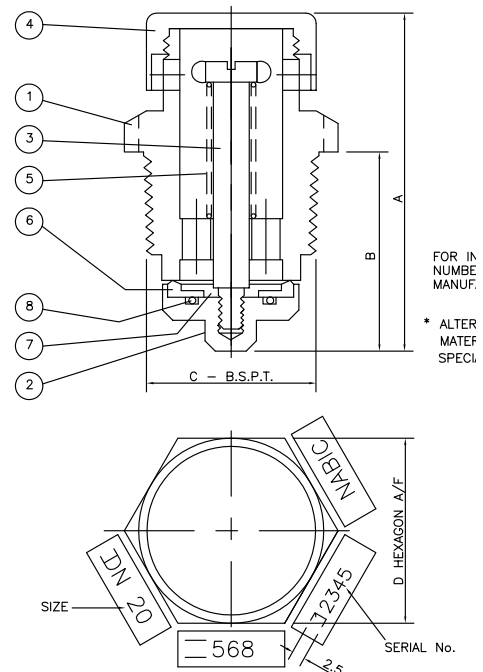
#### PIPE CONNECTIONS

BSPT (R) BS EN 10226-2. Male connections, R1/2, R3/4", R1", R1 1/4", R1 1/2" and R2" available.

#### PRODUCT TESTING

All valves are 100% production tested.

#### DIMENSIONAL DRAWING



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## **FIG 568SS ANTI-VACUUM VALVE**

### **DISCHARGE CAPABILITIES**

The capacity of an anti-vacuum valve should be equal to or greater than the rate of the vacuum formation in the vessel being protected. To assist selection, reference should be made to BS 853 cl 10.3 or to the capacities of the Fig 568SS tabulated below:

<b>AIR</b>						
std. litres/sec						
<b>VACUUM PRESSURE mBar</b>	<b>DN15</b>	<b>DN20</b>	<b>DN25</b>	<b>DN32</b>	<b>DN40</b>	<b>DN50</b>
250	2	5	10	21	32	52
500	3	9	17	32	53	71

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### FIG 100 AUTOMATIC AIR VENT

#### FEATURES & BENEFITS

The NABIC Fig 100 Air Vent has been designed to automatically and efficiently remove trapped air from Heating systems. It can also be fitted to other fluid systems where air inclusion causes problems.

- Reliable operation
- High degree of seat tightness
- Easy inspection and cleaning
- Optional lock shield valve available

#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX PRESSURE (bar)	MAX TEMPERATURE (°C)
0.15 to 10	-20 to 93

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	PTFE Needle	25% Glass Filled PTFE
2	Cover	BS EN 1982:1999 CB491K
3	Float	Stainless Steel 316
4	Body	BS EN 1982:1999 CB491K
5	Washer	Klingsil C4430
6	Starlock Washer	Stainless Steel
7	Spindle	Stainless Steel 316 303 S21

#### MEDIUM

Hot water, air.

#### PIPE CONNECTIONS

Inlet Rp 1/2" BSP female, Vent G 3/8" BSP male.  
BS EN 10226-1.

#### PRODUCT TESTING

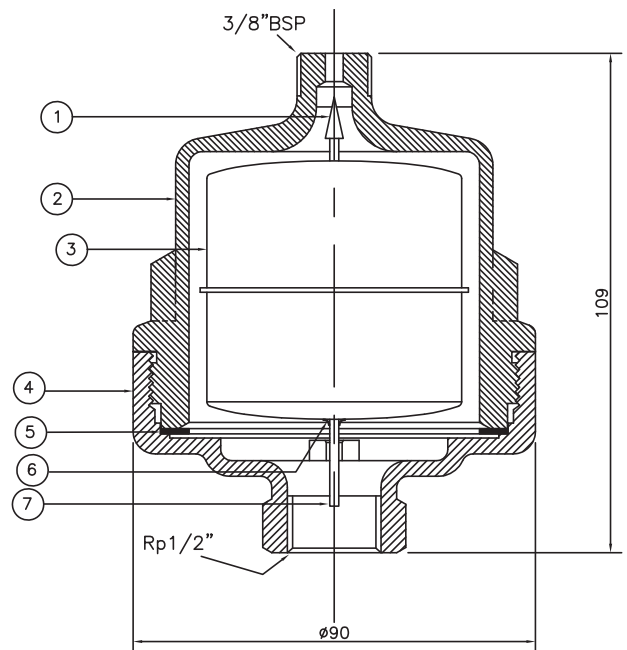
All valves are 100% production tested.

#### CONSTRUCTION

All wetted parts of the Fig 100 Automatic Air Vent are manufactured from dezincification resistant materials, the valve body is of gunmetal construction, the float is of all stainless steel manufacture and the seating faces are of the proven PTFE to metal design. The inlet connection is 1/2" BSP female thread to BS EN 10226-1 and the vent connection is screwed G 3/8" BSP male.



#### DIMENSIONAL DRAWING



#### APPROVALS



FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657

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### FIG 175 3 WAY VENT COCK

#### FEATURES & BENEFITS

The NABIC Fig 175 Three Way Vent Cock has been designed for use on vented hot water systems, to ensure there is a permanent connection from the boiler or calorifier to atmosphere. Fitting a Fig 175 allows the use of a single common vent pipe and permits continued operation of the system whilst maintenance is carried out on an individual unit.

