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INSTALLATION MANUAL

AEROFLOW PERFORMANCE

TEMPERATURE SENSOR

WARNING!

BEFORE PROCEEDING WITH INSTALLATION PLEASE READ INSTRUCTIONS CAREFULLY. THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

INTRODUCTION

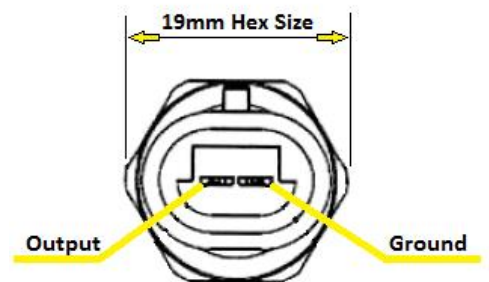
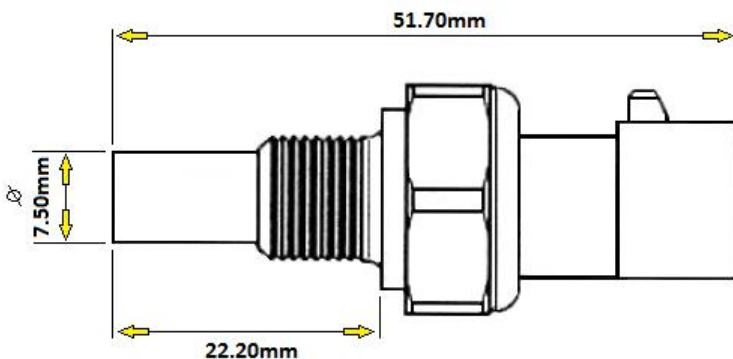
Congratulations on your purchase of Aeroflow Performance temperature sensor. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

The Aeroflow Performance temperature sensor is a Negative Temperature Coefficient (NTC) thermistor sensor. The NTC is a passive resistor, and the resistance of an NTC varies with temperature. More specifically, as the ambient temperature around an NTC increases, the resistance of the NTC decreases.

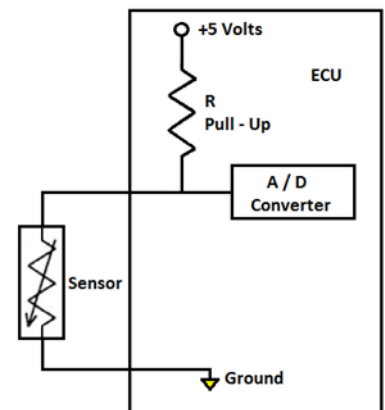
This sensor has a 1/8" NPT thread. It includes the plug and pins to easily wire into any application. This sensor is fully calibrated for high accuracy and designed for high stability across the temperature range.

The sensor body material is Brass with a 19mm hex size.

Dimensions Of Sensor

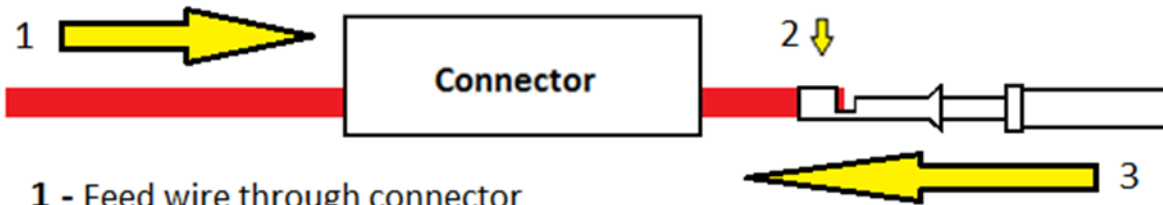


Circuit Schematic



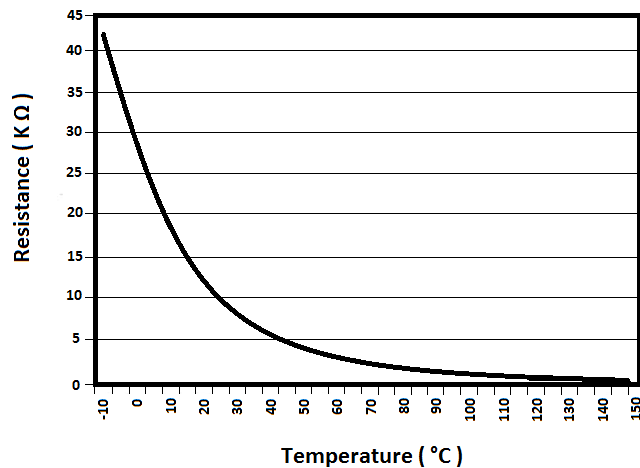
Characteristic	Minimum	Working	Maximum	Unit
Operating Temperature Range	-20		150	°C
Supply Voltage		5		VDC
Resistance Value at 25 degree celsius (°C)	9500	10000	10500	OHM (Ω)
Resistance Value at 80 degree celsius (°C)	1585	1668	1751	OHM (Ω)
Resistance Value at 100 degree celsius (°C)	894	941	988	OHM (Ω)
Response Time		10		Seconds

