

# Temperature Sensor F6310 Series

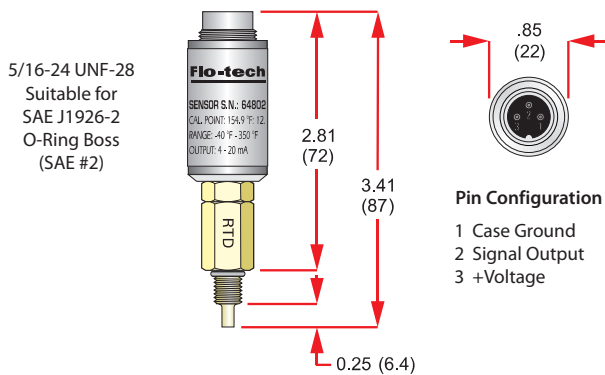
With 4-20 mA Output



- RTD temperature element
- 4-20 mA electrical output
- Temperatures up to +350 °F (+176 °C)
- Withstands pressures up to 6000 PSI (414 Bar)

These two-wire platinum RTD (resistance temperature detector) sensors with 4-20 mA output are designed for direct insertion into high pressure fluid systems without need for special pressure fittings. They are ideal for indicating system operating conditions, temperature testing and process measurements and control.

## DIMENSIONS - Inches (mm)



## SPECIFICATIONS

### Temperature Range:

Ambient	-40 to +185 °F (-40 to +85 °C)
Fluid	-40 to +350 °F (-40 to +177 °C)

### Accuracy:

See Sensor Accuracy vs Temperature Chart below

### Current Span Range:

4-20 mA

### Response Time:

3 seconds

### Maximum Pressure:

6000 PSI (414 Bar)

### Operating Loop Voltage:

Minimum	9V + Voltage of load resistor at 20 mA
Maximum	28V
Min Load Resistance	10 Ohms
Max Load Resistance (including wiring losses)	$\frac{\text{Loop Voltage} - 9V}{20 \text{ mA}} = \text{Ohms}$

## ORDERING INFORMATION

PART NUMBER	Fluid Temperature Range
F6310	-40 to +350 °F (-40 to +177 °C)

## Sensor Accuracy vs Temperature

Combined Celsius / Fahrenheit		Celsius Only		Fahrenheit Only		
Temperature	Accuracy	Temp.	Accuracy	Temp.	Accuracy	
°C	°F	°C	°C	°F	°F	
-20	-4	±0.8	-20	±0.8	-4	±1.4
0	+32	±0.6	0	±0.6	0	±1.2
+100	+212	±1.2	+50	±0.9	+50	±1.2
+176	+350	±1.7	+100	±1.2	+100	±1.5
-	-	-	+150	±1.5	+200	±2.1
-	-	-	+176	±1.7	+300	±2.7
-	-	-	-	-	+350	±3.0