- Size Range: DN20 - DN65
- Boiler connection permanently open
- No water loss on change over
- Dezincification materials
- DN65 available with flanged boiler and vent connections



#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)
7	-20 to 100

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP Inlet / Outlet	A (mm)	B (mm)	C (mm)	D (mm)	WEIGHTS (kg)
20	3/4"	95	38	80	32	1.40
25	1"	108	46	95	35	2.0
32	1 1/4"	127	59	103	43	3.20
40	1 1/2"	146	67	120	54	4.80
50	2"	165	78	146	61	8.20
65	2 1/2"	181	89	175	70	11.30
65 Flg	Flange	205	89	175	70	16

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body	BS EN 1982:1999 CB491K
2	Plug	BS EN 1982:1999 CB491K
3	Packing	Approved type
4	Stud	BS EN 12164:1998 CW609N
5	Gland	BS EN 1982:1999 CB491K
6	Nut	BS EN 12164:1998 CW609N

#### MEDIUM

Hot water.

#### PIPE CONNECTIONS

Female end connections BSP to BS EN 10226-1. Rp 3/4", Rp 1", Rp 1 1/4", Rp 1 1/2", Rp 2", Rp 2 1/2".

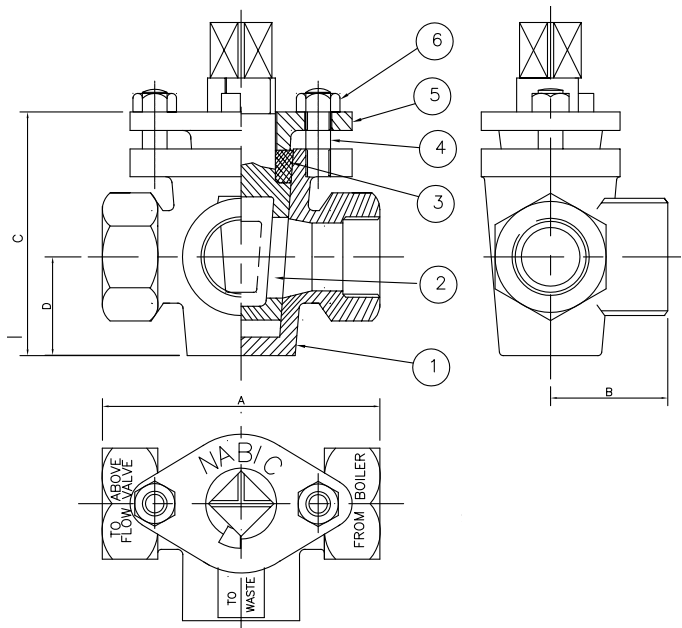
#### PRODUCT TESTING

All valves are 100% production tested.

#### CONSTRUCTION

A stop incorporated in the gland locates with the plug to ensure that the boiler connection is always open to atmosphere, either via the vent or the drain. Fig 176 malleable iron operating keys, designed to fit the plug squares, can be supplied if required.

#### DIMENSIONAL DRAWING



#### APPROVALS



FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657

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## FIG 175 3 WAY VENT COCK

### SIZING

To provide adequate emergency steam relief capability, vented hot water systems require the fitting of a suitably sized vent pipe in addition to a safety relief valve (Fig 542). The following sizes are specified in BS 779, BS 853 & BS 855.

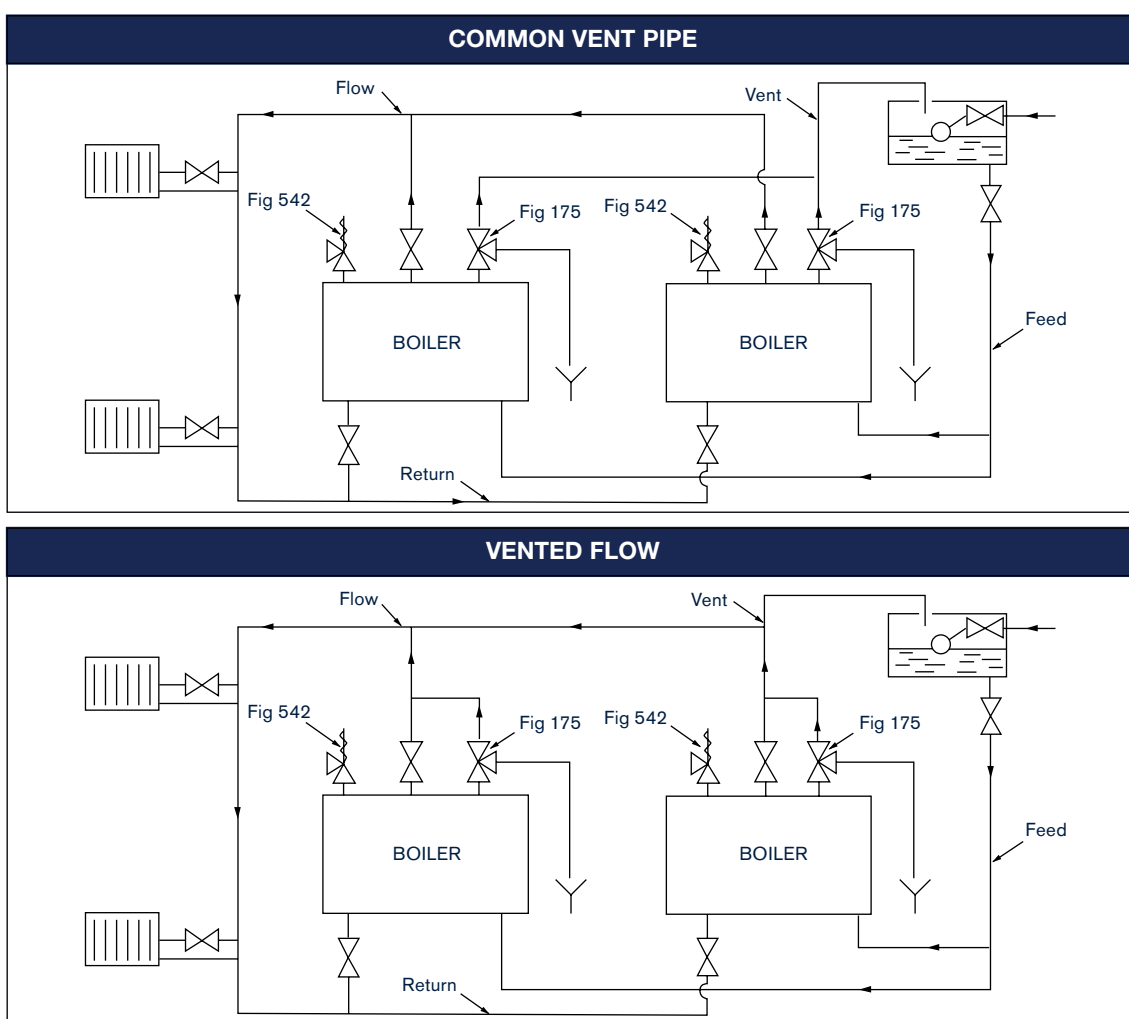
VENT PIPE						
SIZE	*DN20	DN25	DN32	DN40	DN50	DN65
kW	44	60	150	300	600	above 600

