

**29230**  
2 and 3-wire  
configuration  
options

**29309**  
4-wire  
configuration  
option

## Specifications

### Sensing Element

International grade thin film platinum  
 $a = 0.00385 \Omega/\Omega/^\circ\text{C}$  per IEC 751

### Temperature Range

$-200^\circ\text{C}$  to  $260^\circ\text{C}$  ( $-320^\circ\text{F}$  to  $500^\circ\text{F}$ )

### Ice Point Resistance

$100 \pm 0.12\Omega$  or  $1000 \pm 1.2\Omega$ ,  
International Class B, ( $\pm 0.12\%$ )

### Time Constant

$< 0.3$  Seconds on metal surfaces

### Self Heating

$> 15 \text{ mW}/^\circ\text{C}$  mounted

### Interchangeability

$\pm(0.3^\circ\text{C} @ 0^\circ\text{C} + 0.005 |t|^\circ\text{C})$   
IEC 751 Class B above  $-50^\circ\text{C}$

### Long Term Stability

Better than  $0.05^\circ\text{C}$  ( $0.02\Omega$ )  
per 5 years, above  $-50^\circ\text{C}$

### Insulation Resistance

$> 50 \text{ MegOhms}$  at 50VDC at  $25^\circ\text{C}$

### Maximum Current

$100\Omega = 5 \text{ mA}$ ,  $1000\Omega = 2 \text{ mA}$   
for limited self heating

### Recommended Current

1 mA maximum

### Case Material

Kapton® Sensor is refractory  
passified overall before lamination

### Lead Materials

28 AWG nickel-coated, stranded copper  
PFA Teflon® insulated parallel conductors

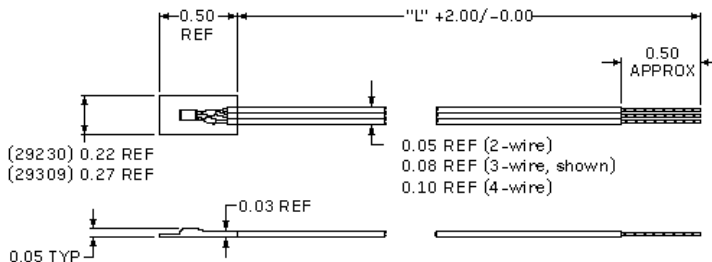
Teflon® is a registered trademark  
of the DuPont Corporation.

## Features

These low cost, sealed platinum surface RTDs are the world's toughest.

The IEC 751 sensor is refractory sealed for  $\pm 0.05^\circ\text{C}$  stability. Its small strong design allows this package to conform on curved surfaces for accurate response in milliseconds. Leads welded within the sealed RTD provide this sensor's durability. Moisture resistance for condensing environments or shallow immersion is provided by Kapton®/Teflon® lamination that completely encapsulates the assembly and lead entrance. Standard operating range is  $-200^\circ\text{C}$  to  $260^\circ\text{C}$ . Clamped sensors can withstand  $315^\circ\text{C}$ .

- Strong welded leads
- Full platinum RTD stability
- Tough
- Completely sealed to condensation
- Strain isolated
- Temperature range is  $-200^\circ\text{C}$  to  $260^\circ\text{C}$
- Time constant is 0.3 seconds on metal surfaces
- Long-term stability better than  $0.05^\circ\text{C}$  ( $0.02\Omega$ ) per 5 years



## Ordering Information & Options

29230	RTD with PFA Teflon® insulated ribbon leads, 2 or 3-wire			
29309	RTD with PFA Teflon® insulated ribbon leads, 4-wire			
RESISTANCE SPECIFICATION @ 0°C				
T01	$100\Omega \pm 0.12\Omega$ , 0.07" x 0.1" sensor			
T10	$1000\Omega \pm 1.2\Omega$ , 0.08" x 0.13" sensor			
NUMBER OF LEADS				
A	2-wire (29230 only)			
B	3-wire (29230 only)			
C	4-wire (29309 only)			
LEAD LENGTH in inches (12 inches standard)				
29230	T10	A	72	Typical write-up for 29230
29309	T01	C	12	Typical write-up for 29309