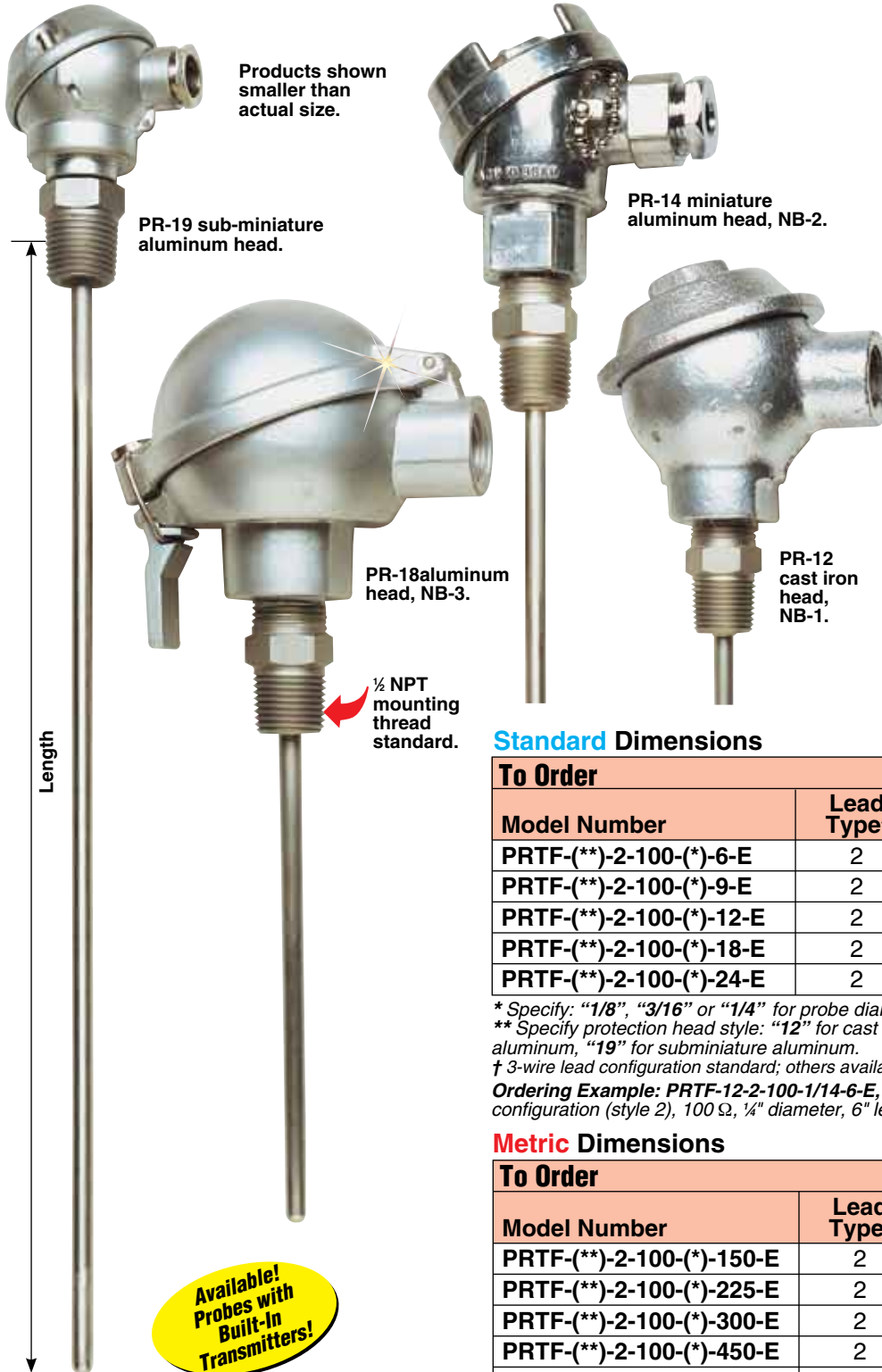


# Platinum RTD Probes

## Industrial Fixed Length Design

### Standard and Metric Dimensions

PRTF Series



Products shown smaller than actual size.