To convert to Btu/hr multiply by 3,400.

\*The minimum size of vent pipe permitted by the above BS specifications is 25mm.

The rating given for the DN20 size is only for applications outside the scope of these standards.

### INSTALLATION



In both types of installation, there must be no isolating valve fitted between the Fig 175 and the boiler, vent pipe or drain.

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### FIG 503 3 WAY VENT VALVE

#### FEATURES & BENEFITS

The NABIC Fig 503 Three Way Vent Cock has been designed for use on vented hot water systems, to ensure there is a permanent connection from the boiler or calorifier to atmosphere. This valve allows the use of a single common vent pipe and permits continued operation of the system whilst maintenance is carried out on an individual unit.

- Size Range: DN20 - DN65
- Boiler connection permanently open
- Minimum water loss on changeover
- Cassette construction for ease of inspection and in-line servicing
- DN65 available with flanged boiler and vent connections



#### PRESSURE RATINGS & TEMPERATURE RANGE

MIN - MAX SET PRESSURE (bar)	MIN - MAX SET TEMPERATURE (°C)
7	-20 to 93

#### DIMENSIONS & WEIGHTS

SIZE DN	Rp BSP	A (mm)	B (mm)	C (mm)
20	3/4"	70	110	38
25	1"	84	145	48
32	1 1/4"	98	150	63
40	1 1/2"	114	170	72
50	2"	140	190	78
65	2 1/2"	170	220	114

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Handwheel	Aluminium
2	Name Plate	Aluminium
3	Hex Head Screw	Brass
4	Washer	Steel
5	Gland Nut	BS EN 12164:1998 CW609N
6	Gland Packing	Non ASB. Graphite
7	Gland Ring	BS EN 12164:1998 CW609N
8	Spindle	BS EN 12164:1998 CW602N
9	O-Ring	Rubber Nitrile
10	Head	BS EN 1982:1999 CB491K
11	Body	BS EN 1982:1999 CB491K
12	O-Ring	Rubber Nitrile
13	Retaining Plate	Stainless Steel, BS 3146 ANC 4BFC
14	Valve Disc	BS EN 12164:1998 CW602N
15	Seat Insert	Virgin PTFE
16	O-Ring	Rubber Nitrile
17	Locknut	BS EN 12164:1998 CW602N

#### MEDIUM

Hot water.

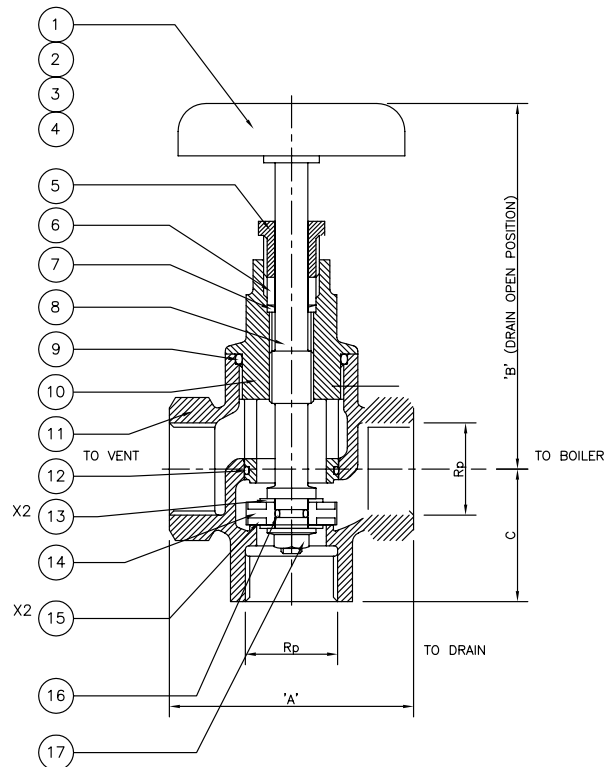
#### PIPE CONNECTIONS

Female end connections BSP to BS EN 10226-1.: Rp 3/4", Rp 1", Rp 1 1/4", Rp 1 1/2", Rp 2", Rp 2 1/2".

#### PRODUCT TESTING

All valves are 100% production tested.

#### DIMENSIONAL DRAWING



#### APPROVALS



FM00311 ISO 9001



ISO 14001 Reg No. EMS 78657

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## FIG 503 3 WAY VENT VALVE

### SIZING

To provide adequate emergency steam relief capability, vented hot water systems require the fitting of a suitably sized vent pipe in addition to a safety relief valve (Fig 542). The following sizes are specified in BS 779, BS 853 & BS 855.