Crimping Wire



- 1 - Feed wire through connector
- 2 - Crimp pin to wire
- 3 - Draw back into connector to lock

Sensor Resistance with Temperature Chart



For more information or technical enquires

Contact: Aeroflow Performance on

Phone: (02) 8825 1979 Website: www.aeroflowperformance.com

TEMPERATURE (°C)	RESISTANCE (K Ω)	VOLTAGE (regulation 5V)
-20	67.640	4.356
-19	64.440	4.328
-18	61.420	4.300
-17	58.570	4.271
-16	55.870	4.241
-15	53.310	4.210
-14	50.880	4.179
-13	48.590	4.147
-12	46.410	4.114
-11	44.350	4.080
-10	42.390	4.046
-9	40.500	4.010
-8	38.700	3.973
-7	37.000	3.936
-6	35.380	3.898
-5	33.850	3.860
-4	32.390	3.820
-3	31.000	3.780
-2	29.690	3.740
-1	28.440	3.699
0	27.250	3.658
1	26.100	3.615
2	25.000	3.571
3	23.960	3.528
4	22.970	3.483
5	22.030	3.439
6	21.130	3.394
7	20.280	3.349
8	19.460	3.303
9	18.690	3.257
10	17.950	3.211
11	17.230	3.164
12	16.550	3.117
13	15.900	3.069
14	15.270	3.021
15	14.680	2.974
16	14.110	2.926
17	13.570	2.879
18	13.050	2.831
19	12.560	2.784
20	12.090	2.737
21	11.630	2.688
22	11.200	2.642
23	10.780	2.594
24	10.380	2.547
25	10.000	2.500
26	9.633	2.453
27	9.281	2.407
28	8.945	2.361
29	8.623	2.315
30	8.314	2.270
31	8.016	2.225
32	7.730	2.180
33	7.456	2.136
34	7.193	2.092
35	6.941	2.049
36	6.700	2.006

TEMPERATURE (°C)	RESISTANCE (K Ω)	VOLTAGE (regulation 5V)
37	6.468	1.964
38	6.246	1.922
39	6.033	1.881
40	5.829	1.841
41	5.630	1.801
42	5.440	1.762
43	5.257	1.723
44	5.081	1.685
45	4.912	1.647
46	4.750	1.610
47	4.594	1.574
48	4.444	1.538
49	4.300	1.503
50	4.162	1.469
51	4.027	1.435
52	3.897	1.402
53	3.773	1.370
54	3.653	1.338
55	3.537	1.306
56	3.426	1.276
57	3.319	1.246
58	3.216	1.217
59	3.117	1.188
60	3.022	1.160
61	2.929	1.133
62	2.839	1.106
63	2.753	1.079
64	2.670	1.054
65	2.589	1.028
66	2.512	1.004
67	2.438	0.980
68	2.366	0.957
69	2.296	0.934
70	2.229	0.911
71	2.164	0.890
72	2.101	0.868
73	2.040	0.847
74	1.981	0.827
75	1.925	0.807
76	1.870	0.788
77	1.817	0.769
78	1.766	0.750
79	1.716	0.732
80	1.669	0.715
81	1.622	0.698
82	1.577	0.681
83	1.534	0.665
84	1.492	0.649
85	1.451	0.634
86	1.412	0.619
87	1.374	0.604
88	1.337	0.590
89	1.301	0.576
90	1.266	0.562
91	1.233	0.549
92	1.200	0.536
93	1.169	0.523

TEMPERATURE (°C)	RESISTANCE (K Ω)	VOLTAGE (regulation 5V)
94	1.138	0.5109
95	1.108	0.4987
96	1.080	0.4874
97	1.052	0.4759
98	1.025	0.4649
99	0.999	0.4541
100	0.974	0.4437
101	0.949	0.4334
102	0.925	0.4233
103	0.902	0.4136
104	0.879	0.4041
105	0.857	0.3948
106	0.836	0.3859
107	0.816	0.3771
108	0.796	0.3686
109	0.776	0.3602
110	0.758	0.3521
111	0.739	0.3442
112	0.721	0.3364
113	0.704	0.3289
114	0.687	0.3215
115	0.671	0.3144
116	0.655	0.3075
117	0.640	0.3007
118	0.625	0.2940
119	0.610	0.2876
120	0.596	0.2813
121	0.582	0.2751
122	0.569	0.2691
123	0.556	0.2633
124	0.543	0.2576
125	0.531	0.2521
126	0.519	0.2467
127	0.507	0.2414
128	0.496	0.2362
129	0.485	0.2312
130	0.474	0.2263
131	0.464	0.2215
132	0.453	0.2169
133	0.444	0.2123
134	0.434	0.2079
135	0.424	0.2035
136	0.415	0.1993
137	0.406	0.1952
138	0.398	0.1912
139	0.389	0.1872
140	0.381	0.1834
141	0.373	0.1797
142	0.365	0.1760
143	0.357	0.1724
144	0.360	0.1736
145	0.342	0.1655
146	0.335	0.1622
147	0.328	0.1590
148	0.322	0.1558
149	0.315	0.1527
150	0.309	0.1497