



Sensata
Technologies

**WWTS0090 SERIES
RESISTANCE
TEMPERATURE DETECTORS**

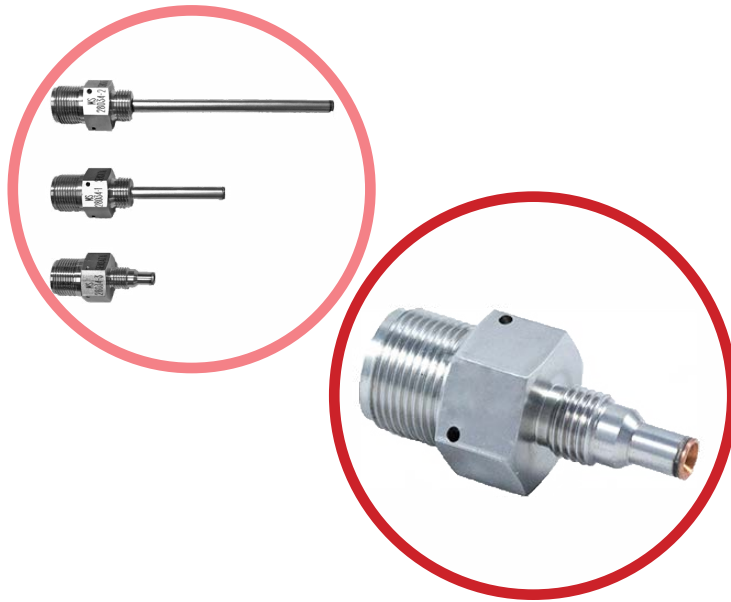


WWTS0090 SERIES RESISTANCE TEMPERATURE DETECTORS

MS28034 BULB, TEMPERATURE PER MIL-DTL-7990B TRANSMITTER, TEMPERATURE

Introduction

Accurate temperature measurement is critical to the operation of turbine and reciprocating engines used on commercial, military, and general aviation aircraft. Sensata Technologies WWTS0090 series resistance temperature detector (RTD) provides a fast response time with accurate measurements in a hermetically sealed package. Designed to the strict requirements of U. S. Military specifications, the WWTS0090 series RTD is suitable for use in aerospace applications from -70 C to +300C to measure temperature in oil, fuel, hydraulic fluid and gas stream applications.



Features

- Fast response, 2-Wire single sensing element
- Welded, hermetic probe tip eliminates vapor/fluid ingress
- Low heat conduction along stem length
- Corrosion resistant design with integral connector
- Designed to MS28034, Bulb Temperature
- Qualified to MIL-DTL-7990B, Transmitter Temperature

Applications

- APU gear box oil temperature
- Gas turbine gear box oil temperature
- General aviation oil temperature
- Hydraulic/pneumatic fluid temperature (low pressure)