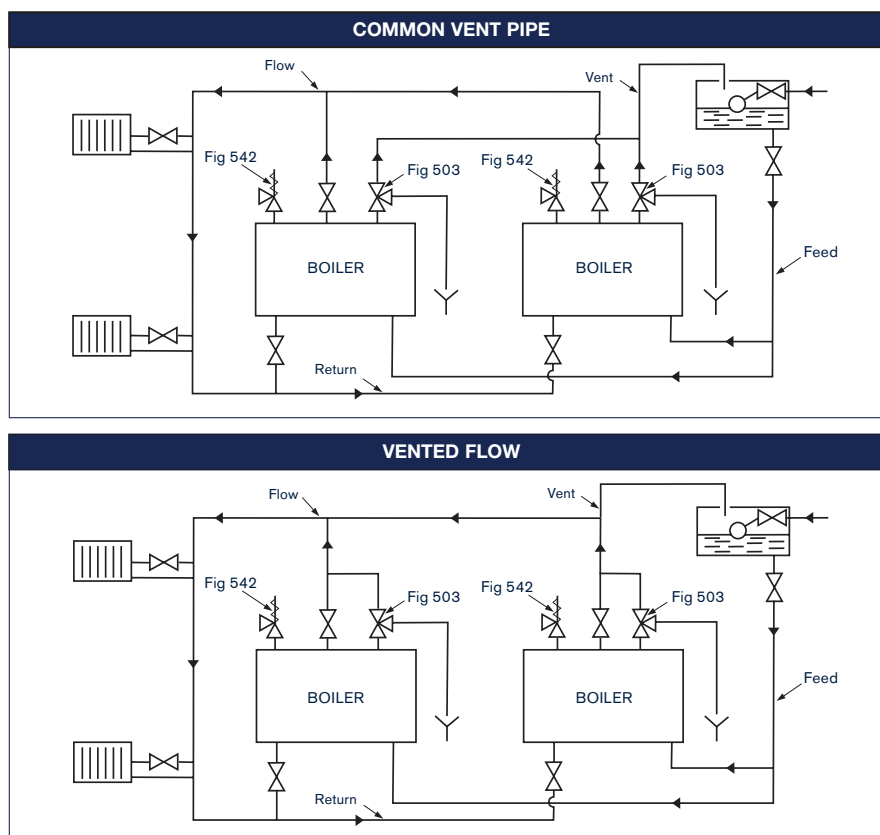
VENT PIPE						
SIZE	DN15	DN20	DN25	DN32	DN40	DN50
kW	44	60	150	300	600	above 600

To convert to Btu/hr multiply by 3400.

\*The minimum size of vent pipe permitted by the above BS specifications is 25mm.

The rating given for the DN20 size is only for application outside the scope of these standards.

### INSTALLATION



In both types of installation, there must be no isolating valve fitted between the Fig 503 and the boiler, vent pipe or drain.

### CONSTRUCTION

The Fig 503 is of gunmetal construction, with all wetted parts manufactured from dezincification resistant materials. Cassette construction allows for the valve to be inspected and serviced without removal from the system. The internal design keeps loss of water on changeover to a minimum, and is such that boiler isolation is impossible. End connections have female threads to BS 21, and the DN65 size is also available with flanged boiler and vent connections. For other design conditions please consult NABIC Technical Department.

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### FIG 256A PIPE INTERRUPTER

#### FEATURES & BENEFITS

The NABIC Fig 256A pipe interrupter is classified as a DC type device suitable for protecting up to fluid category 5. Incorporating ventilation ports that are totally unrestricted and permanent, water is guided past these air vents using a venturi type nozzle. Since they are constantly open to atmosphere, this stops siphonage and allows the escape of water in the event of backflow. WRAS approved.

- Size Range: DN10 - DN20
- O Rings EPDM
- In compliance with: BS EN1717 & BS EN 806-5
- N-256A-015S is available for low flow conditions

#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX WORKING PRESSURE (BAR)	MIN - MAX TEMPERATURE (°C)
0 to 10.0	-20 to 60

#### DIMENSIONS & WEIGHTS

SIZE DN	BSP G	L	D	Kv
10	3/8"	83.5	30	0.33
15S	1/2"	83	30	0.33
15	1/2"	91	43.5	0.9
20	3/4"	88	43.5	1.14

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body Material	Brass
2	Internals	Plastic
3	'O' Ring Seals	EPDM



#### MEDIUM

Water.

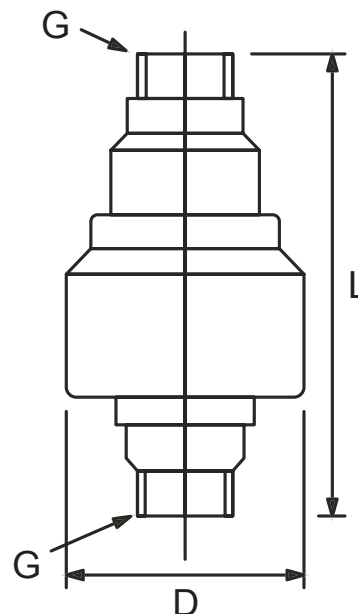
#### PIPE CONNECTIONS

Male BSP inlet and outlet connections: G3/8", G1/2" and G3/4" to ISO228A.

#### PRODUCT TESTING

All valves are 100% production tested.

