RdF

# WIDE RANGE PLATINUM STRAPON® RTD SENSORS PN 22525, 22526

Wide Temperature Range

Sensor sealed for condensing

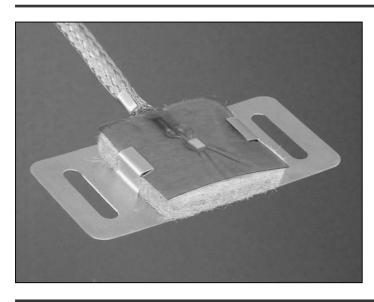
-200°C to 260°C
• Non-penetrating

Low-cost installation

or wet environments
Adhesive-less mounting
High-performance bonded fiber insulation over sensor

 Mount by bolt (22525) or strap (22526)

Platinum surface temperature sensor



# **Performance Specifications**

#### **Operating Temperature Range**

-200°C to +232°C (-320°F to +450°F) -1 Sensor Continuous as mounted (300°C short term)

 $-200^\circ\text{C}$  to  $+260^\circ\text{C}$  (–320°F to  $+500^\circ\text{F})\,$  -2 Sensor Continuous as mounted (300°C short term)

#### **Sensing Element**

International grade thin film platinum  $\alpha = 0.00385 \ \Omega/\Omega/^{\circ}C$  nominal (IEC751)

#### Ice Point Resistance

 $\begin{array}{rrrr} 100 & \pm & 0.12\Omega, \ (\pm 0.3^{\circ}\text{C}) & @ \ 0^{\circ}\text{C} \\ 1000 & \pm & 1.2\Omega, \ \ (\pm 0.3^{\circ}\text{C}) & @ \ 0^{\circ}\text{C} \end{array}$ 

# Interchangeability

 $\pm (0.3^{\circ}\text{C}$  + 0.005|t|°C), IEC 751 Class B Above -50°C

## Time Response

<300 milliseconds lag on metal surfaces

#### Stability

Better than 0.05°C (0.02% of resistance) per 5 years, -50°C to 200°C

## **Self-Heating**

The bare sensor will rise less than 1°C while dissipating power of 15mW (ASTM-E-644)

# Insulation Resistance

The insulation resistance between outer sensor insulation clamped between two metal plates and the common lead wire is 50 megohms minimum with 50 VDC applied to a dry sensor at room temperature (ASTM-E-644)

# Mounting

Will conform to 2 inch minimum diameter

#### (see ordering data)

**Body Material** 

Stainless steel and flexible bonded fiber insulation

## Lead Wire

-1 Sensors

#22 AWG tin-plated, (2-wire) FEP Teflon® over each twisted black/red, FEP overall
#24 AWG tin-plated, (3-wire) FEP Teflon® over each twisted whute/2 red, FEP overall

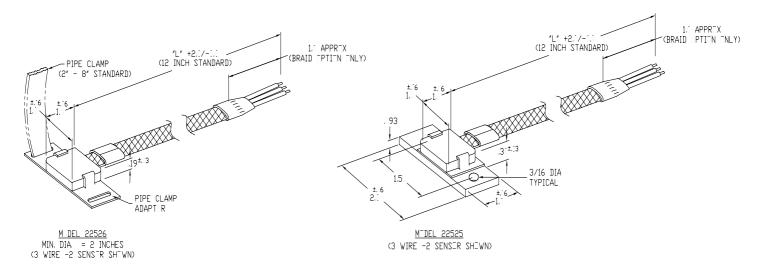
#### -2 Sensors

#26 AWG stranded nickel-plated copper conductors, PFA Teflon® insulated 2 (2 white), 3 (2 white/brown), or 4 (2 white/2 red) conductor ribbon cable,

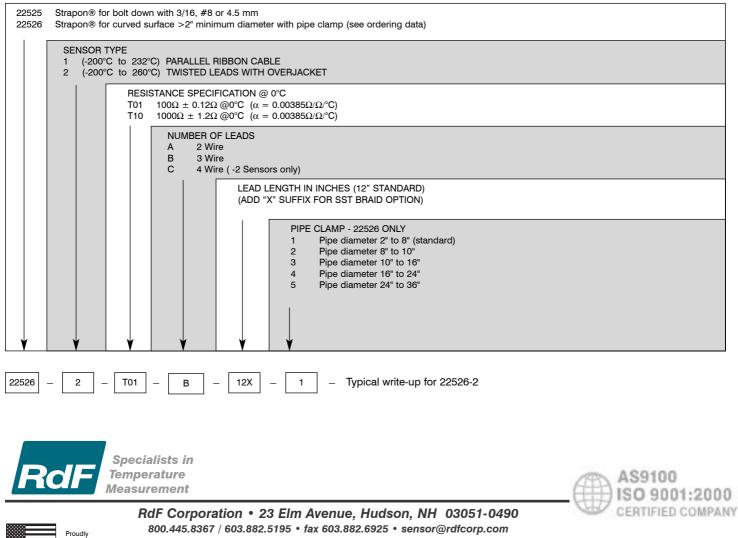


**Specialists in Temperature Measurement** 

# **Dimensional Drawing**



# **Ordering Specifications**





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