SPECIFICATIONS

Requirements

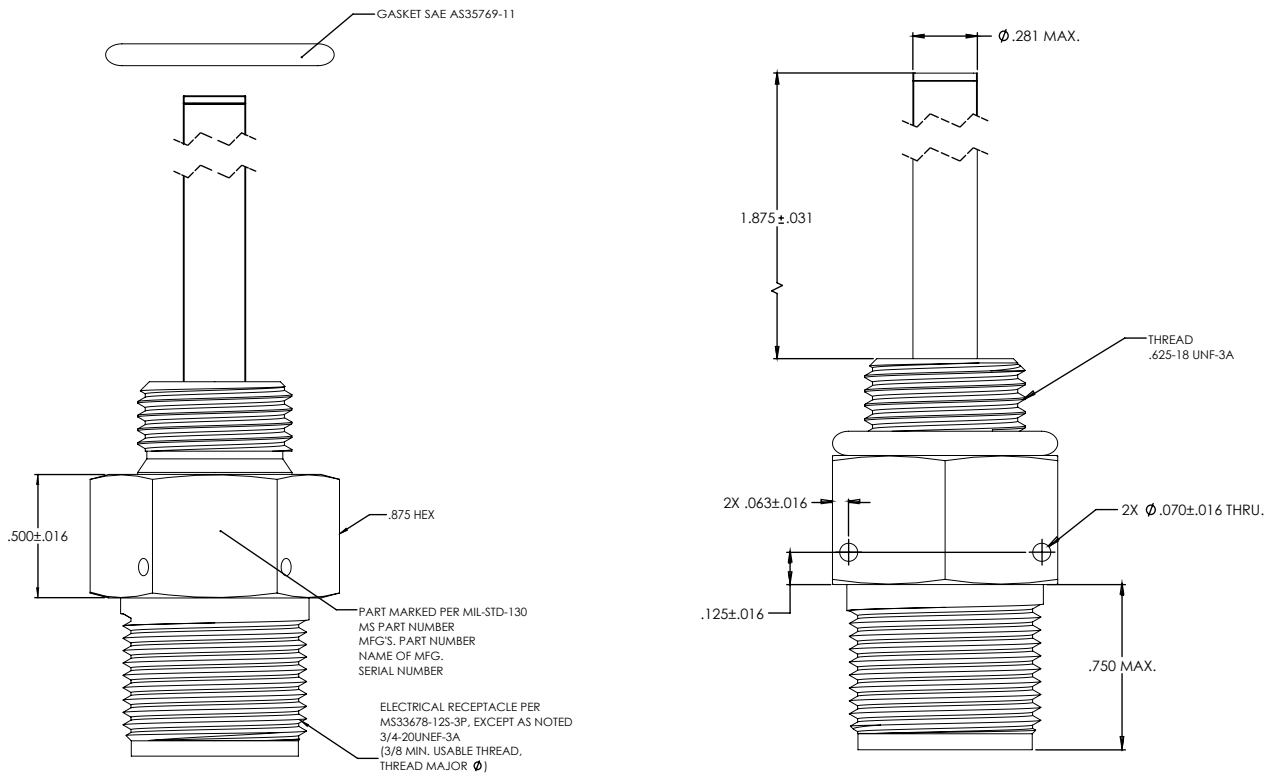
Ordering Information	WWTS0090-1 (MS28034-1)	WWTS0090-2 (MS28034-2)	WWTS0090-3 (MS28034-3)	WWTS0090-4 (MS28034-4)
Operating temperature range	-70°C to 300°C (-94°F to 572°F)			
Response Time (T63)	< 8 seconds from 100°C to 10°C (or per MIL-DTL-7990B)			
Insulation Leakage	20 megohms minimum at 100v			
Qualification	Per MIL-DTL-7990B			
Resistance versus Temperature Curve	Per MIL-DTL-7990B, Table II			
Self-heating	Per MIL-DTL-7990B			
Materials	Corrosion resistant steel with copper tip			
Operating Pressure	n/a	n/a	400 psig	n/a
Burst Pressure	n/a	n/a	600 psig	n/a
Vibration, Endurance	See note 1	See note 1	See note 2	See note 1
Weight (typical)	<.25lbs	<.25lbs	<.25lbs	<.25lbs
Notes:	1. 4 hours, 300 cpm to 3000 cpm, total amplitude between 0.030 inch and 0.032 inch 2. MIL-STD-810, Method 514, "Vibration", general vibration for jet aircraft			



