

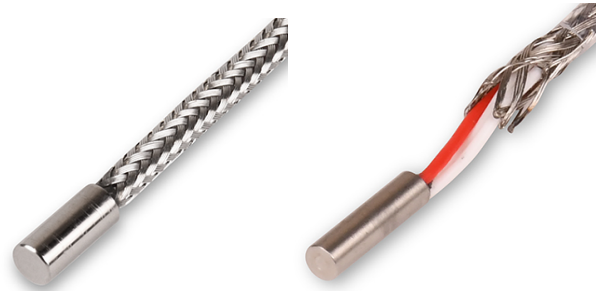
### Miniature Embedment RTD Sensors

Omega's embedment sensors are ideal for monitoring metal temperature in real-time which is critical in giving early warning of lubrication breaking which helps prevent bearing failure. With correct installation, these sensors can provide data needed to inform when maintenance is needed to prevent catastrophic failures the process. These RTD sensors have metal cases and insulated, designed for rough handling and harsh environments. These are easily installed in drilled holes for process sensing.



### Features

- Rugged casings of various styles
- Precisely manufactured for installation beneath the babbitt layer of bearing shoes
- Class "A" and Class "B" accuracy for RTD's, along with a nickel and copper offering
- Rugged materials of construction prevent costly damage during installation and handling
- Various Lead wire insulations offered as well as stainless steel overbraid if required
- Low mass for fast response
- Compact for space limitations



### Typical applications:

- Bearing plates
- Bearing shafts
- Motor windings
- Babbitt installations

### Specifications

Temperature range	-50 to 260°C (-58 to 500°F)
Case Material	Tin plated copper alloy. Model ME-D-S is Stainless steel.
Babbitt tip	Factory applied babbitt, available on case style A or B
Lead wire	Stranded copper with PFA insulation; other options available. Lead wire gauge dependent on case style and number of leads
Time constant	3.0 seconds (case style A) to 1.5 seconds (case style D), typical value in moving water
Insulation resistance	10 megohms min. at 100 VDC, leads to case

### Table of Sensor Types:

#### Part Number Breakdown – [Model]-[Element]-[Cable Insulation]-[Number of Leads]-[Lead Length]-[Babbit]

**Example: ME-B-S-PD-T-2-120**, Case style B, single probe element, PFA cable insulated, 2 wire, 120 in lead length

Model	Case Style	Number of probe elements	Element Options	Dimensions	Model image
ME-A-S	A	Single	All	L: 0.250 in (6.4 mm) Ø: 0.275" (7.0 mm)	
ME-A-D		Dual	All	L: 0.250 in (6.4 mm) Ø: 0.275" (7.0 mm)	
ME-B-S	B	Single	All	L: 0.250" (6.4 mm) Ø: 0.188" (4.8 mm) Flange Ø: 0.250" (6.4 mm)	
ME-B-D		Dual	All except CA	L: 0.250" (6.4 mm) Ø: 0.188" (4.8 mm) Flange Ø: 0.250" (6.4 mm)	
ME-C-S	C	Single	All	L: 0.300" (7.6 mm) Ø: 0.125" (3.2 mm)	
ME-C-D		Dual	All except CA,NA	L: 0.300" (7.6 mm) Ø: 0.125" (3.2 mm)	
ME-D-S	D	Single	All except CA,NA	L: 0.300" (7.6 mm) Ø: 0.080" (2.0 mm)	

Element	Element Specifications
PD	Platinum (0.00385 TCR), 100 Ω ±0.12% at 0°C (EN60751, Class B)
PF	Platinum (0.00385 TCR), 1000 Ω ±0.12% at 0°C
PE	Platinum (0.00385 TCR), 100 Ω ±0.36% at 0°C
PA	Platinum (0.00392 TCR), 100 Ω ±0.36% at 0°C
CA	Copper (.00427 TCR), 10 Ω ±0.2% at 25°C
NA	Nickel (.00672 TCR), 120 Ω ±0.5% at 0°C

Cable Insulation	
T	PFA
S	PFA with Stainless Steel Overbraid
R	PFA with Stainless Steel Overbraid and FEP
F	PFA with FEP

Number of Wires	Lead Length
2, 3, or 4	24, 36, 48, 60, 72, 120, or 144 inches standard

Babbit (Optional)	
B1	Babbitt metal applied
AC1	Supplied with AC171 spring and AC172series ring (case style B only)
AC2	Supplied with AC171 spring and AC1038 ring (case style B only)
AC3	Supplied with AC171 spring and AC915 -1 ring (case style B only)