

Averaging Temperature Sensors

TEKA sensors are made for detecting the average temperature in a large air duct. Housing is made of heat resistant plastics. Screw cover and terminal blocks tilted to 45° make an easy installation. Temperature is detected by a range of thermistors. Thanks to the special mechanical construction the sensor is able to detect temperature throughout its entire length.

Sensors are mounted to the duct by means of an adjustable flange and spring.



Model Types	Model	Description
	TEKA 1000	PTC1000 Average Temperature Sensor
	TEKA PT1000	PT1000 Average Temperature Sensor
	TEKA NTC10	NTC10 Average Temperature Sensor (Trend, Johnson and Saia equivalent)
	TEKA NTC20	NTC20 Average Temperature Sensor (Honeywell equivalent)
	TEKA NTC1800	NTC1800 Average Temperature Sensor (TAC equivalent)
	TEKA NI1000-LG	NI1000 Average Temperature Sensor (Landis & Staefa equivalent)
	TEKA NTC10-KB	NTC10 Linearised Average Temperature Sensor (Satchwell equivalent)
	TEKA NTC10-AN	NTC10-AN Average Temperature Sensor (Andover equipment)
Technical Data	Sensor Element	TEKA 1000 - 4 x 1000Ω PTC thermistor TEKA PT1000 - 4 x Pt1000 EN 60751/B TEKA NTC10 - 4 x 10kΩ NTC thermistor TEKA NTC20 - 4 x 20kΩ NTC thermistor TEKA NTC1800 - 4 x 1800kΩ NTC thermistor TEKA NI1000-LG - 4 x Ni1000-LG TEKA NTC10-KB - Linearised 10kΩ NTC thermistor TEKA NTC10-AN - 4 x 10k4A1 NTC thermistor
	Accuracy	TEKA 1000 - ±1.3°C (at 25°C) TEKA PT1000 - ±0.3°C (at 0°C) TEKA NTC10, TEKA NTC20, TEKA NTC10-AN & TEKA NTC1800 - ±0.2°C (at 25°C) TEKA NI1000-LG - ±0.5°C (at 0°C) TEKA NTC10-KB - ±0.3°C (at 25°C)
	Duct Connection	Ø10mm hole and flange, 3 springs
	Housing	plastic (<120°C)
	Protection class	IP 54, cable entry down
	Cable entry	M16
	Range	-50°C...+70°C
	Measurement element	3m

Temperature/Resistance

°C	PTC1000/Ω	PT1000/Ω	NTC10/Ω	NTC20/Ω	Ni1000-LG/Ω	NTC10-KB/Ω	NTC10-AN/Ω	NTC1800/Ω
120	1923	1460.6	389.0	609	1616.4	466	483	N/A
100	1700	1385.0	680.0	1114	1500.0	721	817	N/A
90	1594	1347.0	917.7	1541	1444.4	921	1084	N/A
80	1492	1308.9	1258.0	2166	1390.1	1193	1458	N/A
75	1442	1289.8	1480.0	2585	1363.5	1364	1700	N/A
70	1394	1270.7	1752.0	3099	1337.1	1563	1990	N/A
65	1347	1251.6	2082.0	3732	1311.1	1792	2339	N/A
60	1300	1232.4	2488.0	4517	1285.4	2056	2760	542
55	1254	1213.2	2968.0	5494	1260.1	2358	3271	634
50	1209	1194.0	3603.0	6718	1235.0	2702	3893	744
45	1166	1174.7	4368.0	8259	1210.2	3089	4656	878
40	1123	1155.4	5327.0	10211	1185.7	3518	5594	1042
35	1081	1136.1	6532.0	12698	1161.5	3987	6754	1243
30	1040	1116.7	8057.0	15887	1137.6	4492	8197	1491
25	1000	1097.3	10000.0	20000	1114.0	5025	10000	1800
20	961	1077.9	12490.0	25350	1090.7	5573	12268	2187
15	923	1058.5	15710.0	32346	1067.6	6125	15136	2675
10	886	1039.0	19900.0	41567	1044.8	6667	18787	3295
5	850	1019.5	25400.0	53812	1022.3	7152	23462	4090
0	815	1000.0	32650.0	70203	1000.0	7661	29490	5117
-5	781	980.4	42340.0	92322	978.0	8093	37316	6456
-10	748	960.9	55330.0	122431	956.2	8472	47549	8217
-15	716	941.2	72980.0	163777	934.7	8796	61030	10556
-20	685	921.6	97070.0	221088	913.5	9067	78930	13696
-25	655	901.9	130400.0	301297	892.5	9288	102890	17959
-30	625	882.2	177000.0	414698	871.7	9465	135233	23811
-40	570	842.7	336500.0	810861	830.8	9711	239831	43409
-50	518	803.1	670100.0	1659082	790.9	N/A	N/A	N/A

Dimensions

