Pressure & Temperature Relief Valve

for liquid *hot water*

Seetru Limited

P3W

Relief made from Brass

Protection against both excess temperature as well as over pressurisation

Features

- Size range: 1/2" (DN15) to 2 1/2" (DN65)
- Set Pressure Range: 0.4 to 12.5 bar
- Set Temperature: 90 - 95°C
- BSP taper male inlet connections
- BSP parallel outlet connections
- WRAS approved PTFE valve seal and silicone diaphragm
- Sealed lever
- WRAS Approved (all sizes and pressures) – certificate number 2011005
- Designed in accordance with BS EN 1490 (Building valves. Combined temperature and pressure relief valves. Tests and requirements)
- Valves supplied pre-set at the required set pressure and temperature
- Test certificate supplied free of charge

Lever Type

Materials of Construction

	COMPONENT	MATERIAL
1	Inlet	Brass CW602N
2	Thermostat	Brass CW602N
3	Seal Assembly	Brass CW602N & PTFE
4	Body	Bronze CC491K
5	Piston Assembly	Brass CW602N
6	Spring	Stainless Steel 1.4401
7	Adjuster	Brass CW602N
8	Cap	Brass CW602N
9	Wire & Lead-Seal	Stainless Steel & Lead Seal
10	Lever	Bronze

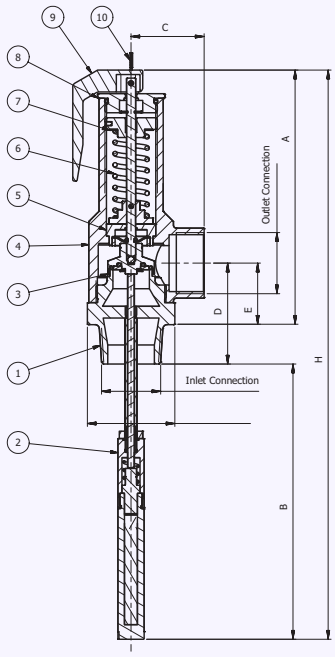
Standards & Approvals

- WRAS approved, meeting the requirements of the UK Water Supply Regulations. Certificate number 2011005.
- Designed in accordance with BS EN 1490 (Building valves. Combined temperature and pressure relief valves. Tests and requirements).

Dimensions

Inlet	Outlet	Dim H (mm)	Dim A (mm)	Dim B (mm)	Dim C (mm)	Dim D (mm)	Dim E (mm)	Weight (kg)
1/2" BSPT (DN15)	1/2" BSPP (DN15)	302	129	144	33	61	32	1.1
3/4" BSPT (DN20)	3/4" BSPP (DN20)	302	129	144	37	62	32	1.1
1" BSPT (DN25)	1" BSPP (DN25)	372	156	176	42	77	37	1.8
1 1/4" BSPT (DN32)	1 1/4" BSPP (DN32)	393	182	184	50	77	50	2.4
1 1/2" BSPT (DN40)	1 1/2" BSPP (DN40)	456	231	192	59	91	58	4.0
2" BSPT (DN50)	2" BSPP (DN50)	509	258	191	69	119	69	5.6
2 1/2" BSPT (DN65)	2 1/2" BSPP (DN65)	538	314	191	78	107	74	11.1

Dimensional Drawing



Please Note:
The above DN sizes are correctly related to the inlet & outlet connections mentioned. Please be aware other manufacturers may not correctly match DN sizes listed to the connection sizes of their valves.
Thus, when comparing a Seetru P&T relief valve to a valve from a different manufacturer, please always compare kW rating and threaded connection size, not the DN size.

Discharge Capacities

P3W Pressure & Temperature Valve

Discharge Capacities

The discharge capacity of the relief valve must be equal to or greater than the output of the boiler it is intended to protect. Below are the discharge capacities for both the temperature relief and the conventional pressure relief.

The temperature rating should be used to size and select the valve.

