

Frost Guard Sensors

TEV temperature sensors are designed for automatic HVAC systems for the monitoring of the heating coils against frost. Sensors are housed in a stainless steel pocket for prolonged life. Sensors are available with a number of different resistive elements (see table overleaf).

Sensors are installed to the heating coil by means of an R1/4" joint. Mounting depth can be adjusted to max. 210mm. Time constant of the sensor is ca 2.5 seconds.



Model Types	Model	Description
	TEV 1000	PTC1000 Frost Guard Sensor
	TEV PT1000	PT1000 Frost Guard Sensor
	TEV NTC10	NTC10 Frost Guard Sensor (Trend, Johnson and Saia equivalent)
	TEV NTC20	NTC20 Frost Guard Sensor (Honeywell equivalent)
	TEV NI1000-LG	NI1000 Frost Guard Sensor (Landis & Staefa equivalent)
	TEV NTC10-KB	NTC10 Linearised Frost Guard Sensor (Satchwell equivalent)
	TEV NTC10-AN	NTC10-AN Frost Guard Sensor (Andover equivalent)
Technical Data	Sensor Element	TEV 1000 - 1000Ω PTC thermistor TEV PT1000 - Pt1000 EN 60751/B TEV NTC10 - 10kΩ NTC thermistor TEV NTC20 - 20kΩ NTC thermistor TEV NI1000-LG - Ni1000-LG TEV NTC10-KB - Linearised 10kΩ NTC thermistor TEN NTC10-AN - 10k4A1 NTC thermistor
	Accuracy	TEV 1000 - ±1.3°C (at 25°C) TEV PT1000 - ±0.3°C (at 0°C) TEV NTC10, TEV NTC20 & TEV NTC10-AN - ±0.2°C (at 25°C) TEV NI1000-LG - ±0.5°C (at 0°C) TEV NTC10-KB - ±0.3°C (at 25°C)
	Connection	R 1/4" pipe thread
	Stem	Ø4mm x 200mm
	Connecting cable	Ø2.8mm x 2m
	Range	-50°C...+120°C
	Time constant	ca 2.5 s
	Pressure rating	PN 16

Temperature/Resistance

°C	PTC1000/ Ω	PT1000/ Ω	NTC10/ Ω	NTC20/ Ω	Ni1000-LG/ Ω	NTC10-KB/ Ω	NTC10-AN/ Ω
120	1923	1460.6	389.0	609	1616.4	466	483
100	1700	1385.0	680.0	1114	1500.0	721	817
90	1594	1347.0	917.7	1541	1444.4	921	1084
80	1492	1308.9	1258.0	2166	1390.1	1193	1458
75	1442	1289.8	1480.0	2585	1363.5	1364	1700
70	1394	1270.7	1752.0	3099	1337.1	1563	1990
65	1347	1251.6	2082.0	3732	1311.1	1792	2339
60	1300	1232.4	2488.0	4517	1285.4	2056	2760
55	1254	1213.2	2968.0	5494	1260.1	2358	3271
50	1209	1194.0	3603.0	6718	1235.0	2702	3893
45	1166	1174.7	4368.0	8259	1210.2	3089	4656
40	1123	1155.4	5327.0	10211	1185.7	3518	5594
35	1081	1136.1	6532.0	12698	1161.5	3987	6754
30	1040	1116.7	8057.0	15887	1137.6	4492	8197
25	1000	1097.3	10000.0	20000	1114.0	5025	10000
20	961	1077.9	12490.0	25350	1090.7	5573	12268
15	923	1058.5	15710.0	32346	1067.6	6125	15136
10	886	1039.0	19900.0	41567	1044.8	6667	18787
5	850	1019.5	25400.0	53812	1022.3	7152	23462
0	815	1000.0	32650.0	70203	1000.0	7661	29490
-5	781	980.4	42340.0	92322	978.0	8093	37316
-10	748	960.9	55330.0	122431	956.2	8472	47549
-15	716	941.0	72980.0	163777	934.7	8796	61030
-20	685	921.6	97070.0	221088	913.5	9067	78930
-25	655	909.4	130400.0	301297	892.5	9288	102890
-30	625	882.2	177000.0	414698	871.7	9465	135233
-40	570	842.7	336500.0	810861	830.8	9711	239831
-50	518	803.1	670100.0	1659082	790.9	N/A	N/A

Dimensions

