



500T
Bronze
Pressure & Temperature
Safety Relief Valve
For Hot Water
BSPT Inlet Threaded



The 500T combined pressure & 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.

Approvals, Features & Benefits

- BS6283 & BS EN ISO 4126
- WRAS approved (1 Bar & above)
- Testing lever
- Resilient Viton seating design
- Set, tested and certified prior to despatch

Pressure & Temperature

Pressure range:-
DN15 - DN25: 1.0 to 12.5 bar
DN32 - DN80: 0.4 to 12.5 bar

Temperature range:-
-20°C to 195°C

Lift temperature:-
90 to 95°C

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

Temperature Rating in kW						
DN	20	25	32	40	50	
kW	25	45	65	105	165	255

To convert kW 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.

Pressure Rating in kW (set pressure in bar) Hot Water - Unvented System - 10% Overpressure (BS 6759)								
DN	1.0	2.0	3.0	4.0	6.0	8.0	10.0	12.5
15	46	70	94	118	166	214	262	322
20	81	124	167	209	294	380	465	571
25	127	194	260	327	460	594	727	894
32	208	317	427	536	754	972	1190	1463
40	326	496	667	837	1179	1520	1861	2287
50	509	775	1041	1308	1841	2373	2906	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.

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