

1. Introduction

The 50014157-001 temperature sensor is designed for use with Honeywell's TB6980/TB7980 thermostats to measure the temperature inside an air duct or air chamber. It can be also used in various other applications.

2. Technical Specifications

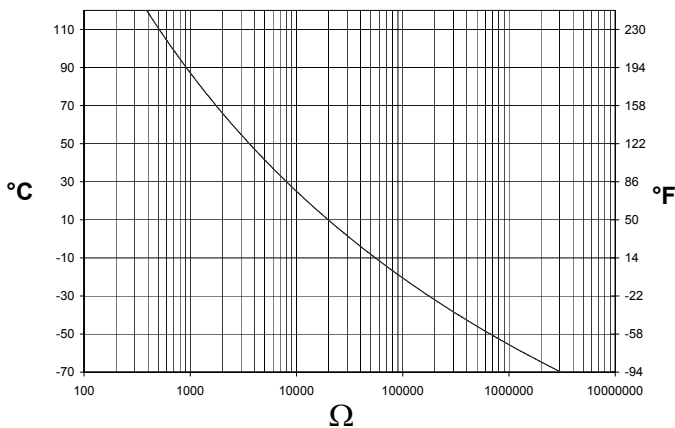
Temperature range: -70 to 120°C (-94 to 248°F)

Output signal: resistive

Sensing device: thermistor (10 kΩ @ 25°C or 77°F)

Cable length: 3 m (10 ft)

Resistance Curve



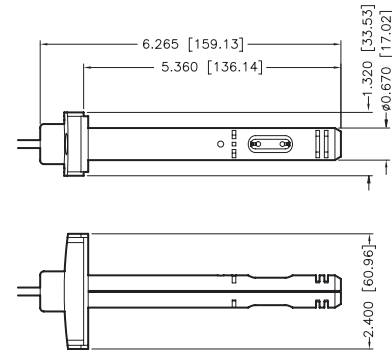
°C	Ω	°F	°C	Ω	°F
120	388	248	20	12 493	68
115	444	239	15	15 714	59
110	510	230	10	19 903	50
105	587	221	5	25 395	41
100	678	212	0	32 651	32
95	787	203	-5	42 317	23
90	916	194	-10	55 304	14
85	1 070	185	-15	72 911	5
80	1 256	176	-20	97 007	-4
75	1 480	167	-25	130 308	-13
70	1 752	158	-30	176 805	-22
65	2 082	149	-35	242 430	-31
60	2 487	140	-40	336 103	-40
55	2 985	131	-45	471 401	-49
50	3 601	122	-50	669 262	-58
45	4 367	113	-55	962 410	-67
40	5 325	104	-60	1 402 728	-76
35	6 530	95	-65	2 073 705	-85
30	8 056	86	-70	3 111 810	-94
25	10 000	77			

3. Installation

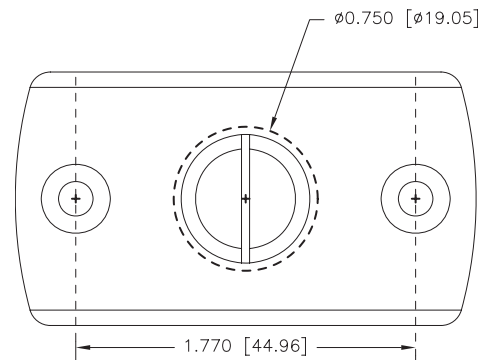
- Use twisted pair cable for the sensor connection.
- The maximum allowable distance between the sensor and the thermostat is 50 feet (15 m).
- The sensor must be installed so the reading hole is facing the air flow direction.

- 1 Drill a 19-mm (0.75-in.) hole for inserting the sensor.
- 2 Install the sensor using # 12 self-tapping screws.
- 3 Wire the sensor to the thermostat (no polarity).

NOTE: Do not submerge in liquid.



Note: Dimensions are expressed in INCHES [MM]



4. Warranty

Honeywell warrants this product, excluding battery, to be free from defects in the workmanship or materials, under normal use and service, for a period of one (1) year from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option).

If the product is defective,

- (i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or
- (ii) call Honeywell Customer Care at 1-800-468-1502. Customer Care will make the determination whether the product should be returned to the following address: Honeywell Return Goods, Dock 4 MN10-3860, 1885 Douglas Dr N, Golden Valley, MN 55422, or whether a replacement product can be sent to you.

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

Honeywell's sole responsibility shall be to repair or replace the product within the terms stated above. HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY HONEYWELL MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE ONE-YEAR DURATION OF THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you have any questions concerning this warranty, please write Honeywell Customer Relations, 1985 Douglas Dr, Golden Valley, MN 55422 or call 1-800-468-1502. In Canada, write Retail Products ON15-02H, Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V4Z9.

5. Service

If you have any questions about the operation of your thermostat, please go to <http://customer.honeywell.com>, or call Honeywell technical hotline at 1-763-954-6464.