

# Combined Pressure & Temperature Relief Valve

# NABIC®

## Applications:

The Fig 500T Combined Pressure and Temperature Relief Valve has been designed for use on unvented hot water supply systems, where protection against excess temperature is required in addition to pressure protection. Pressure and temperature elements of the valve operate independently, thereby providing dual safety protection in the one valve.

## Construction:

The Fig 500T is of gunmetal construction, with diaphragm protected working parts and resilient viton seating. All wetted parts are manufactured from dezincification resistant materials, approved by the Water Regulations Advisory Scheme for use on potable water. Inlet and outlet connections are of equal size and threaded to BS 21, with the inlet connection male and the outlet female.

## Features:

- Resilient viton seating
- High Discharge Capacity
- Powerful thermostat
- Dual safety protection
- Diaphragm protected working parts
- Safe manual testing
- Easy inspection and cleaning
- Pressure setting locked and sealed
- Designed and tested to BS 6759
- Water regulations advisory scheme approved product



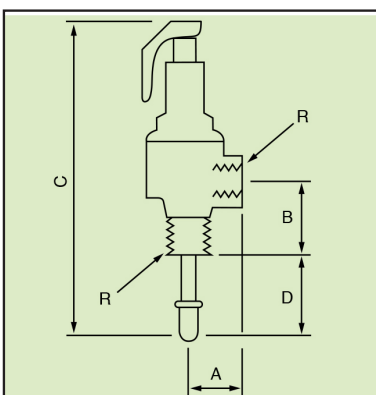
**Body Material:** Gunmetal

**Max Set Pressure:** 12.5 bar

**Max Temperature:** 95°C

**Max Working Temperature:** 75°C

## Dimensions



Size DN	R BSP	A mm	B mm	C mm	D mm
15	3/4	34	48	230	81
20	1	39	47	240	81
25	1.1/4	45	56	260	81
32	1.1/2	54	62	350	127
40	2	64	71	400	127
50	2.1/2	76	82	430	127



## Discharge Capacities

The discharge capacity of a 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 & 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.

Temperature 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 capacities represent approximately 45% of the relief capability of the valve, when steam at a pressure of 1 bar causes the thermostat to open the valve.

Set Pressure bar	Pressure Rating					
	kW					
	DN15	DN20	DN25	DN32	DN40	DN50
1.0	46	81	127	208	326	509
1.5	58	103	160	263	411	642
2.0	70	124	194	318	496	775
2.5	82	145	227	372	581	908
3.0	94	167	260	427	664	1042
4.0	118	209	372	536	837	1308
5.0	142	252	394	645	1008	1575
6.0	166	295	460	754	1178	1841
7.0	190	337	527	863	1349	2108
8.0	214	380	594	973	1520	2374
10.0	262	468	727	1191	1861	2907
12.5	322	572	893	1464	2287	3574

To convert to Btu/hr multiply by 3400

The above discharge capacities 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.