#### DIMENSIONAL DRAWING



#### APPROVALS



ISO 14001 Reg No. EMS 78657



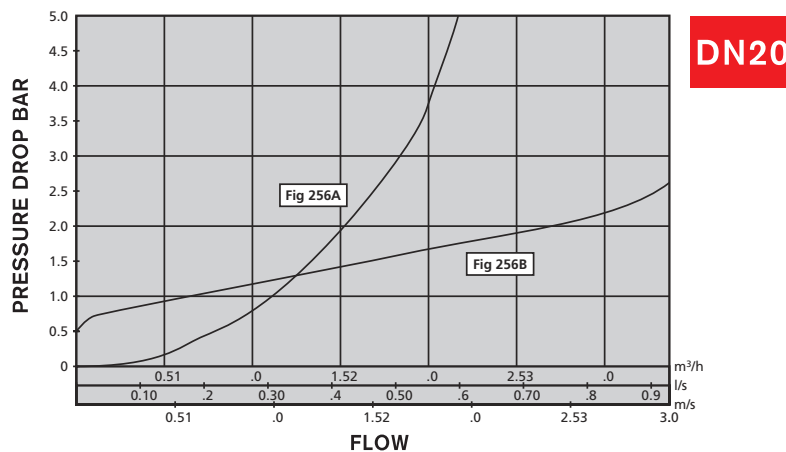
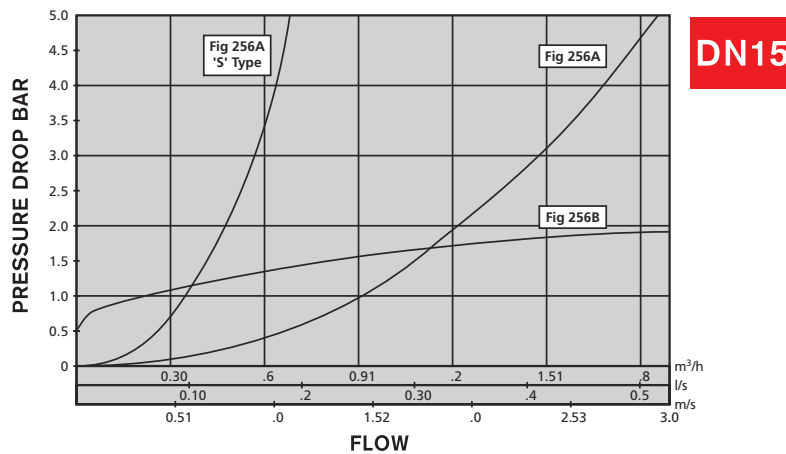
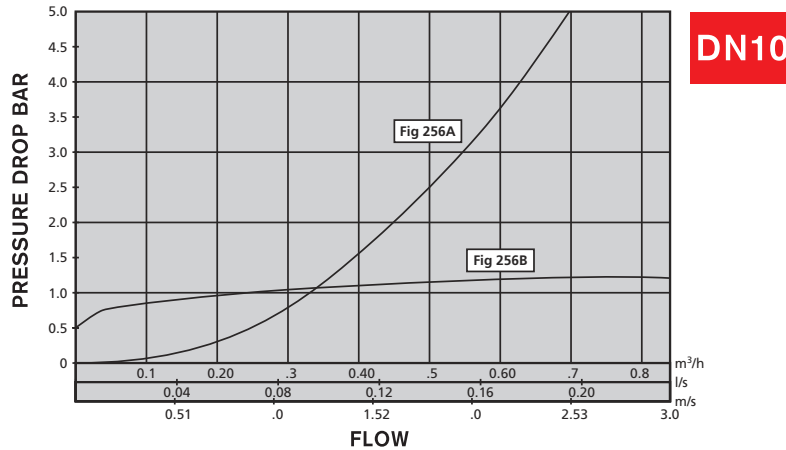
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# FIG 256A PIPE INTERRUPTER

## FLOW CHARACTERISTICS



## INSTALLATION

The devices should be fitted in the vertical position with downwards flow in a readily accessible location. They must be installed with the lowest point of the air apertures, at least 300mm above the highest possible water level. The only exception is on urinals where the DC type can be fixed not less than 150mm above the sparge pipe outlet. There shall be no valve or restriction on the outlet side of the interrupter and they should not be fitted in locations liable to flooding.

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### FIG 256B PIPE INTERRUPTER

#### FEATURES & BENEFITS

NABIC Fig 256B pipe interrupter is classified as a DB type device suitable for protecting up to fluid category 4. This device has a moving element which seals the ventilation gaps during normal flow conditions. When negative pressures occur on the inlet side which could cause siphonage, the membrane retracts seals the flow ports and simultaneously vents the outlet side of the pipe interrupter. WRAS approved.

- Size Range: DN10 - DN20
- O Rings EPDM
- Female inlet connection available on DN15 and 20
- In compliance with:  
BS EN1717 & BS EN 806-5



#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX WORKING PRESSURE (BAR)	MIN - MAX TEMPERATURE (°C)
0.5 to 10.0	-20 to 60

#### DIMENSIONS & WEIGHTS

SIZE DN	BSP G	L	D	Kv
10M	3/8"	89	29	0.26
15M	1/2"	89	29	0.26
20M	3/4"	90	29	0.61
15F	1/2"	82	29	0.26
20F	3/4"	68	29	0.61

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body Material	Brass
2	Internals	Plastic
3	Membrane	EPDM

#### MEDIUM

Water.

