

Frost Guard Sensor

TEMV 1000 + PT1000 temperature sensors are designed for automatic HVAC systems to safeguard the radiator against frost and to detect the temperature of return water from the ventilating unit.

Housing is made of heat-resistant plastic. The screw cover and the terminal blocks tilted to 45° make an easy installation.

Temperature is detected by a range of thermistors and Pt1000 sensor element (see table overleaf).

Sensor is installed to the pipe by means of an adjustable R 1/4" joint. Mounting depth can be adjusted to max. 210mm



Model Types	Model	Description
	TEMV 1000	PTC1000 Frost Guard Sensor
	TEMV PT1000	Pt1000 Frost Guard Sensor
	TEMV NTC10	NTC10 Frost Guard Sensor (Trend, Johnson and Saia equivalent)
	TEMV NTC20	NTC20 Frost Guard Sensor (Honeywell equivalent)
Technical Data	Sensor Element	TEMV 1000 - 1000Ω PTC thermistor TEMV PT1000 - Pt1000 EN 60751/B TEMV NTC10 - 10kΩ NTC thermistor TEMV NTC20 - 20kΩ NTC thermistor
	Accuracy	TEMV 1000 - ±1.3°C (at 25°C) TEMV PT1000 - ±0.3°C (at 0°C) TEMV NTC10 & TEMV NTC20 - ±0.2°C (at 25°C)
	Connection	R 1/4"
	Stem	Ø6mm x 200mm HST steel
	Housing	plastic (<120°C), IP 54
	Cable entry	PG 11
	Range	-50°C...+120°C
	Time constant	ca5s
Pressure rating	PN 16	

WARNING:

Use only for closed water heating circuits. Not for domestic water circuits.

Temperature/Resistance

°C	PTC1000/Ω	PT1000/Ω	NTC10/Ω	NTC20/Ω
120	1882	1460.6	389.0	609
100	1670	1385.0	680.0	1114
90	1569	1347.0	917.7	1541
80	1472	1308.9	1258.0	2166
75	1425	1289.8	1480.0	2585
70	1379	1270.7	1752.0	3099
65	1333	1251.6	2082.0	3732
60	1288	1232.4	2488.0	4517
55	1245	1213.2	2968.0	5494
50	1202	1194.0	3603.0	6718
45	1159	1174.7	4368.0	8259
40	1118	1155.4	5327.0	10211
35	1078	1136.1	6532.0	12698
30	1039	1116.7	8057.0	15887
25	1000	1097.3	10000.0	20000
20	962	1077.9	12490.0	25350
15	925	1058.5	15710.0	32346
10	889	1039.0	19900.0	41567
5	853	1019.5	25400.0	53812
0	820	1000.0	32650.0	70203
-5	787	980.4	42340.0	92322
-10	754	960.9	55330.0	122431
-15	722	941.2	72980.0	163777
-20	691	921.6	97070.0	221088
-25	662	901.9	130400.0	301297
-30	632	882.2	177000.0	414698
-40	577	842.7	336500.0	810861
-50	525	803.1	670100.0	1659082

Dimensions