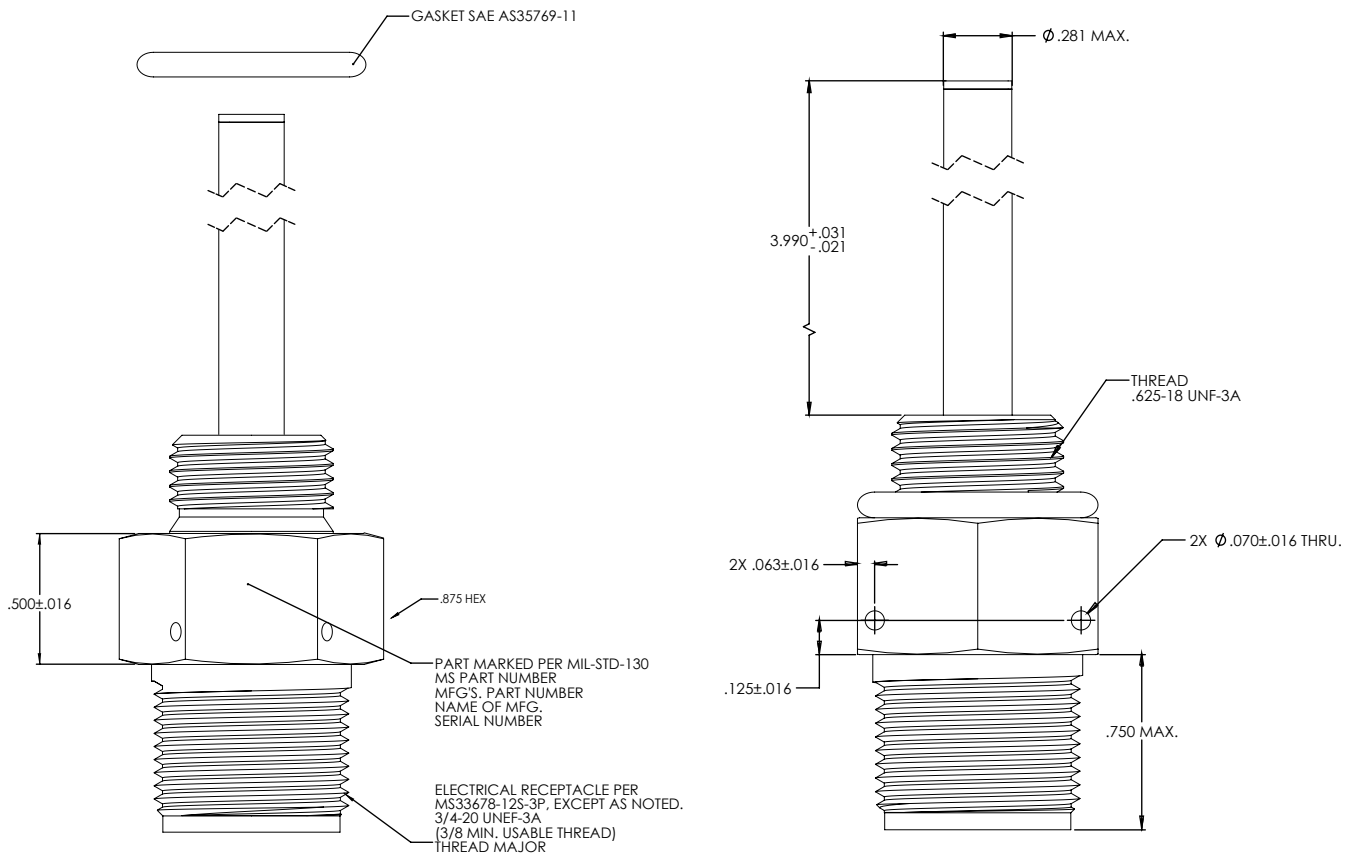
DIMENSIONS

All dimensions are in millimeters

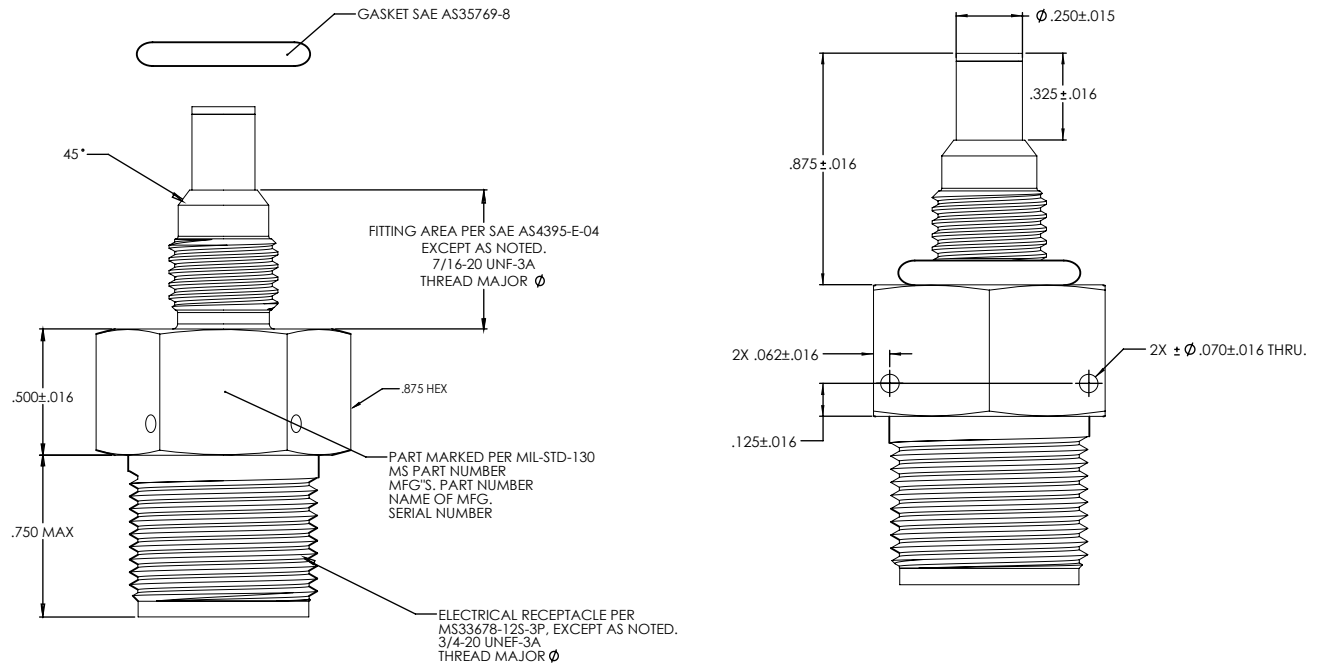
WWTS0090-1



WWTS0090-2



WWTS0090-3



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