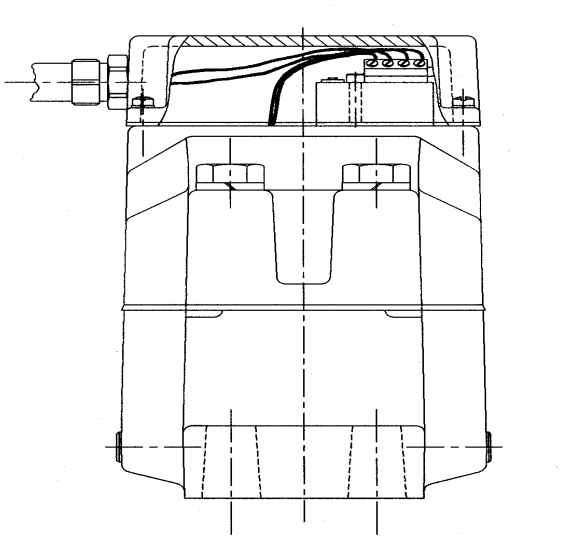


Product Description

The Thermocouple Sensor is a factory-installed sensor that monitors the temperature of a Dodge Sensorized bearing. The Thermocouple Sensor is epoxied into a hole in the bearing housing which is positioned to measure the temperature of the outer race of the bearing. The cast iron housing assures good thermal conductivity over this distance to provide an accurate representation of the bearing temperature. A thermocouple transmitter conditions the microvolt output of the thermocouple into a 4-20 mA current proportional to the temperature of the bearing. The thermocouple transmitter output is adjusted to a temperature range of 0° to 250°F and can be read by PLC Analog Input cards with an internal loop power supply.

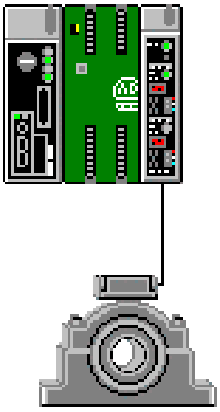
The Thermocouple Sensor may be combined in the same housing with the Vibration Accelerometer Sensor offered by Dodge.

Related Documents

Connecting Sensors on Pillow Block Bearings, Document 499807

Typical Application

Wire the output from the thermocouple transmitter directly to a PLC Analog Input card.



Specifications

Thermocouple	Type J
Temperature Range	0° - 250° F
Accuracy	+/- 0.5°F
Output Current	4 - 20 mA
Supply Voltage	8.5 - 35 V
Enclosure	Exceeds NEMA 4 Rating NEMA 4X Option Available

$$\text{Max. Loop Resistance} = \frac{\text{V supply - 8.5V}}{\text{0.02 A}}$$