PR-19 sub-miniature aluminum head.

PR-14 miniature aluminum head, NB-2.

PR-18 aluminum head, NB-3.

PR-12 cast iron head, NB-1.

½ NPT mounting thread standard.

Available! Probes with Built-In Transmitters!

Use RTD Extension Wire, e.g., EXTT-3CU Series. Visit us online for details.

- ✓ Rugged Design Offers a Variety of Protection Heads with ½ NPT Mounting Threads and a Screw-Type Terminal Block
- ✓ Probe is Fixed Length, 304 SST Sheath Connected to 304 SST Hex Fitting
- ✓ 100 Ω Thin Film Class “B” DIN Platinum Sensors
- ✓ Standard 3-Wire Configurations with IEC751/ASTM-E-1137 Color Codes (2- and 4-Wire Configurations also Available)
- ✓ Operating Temperature: -60 to 500°C
- ✓ Probe Can be Used as a Direct Immersion Sensor with the Protection Head Isolating the Connections from the Outside Environment
- ✓ Optional 4 to 20mA Transmitters Can Conveniently be Installed into PRTF-12 and PRTF-18 Protection Heads

Note: No transmitters are available for the -14 and -19 heads.

### Standard Dimensions

To Order			
Model Number	Lead Type†	Ohms at 0°C	Sheath Length
PRTF-(**)-2-100-(*)-6-E	2	100	6"
PRTF-(**)-2-100-(*)-9-E	2	100	9"
PRTF-(**)-2-100-(*)-12-E	2	100	12"
PRTF-(**)-2-100-(*)-18-E	2	100	18"
PRTF-(**)-2-100-(*)-24-E	2	100	24"

\* Specify: “1/8”, “3/16” or “1/4” for probe diameter in inches. Other lengths readily available.

\*\* Specify protection head style: “12” for cast iron, “14” for miniature aluminum, “18” for aluminum, “19” for subminiature aluminum.

† 3-wire lead configuration standard; others available, contact sales for other configurations.

Ordering Example: PRTF-12-2-100-1/14-6-E, industrial RTD probe with cast iron head, 3-wire configuration (style 2), 100 Ω, ¼" diameter, 6" length, European curve (α = 0.00385).

### Metric Dimensions

To Order			
Model Number	Lead Type†	Ohms at 0°C	Sheath Length
PRTF-(**)-2-100-(*)-150-E	2	100	150 mm
PRTF-(**)-2-100-(*)-225-E	2	100	225 mm
PRTF-(**)-2-100-(*)-300-E	2	100	300 mm
PRTF-(**)-2-100-(*)-450-E	2	100	450 mm
PRTF-(**)-2-100-(*)-600-E	2	100	600 mm

\* Specify: M30, M45 or M60 for probe diameter in millimeters. Other lengths readily available.

\*\* Specify protection head style: “12” for cast iron, “14” for miniature aluminum, “18” for aluminum, “19” for subminiature aluminum.

