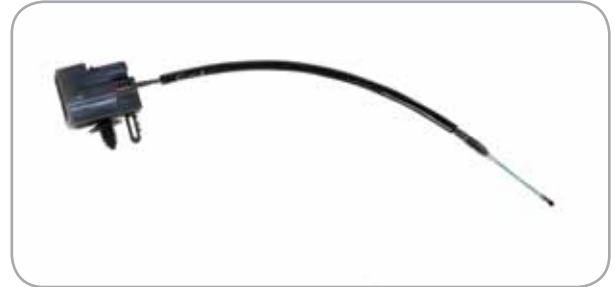


T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

CHT

Cylinder Head Temperature Sensor



The cylinder head temperature sensor is designed to take the place of one of the cylinder head bolts on a diesel engine. The sensor's purpose is to measure the cylinder head temperature and to signal the vehicle's operator if an engine overheats (that is, if an engine over temperature is taking place). The engine will be in danger of permanent damage if it continues to run at an elevated temperature.

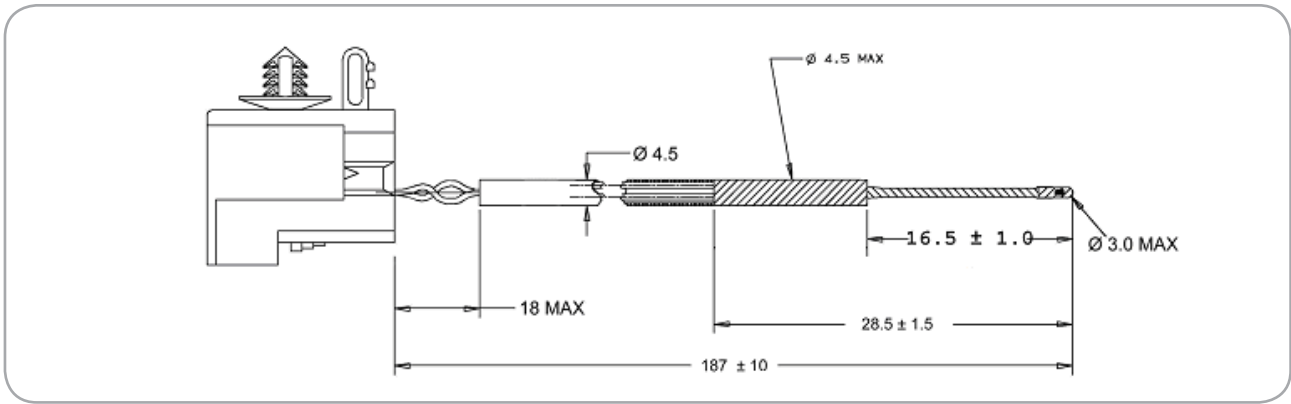
Applications

- Engine cylinder head temperature
- Oil Temperature Sensor

Features

- High accuracy and long term stability @ 185°C
- Fast response time
- Cable designed to maintain flexibility in high vibration applications such as small diesel engines.
- Pigtail leaded design
- Field proven design
- Alternate RvT curves available
- Different geometries to meet package requirements
- Other resistance and beta values available
- Insulation Resistance: > 100Mohm @ 500 VDC
- Withstand Voltage: 1500 VAC for 1 second

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Specifications

R @ 100°C

2,040 ohms ± 5%

B (25/85)

3977K

Operating Temperature

-40°C to 185°C

Storage Temperature

-40°C to 185°C

Response Time

15 seconds (liquid to liquid)

Temperature Accuracy

± 1.77% @ 25°C

± 2.0% @ 100°C

Lead Material

Dual copper conductor,
Polyurethane outer jacket

Weight:

~16 grams

Connector

Yazaki - 7283-5558-10

Mating Connector

Yazaki - 7282-5558-10

Resistance vs. Temperature Data

Resistance = 2040 Ohms at 100.00 °C Rtol. @ 25°C 5.0%

Temp (°C)	Rnominal (Ohms)	Res. Tol. ±%	Rmin. (Ohms)	Rmax (Ohms)	Temp Tolerance + °C	Temp Tolerance - °C
-40	1,009,500	11.5	893,736	1,125,265	1.73	-1.73
-20	291,210	10.1	261,751	320,669	1.75	-1.75
0	97,950	9.0	89,171	106,729	1.77	-1.77
20	37,470	8.0	34,485	40,455	1.77	-1.77
25	30,000	7.7	27,678	32,322	1.77	-1.77
40	15,981	7.1	14,847	17,115	1.77	-1.77
60	7,464	6.3	6,991	7,937	1.77	-1.77
80	3,744	5.6	3,561	3,987	1.80	-1.80
100	2,040	5.0	1,938	2,142	2.00	-2.00
120	1,168	5.6	1,103	1,233	2.09	-2.09
140	704.4	6.1	661.5	747.3	2.51	-2.51
160	443.7	6.5	414.7	472.7	2.95	-2.95
180	290.4	7.0	270.3	310.6	3.43	-3.43
200	196.8	7.3	182.4	211.2	3.93	-3.93
220	137.4	7.6	126.9	147.9	4.45	-4.45

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