Temperature Rating, Hot Water

Relief Pressure		DN15 (1/2" inlet)		DN20 (3/4" inlet)		DN25 (1" inlet)		DN32 (1 1/4" inlet)		DN40 (1 1/2" inlet)		DN50 (2" inlet)		DN65 (2 1/2" inlet)	
bar	psi	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec
Nominal Power Rating kW per BS EN 1490															
1	14.5	10.0	9.5	25.0	23.7	50.0	47.4	75.0	71.1	100.0	94.8	-	-	-	-
Actual Power Rating kW per BS EN 4126-1 Annex NA															
1	14.5	38.1	36.1	49.2	46.6	87.4	82.8	136.5	129.4	223.7	212.0	349.5	331.3	546.2	517.7

Pressure Relief Rate, Hot Water

kW Relief Rate per BS EN 1490 & 4126-1 Annex NA

Set Pressure		DN15 (1/2" inlet)		DN20 (3/4" inlet)		DN25 (1" inlet)		DN32 (1 1/4" inlet)		DN40 (1 1/2" inlet)		DN50 (2" inlet)		DN65 (2 1/2" inlet)	
bar	psi	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec	kW	Btu/sec
0.4	5.8	38.1	36.1	49.2	46.6	87.4	82.8	136.5	129.4	223.7	212.0	349.5	331.3	546.2	517.7
1	14.5	49.4	46.8	63.8	60.5	113.4	107.5	177.2	168.0	290.4	275.2	453.7	430.1	708.9	672.0
1.5	21.75	58.9	55.8	76.0	72.0	135.1	128.1	211.2	200.1	346.0	327.9	540.5	512.3	844.6	800.5
2	29	68.3	64.8	88.2	83.6	156.8	148.7	245.1	232.3	401.5	380.6	627.4	594.6	980.3	929.1
2.5	36.25	77.8	73.7	100.4	95.2	178.5	169.2	279.0	264.4	457.1	433.2	714.2	676.9	1115.9	1057.7
3	43.5	87.2	82.7	112.6	106.8	200.3	189.8	312.9	296.6	512.6	485.9	801.0	759.2	1251.6	1186.3
3.5	50.75	98.6	93.4	127.3	120.7	226.3	214.5	353.6	335.1	579.3	549.1	905.2	858.0	1414.4	1340.6
4	58	102.4	97.0	141.9	134.5	252.3	239.2	394.3	373.7	646.0	612.3	1009.4	956.7	1577.2	1494.9
4.5	65.25	121.3	114.9	156.6	148.4	278.4	263.9	435.0	412.3	712.7	675.5	1113.6	1055.5	1739.9	1649.2
5	72.5	132.6	125.7	171.2	162.3	304.4	288.6	475.7	450.9	779.4	738.7	1217.8	1154.2	1902.7	1803.4
6	87	155.3	147.2	200.5	190.1	356.5	337.9	557.1	528.0	912.7	865.1	1426.1	1351.7	2228.3	2112.0
7	101.5	178.0	168.7	229.9	217.9	408.6	387.3	638.5	605.2	1046.1	991.5	1634.5	1549.2	2553.9	2420.6
8	116	200.7	190.2	259.2	245.6	460.7	436.7	719.9	682.3	1179.4	1117.9	1842.9	1746.7	2879.5	2729.2
9	130.5	223.4	211.7	288.5	273.4	512.8	486.0	801.3	759.5	1312.8	1244.3	2051.2	1944.2	3205.1	3037.8
10	145	246.1	233.2	317.8	301.2	564.9	535.4	882.7	836.6	1446.1	1370.7	2259.6	2141.7	3530.6	3346.4
11	159.5	268.8	254.7	347.1	328.9	617.0	584.8	964.1	913.7	1579.5	1497.1	2468.0	2339.2	3856.2	3655.0
12	174	291.5	276.2	376.4	356.7	669.1	634.2	1045.4	990.9	1712.9	1623.5	2676.3	2536.7	4181.8	3963.6
12.5	181.25	302.8	287.0	391.0	370.6	695.1	658.9	1086.1	1029.5	1779.5	1686.7	2780.5	2635.4	4344.6	4117.9