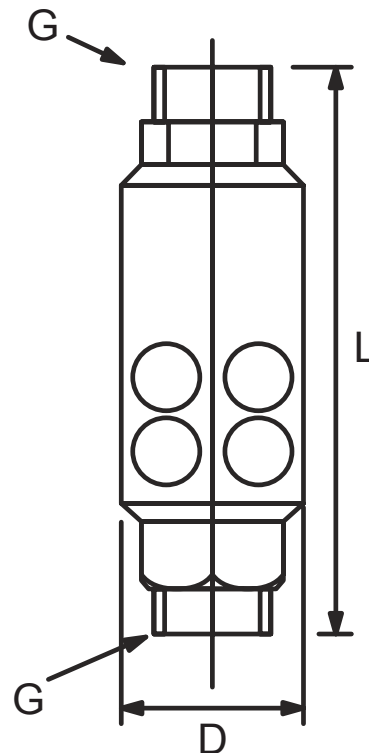
#### PIPE CONNECTIONS

Male BSP inlet and outlet connections: G3/8", G1/2" and G3/4" to ISO228A. DN15 and DN20 female connections G1/2" and G3/4" to ISO228.

#### PRODUCT TESTING

All valves are 100% production tested.

#### DIMENSIONAL DRAWING



#### APPROVALS



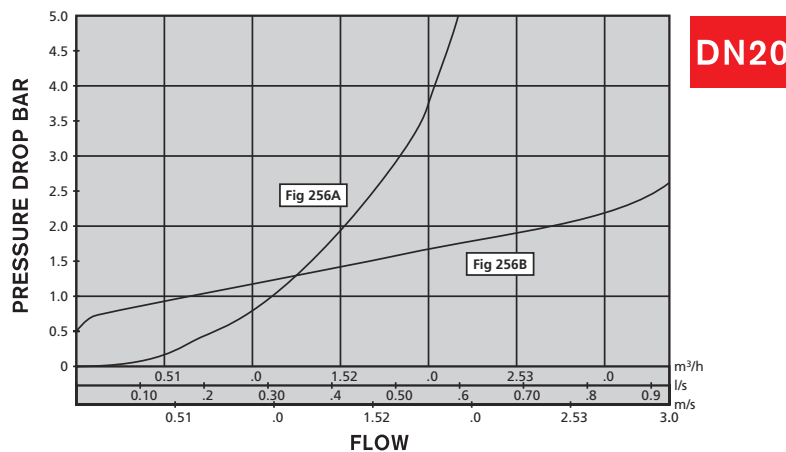
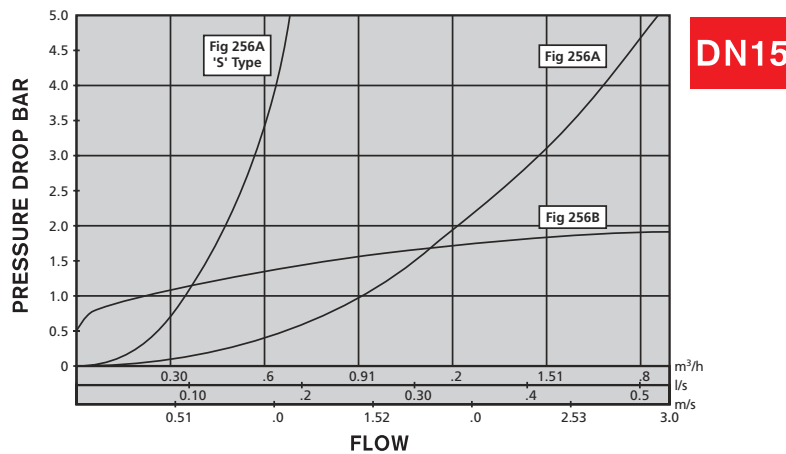
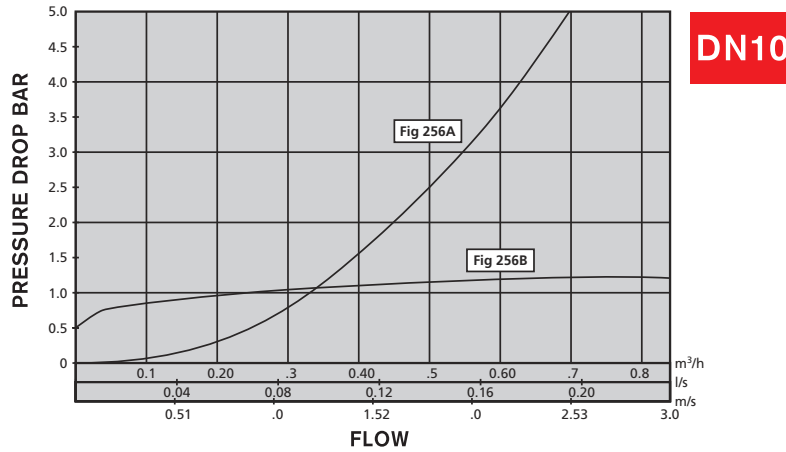
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# FIG 256B PIPE INTERRUPTER

## FLOW CHARACTERISTICS



## INSTALLATION

The devices should be fitted in the vertical position with downwards flow in a readily accessible location. They must be installed with the lowest point of the air apertures, at least 300mm above the highest possible water level. The only exception is on urinals where the DC type can be fixed not less than 150mm above the sparge pipe outlet. There shall be no valve or restriction on the outlet side of the interrupter and they should not be fitted in locations liable to flooding.

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### FIG 55N TEST VALVE

#### FEATURES & BENEFITS

The NABIC Fig 55N Test Valve allows the use of a single common vent pipe and permits continued operation of the system whilst maintenance is carried out on an individual unit. It is a robust gunmetal stop valve, with stainless steel needle type valve and seat. A dust cap protects the test gauge connection.

- Acts as an air vent, to facilitate draining and filling of the boiler
- Protective cap for test gauge connection



#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX PRESSURE (bar)	MAX TEMPERATURE (°C)
17.5	-20 to 260

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body	Gunmetal

#### MEDIUM

Hot water, steam.

