

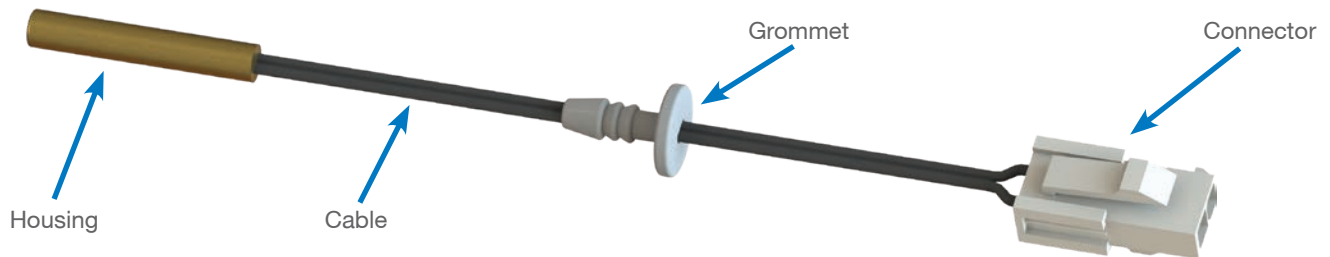
THERMOMETRICS
A COMMITMENT TO EXCELLENCE

Product Spotlight



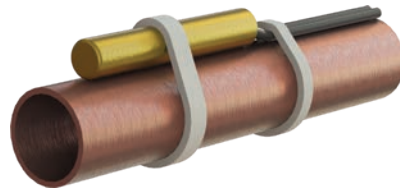
Cable Probe Temperature Sensors

Cable Probe Temperature Sensors are used in a broad range of industrial applications, including water heating, refrigeration and air conditioning systems, consisting of resin-potted NTC thermistors encapsulated within metal housings, extension cables and connector systems. They are typically strapped directly to the measurement surface or positioned in a “dry well” where a grommet or cable tie is used to secure the sensor in position.

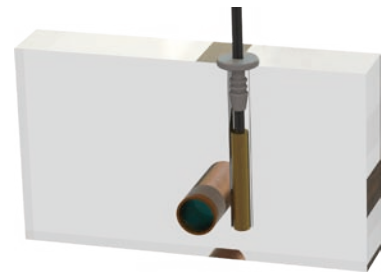


Installations:

On-Pipe



Dry Well



Specifications

Part Number	Housing Material	Housing Dimensions (mm)	Resistance at (T_{ref}) / W	B (25/85) / K	Cable Description	Cable Length (mm)
JS4710	Brass	5x30	12,000 (25) 950 (100) $\pm 5\%$	3740 $\pm 1\%$	PVC (single insulation)	300
JS4833	Brass	5x30	10,000 (25) $\pm 1\%$	3977 $\pm 0.75\%$	PVC (single insulation)	1485
JS4832	Brass	5x30	10,000 (25) $\pm 1\%$	3977 $\pm 0.75\%$	PVC (single insulation)	1235

Part Number	Connector System	Grommet	Max Temp ($^{\circ}\text{C}$)	V(ac) Strength/ V (at 1mA)	IP RATING
JS4710	Molex 5559	Yes	105	750	IP66
JS4833	Polehousing CTH1300/2	Yes	105	1500	IP66
JS4832	Polehousing CTH1300/2	Yes	105	1500	IP66

Cable Probe Temperature Sensors (Cont.)

Thermal Equilibrium Resistance vs. Temperature

Parts: JS4833 and JS4832							
Temp / °C	R nom / W	R min / W	R max / W	R tol / %	R tol / %	T tol / °C	T tol / °C
0	32640	32028	33260	-1.87	1.90	0.37	-0.37
5	25391	24962	25824	-1.69	1.71	0.34	-0.35
10	19902	19601	20205	-1.51	1.52	0.31	-0.32
15	15713	15504	15924	-1.33	1.34	0.29	-0.29
20	12493	12348	12639	-1.17	1.17	0.26	-0.26
25	10000	9900	10100	-1.00	1.00	0.23	-0.23
30	8055	7962	8149	-1.16	1.16	0.27	-0.27
35	6530	6444	6616	-1.32	1.32	0.32	-0.32
40	5324	5246	5403	-1.47	1.48	0.36	-0.37
45	4366	4296	4437	-1.61	1.63	0.41	-0.42
50	3600	3537	3664	-1.76	1.78	0.46	-0.47

Part: JS4710							
Temp / °C	R nom / W	R min / W	R max / W	R tol / -%	R tol / +%	T tol / °C	T tol / °C
0	36269	33223	39495	-8.40	8.89	1.75	-1.86
5	28652	26308	31127	-8.18	8.64	1.76	-1.86
10	22797	20980	24710	-7.97	8.39	1.77	-1.86
15	18263	16845	19752	-7.77	8.15	1.78	-1.87
20	14728	13613	15894	-7.57	7.92	1.79	-1.87
25	11951	11070	12871	-7.38	7.69	1.79	-1.87
30	9756	9055	10486	-7.19	7.47	1.80	-1.87
35	8010	7449	8592	-7.00	7.26	1.80	-1.87
40	6614	6162	7080	-6.83	7.06	1.81	-1.87
45	5489	5124	5866	-6.65	6.86	1.81	-1.87
50	4579	4282	4884	-6.48	6.66	1.81	-1.86
55	3839	3596	4087	-6.32	6.48	1.82	-1.86
60	3233	3034	3437	-6.16	6.29	1.82	-1.86
65	2735	2571	2903	-6.00	6.12	1.82	-1.85
70	2324	2188	2462	-5.85	5.94	1.82	-1.85
75	1983	1870	2098	-5.70	5.78	1.82	-1.84
80	1699	1604	1794	-5.55	5.61	1.82	-1.84
85	1461	1382	1541	-5.41	5.45	1.82	-1.83
90	1261	1195	1328	-5.27	5.30	1.81	-1.82
95	1092	1036	1149	-5.13	5.15	1.81	-1.82
100	950	902	997	-5.00	5.00	1.81	-1.81