MEAS INCREASED SAFETY SENSORS–ATEX/IECEX/FM APPROVED BEARING RTD, TIP SENSITIVE

- Variety of Configurations
- Single and Dual Elements

Increased Safety Sensors– ATEX/IECEx/FM Approved Bearing RTD, Tip Sensitive

- Copper tipped construction for fast thermal response
- Used to continuously monitor the temperatures of motor/generator shaft bearings
- Designed for use in hazardous areas where flammable gas may be present
- EC-type certificate: FM 11 ATEX 0029U
- IECEx certificate: FMG 12.0021U

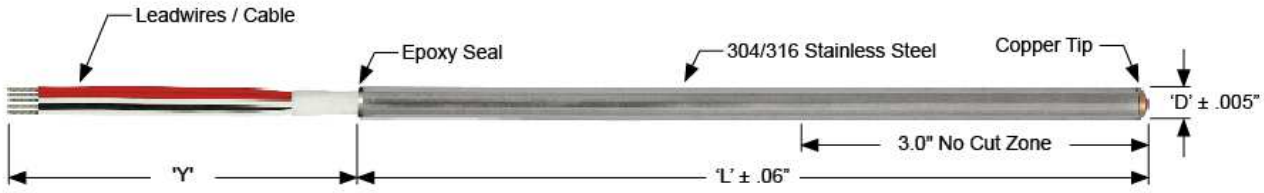
Features

- Sheath Styles:
  » 304/316 Stainless Steel with Copper alloy tip
- Elements, Single and Dual:
  » Platinum, Copper, Nickel
- Sheath Diameters:
  » .188”, .215”, .236” (6.0 mm), .250”
- Leadwire/Cable options

Applications

- Motors
- Generators

Dimensions



'D' = Sheath Diameter
'L' = Sheath Length
'Y' = Leadwire/Cable Length

Performance Specifications

Approvals:

II 2 G Ex e IIC Gb FM11ATEX0029U IECEx FMG 12.0021U

Class I, Zone 1, AEx/Ex e IIC MAX 0.01W

Temperature Range:
-60 to 180°C (-76 to 356°F)

Rated Pressure Range:
Up To 50 PSI

Sheath Material:
304/316 Stainless Steel with fast response Copper tip

Leadwires:
Two, Three or Four Wire Configurations

Dielectric Strength:
1,500 VAC at 60 Hz with 1 mA Maximum Leakage Current

Insulation Resistance:
1,000 megohms minimum between element and case at 500 VDC
100 megohms minimum between elements at 50 VDC (dual RTD sensors only)

Excitation Current:
1 mA Nominal, 5 mA Maximum. At Maximum Excitation Current, Sensor Will Dissipate No More Than 0.01 Watts of Power and Generate a Maximum Voltage of 1.75 Volts.

Sensor Length:
4.0” Minimum

Sensor Diameters:
.188”, .215”, .236” (6.0 mm), .250”

Ordering Information

INCREASED SAFETY SENSORS–ATEX/IECEX/FM APPROVED BEARING RTD, TIP SENSITIVE

Model	Cable/Lead Configuration
1180	Bearing Sensor with Copper Tip, TFE Leads
1181	Bearing Sensor with Copper Tip, Jacketed Cable
1182	Bearing Sensor with Copper Tip, Shielded Jacketed Cable
1190	Bearing Sensor with Copper Tip, TFE Leads, PTFE Sheath Isolator
1191	Bearing Sensor with Copper Tip, Jacketed Cable, PTFE Sheath Isolator
1192	Bearing Sensor with Copper Tip, Shielded Jacketed Cable, PTFE Sheath Isolator

Element Configuration (Single Elements Only)

Model	Element	Nominal Resistance	Accuracy	Temperature Coefficient
P2A	Platinum	100	0.06%	0.00385
P2B	Platinum	100	0.12%	0.00385
P2C	Platinum	100	0.50%	0.00385
P6A	Platinum	1,000	0.06%	0.00385
P6B	Platinum	1,000	0.12%	0.00385
G2B	Platinum	100	0.12%	0.00392
G2C	Platinum	100	0.50%	0.00392
N3C	Nickel	120	0.50%	0.00672

Model	Leadwire Configuration	Element
2S	Two Wire	Single
3S	Three Wire	Single
4S	Four Wire	Single
2D	Two Wire	Dual
3D	Three Wire	Dual
4D	Four Wire	Dual

Model	‘L’ Sheath Length
---	Define ‘L’ Length in .1 Inches. Minimum Length: 4.0 Inches Example: (120 = 12.0”; 063 = 6.3”)

Model	‘D’ Sheath Diameter
B	0.188”
C	0.250”
D	0.215”
E	6.0 mm

Model	‘Y’ Leadwire/Cable Length
---	Define ‘Y’ Length in Whole Inches (120 = 120.0”; 036 = 36.0”)

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