#### PIPE CONNECTIONS

Boiler connection R 1/2" BSP male. Gauge connection Rp 3/8" BSP female. To BS EN 10226-1.

#### PRODUCT TESTING

All valves are 100% production tested.

#### APPROVALS



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### FIG 174 TEST VALVE

#### FEATURES & BENEFITS

The NABIC Fig 174 is a robust gunmetal stop valve with a flanged boiler connection and stainless steel needle type valve and seat. A dust cap protects the test gauge connection. The test valve is used on steam boilers, to provide a means for attaching a test pressure gauge to enable the calibration of the boiler gauge to be checked under working conditions.

- Acts as an air vent, to facilitate draining and filling of the boiler
- Protective cap for test gauge connection



#### PRESSURE RATINGS & TEMPERATURE RANGE

MAX PRESSURE (bar)	MAX TEMPERATURE (°C)
17.5	-20 to 260

#### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body	Gunmetal

#### MEDIUM

Hot water, steam.

#### PIPE CONNECTIONS

Flanged boiler connection. The following flange rating are available: BS EN 1092-3 PN16 and PN25. BS10 Table F and Table H. Gauge connection Rp 3/8" BSP female. To BS EN 10226-1.

#### PRODUCT TESTING

All valves are 100% production tested.

#### APPROVALS



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## FIG 362, 363 & 364 PRESSURE GAUGE TESTER



Fig 362



Fig 363



Fig 364

### FEATURES & BENEFITS

The Fig 362 Pressure Gauge Tester is a compact portable unit, used for checking pressure gauges on site.

The tester is comprised of a small hand operated air pump with fine adjustment facility. Suitable fittings are supplied

### PRESSURE RATINGS & TEMPERATURE RANGE

MAX  
PRESSURE (bar)  
0 - 20

### PART NAME & MATERIALS

ITEM NO.	PART NAME	MATERIAL
1	Body material	Brass Powder Coated

to enable most gauges in common use to be tested throughout their range.

Two 80mm Pressure Gauges are provided, both calibrated in metric and imperial units. The low pressure gauge is graduated 0-4 bar (0-60 psi) and the high pressure gauge is graduated 0-20 bar (0-300 psi). The instrument is contained in a lightweight durable case with carrying handle.

Fig 363, low pressure gauge 0-4 bar (0-60 psi) & Fig 364, high pressure gauge 0-20 bar (0-300 psi) are both available to order separately.

### CALIBRATION SERVICE

NABIC® offer an independent pressure gauge calibration service traceable to National Standards. This service has been developed to meet the growing demand of Quality Assurance Schemes and Inspection Authorities for certification.

Equipment used for checking gauges, is certified for accuracy to National Standards held at the National Physical Laboratory. Full point by point test certificates can be provided or, for industrial gauges, a letter of conformity to BS 1780.

### APPROVALS



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## FIG 500 SERIES - CHROME VANADIUM

SPRING SIZE		1	2	3	4	5	6	7	8
VALVE SIZE (DN)		10	15	20	25	32	40	50	65
White	5 - 9	NP3010	NP3090	NP3170	NP3250	NP3330	NP3410	NP3490	NP3570
Red	10 - 19	NP3020	NP3100	NP3180	NP3260	NP3340	NP3420	NP3500	NP3580
Yellow	20 - 39	NP3030	NP3110	NP3190	NP3270	NP3350	NP3430	NP3510	NP3590
Green	40 - 59	NP3040	NP3120	NP3200	NP3280	NP3360	NP3440	NP3520	NP3600
Brown	60 - 89	NP3050	NP3130	NP3210	NP3290	NP3370	NP3450	NP3530	NP3610
Blue	90 - 119	NP3060	NP3140	NP3220	NP3300	NP3380	NP3460	NP3540	NP3620
Purple	120 - 149	NP3070	NP3150	NP3230	NP3310	NP3390	NP3470	NP3550	NP3630
Black	150 - 180	NP3080	NP3160	NP3240	NP3320	NP3400	NP3480	NP3560	NP3640
<b>COLOUR</b>	<b>RANGE PSI</b>	<b>SPRING PART NUMBER</b>							

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## FIG 520 SERIES - CHROME VANADIUM

SPRING SIZE			6	7	8
VALVE SIZE (DN)			65	80	100
White	5 - 9	0.4 - 0.6	NP3410	NP3490	NP3570
Red	10 - 19	0.7 - 1.3	NP3420	NP3500	NP3580
Yellow	20 - 39	1.4 - 2.6	NP3430	NP3510	NP3590
Green	40 - 59	2.7 - 4.0	NP3440	NP3520	NP3600
Brown	60 - 89	4.1 - 6.1	NP3450	NP3530	NP3610
Blue	90 - 119	6.2 - 8.2	NP3460	NP3540	NP3620
Purple	120 - 149	8.3 - 10.2	NP3470	NP3550	NP3630
Black	150 - 180	10.3 - 12.5	NP3480	NP3560	NP3640
COLOUR	RANGE PSI	RANGE BAR	SPRING PART NUMBER		

**Note:** Needs two springs per Valve as FIG520 is a double headed version of FIG500.

- DN65 FIG520 uses same spring as DN40 FIG500.
- DN80 FIG520 uses same spring as DN50 FIG500.
- DN100 FIG520 uses same spring as DN65 FIG500.

## FIG 500T SERIES - CHROME VANADIUM

SPRING SIZE			2	3	4	5	6	7
VALVE SIZE (DN)			15	20	25	32	40	50
White	5 - 9	0.4 - 0.6	NP3090	NP3170	NP3250	NP3330	NP3410	NP3490
Red	10 - 19	0.7 - 1.3	NP3100	NP3180	NP3260	NP3340	NP3420	NP3500
Yellow	20 - 39	1.4 - 2.6	NP3110	NP3190	NP3270	NP3350	NP3430	NP3510
Green	40 - 59	2.7 - 4.0	NP3120	NP3200	NP3280	NP3360	NP3440	NP3520
Brown	60 - 89	4.1 - 6.1	NP3130	NP3210	NP3290	NP3370	NP3450	NP3530
Blue	90 - 119	6.2 - 8.2	NP3140	NP3220	NP3300	NP3380	NP3460	NP3540
Purple	120 - 149	8.3 - 10.2	NP3150	NP3230	NP3310	NP3390	NP3470	NP3550
Black	150 - 180	10.3 - 12.5	NP3160	NP3240	NP3320	NP3400	NP3480	NP3560
COLOUR	RANGE PSI	RANGE BAR	SPRING PART NUMBER					

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## FIG 542 SERIES - CHROME VANADIUM

SPRING SIZE		1	2	3	4	5	6	7	8
VALVE SIZE (DN)		15	20	25	32	40	50	65	80
White	4 - 7	NP3010	NP3090	NP3170	NP3250	NP3330	NP3410	NP3490	NP3570
Red	8 - 15	NP3020	NP3100	NP3180	NP3260	NP3340	NP3420	NP3500	NP3580
Yellow	16 - 31	NP3030	NP3110	NP3190	NP3270	NP3350	NP3430	NP3510	NP3590
Green	32 - 47	NP3040	NP3120	NP3200	NP3280	NP3360	NP3440	NP3520	NP3600
Brown	48 - 71	NP3050	NP3130	NP3210	NP3290	NP3370	NP3450	NP3530	NP3610
Blue	72 - 95	NP3060	NP3140	NP3220	NP3300	NP3380	NP3460	NP3540	NP3620
Purple	96 - 119	NP3070	NP3150	NP3230	NP3310	NP3390	NP3470	NP3550	NP3630
Black	120 - 152	NP3080	NP3160	NP3240	NP3320	NP3400	NP3480	NP3560	NP3640
<b>COLOUR</b>	<b>RANGE PSI</b>	<b>SPRING PART NUMBER</b>							

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## FIG 500 SERIES - STAINLESS STEEL

SPRING SIZE		1	2	3	4	5	6	7	8
VALVE SIZE (DN)		15	20	25	32	40	50	65	80
White	4 - 6	NP4200	NP4216	NP4232	NP4248	NP4264	NP4280	NP4296	NP4312
Red	7 - 13	NP4202	NP4218	NP4234	NP4250	NP4266	NP4282	NP4298	NP4314
Yellow	14 - 27	NP4204	NP4220	NP4236	NP4252	NP4268	NP4284	NP4300	NP4316
Green	28 - 41	NP4206	NP4222	NP4238	NP4254	NP4270	NP4286	NP4302	NP4318
Brown	42 - 62	NP4208	NP4224	NP4240	NP4256	NP4272	NP4288	NP4304	NP4320
Blue	63 - 83	NP4210	NP4226	NP4242	NP4258	NP4274	NP4290	NP4306	NP4322
Purple	84 - 104	NP4212	NP4228	NP4244	NP4260	NP4276	NP4292	NP4308	NP4324
Black	105 - 130	NP4214	NP4230	NP4246	NP4262	NP4278	NP4294	NP4310	NP4326
<b>COLOUR</b>	<b>RANGE PSI</b>	<b>SPRING PART NUMBER</b>							

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## FIG 542 SERIES - STAINLESS STEEL

SPRING SIZE		1	2	3	4	5	6	7	8
VALVE SIZE (DN)		10	15	20	25	32	40	50	65
White	4 - 8	NP4200	NP4216	NP4232	NP4248	NP4264	NP4280	NP4296	NP4312
Red	9 - 17	NP4202	NP4218	NP4234	NP4250	NP4266	NP4282	NP4298	NP4314
Yellow	18 - 34	NP4204	NP4220	NP4236	NP4252	NP4268	NP4284	NP4300	NP4316
Green	35 - 52	NP4206	NP4222	NP4238	NP4254	NP4270	NP4286	NP4302	NP4318
Brown	53 - 78	NP4208	NP4224	NP4240	NP4256	NP4272	NP4288	NP4304	NP4320
Blue	79 - 104	NP4210	NP4226	NP4242	NP4258	NP4274	NP4290	NP4306	NP4322
Purple	105 - 130	NP4212	NP4228	NP4244	NP4260	NP4276	NP4292	NP4308	NP4324
Black	131 - 160	NP4214	NP4230	NP4246	NP4262	NP4278	NP4294	NP4310	NP4326
<b>COLOUR</b>	<b>RANGE PSI</b>	<b>SPRING PART NUMBER</b>							

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## FIG 520 SERIES - STAINLESS STEEL

SPRING SIZE			6	7	8
VALVE SIZE (DN)			40	50	65
White	4 - 8	0.4 - 0.6	NP4280	NP4296	NP4312
Red	9 - 17	0.7 - 1.2	NP4282	NP4298	NP4314
Yellow	18 - 34	1.3 - 2.3	NP4284	NP4300	NP4316
Green	35 - 52	2.4 - 3.5	NP4286	NP4302	NP4318
Brown	53 - 78	3.6 - 5.3	NP4288	NP4304	NP4320
Blue	79 - 104	5.4 - 7.1	NP4290	NP4306	NP4322
Purple	105 - 130	7.2 - 8.9	NP4292	NP4308	NP4324
Black	131 - 160	9.0 - 11.0	NP4294	NP4310	NP4326
COLOUR	RANGE PSI	RANGE BAR	SPRING PART NUMBER		

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