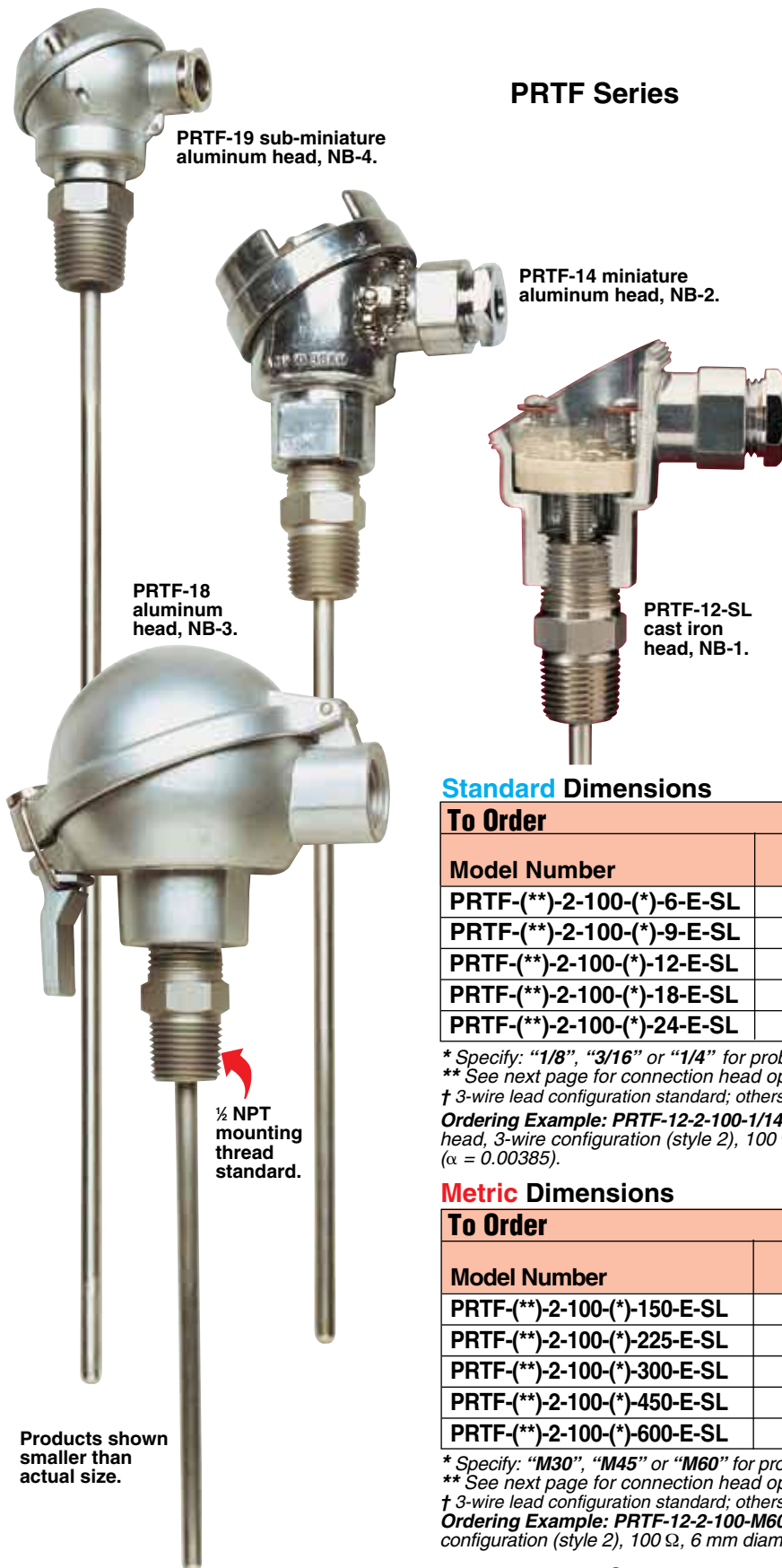
† 3-wire lead configuration standard; others available, contact sales for other configurations.

Ordering Example: PRTF-12-2-100-M60-150-E, industrial RTD probe with cast iron head, 3-wire configuration (style 2), 100 Ω, 6 mm diameter, 150 mm length, European curve (α = 0.00385).

# Platinum RTD Probes

## Spring Loaded for Thermowells

### Standard and Metric Dimensions



#### PRTF Series

PRTF-19 sub-miniature aluminum head, NB-4.

PRTF-14 miniature aluminum head, NB-2.

PRTF-18 aluminum head, NB-3.

PRTF-12-SL cast iron head, NB-1.

1/2 NPT mounting thread standard.

Products shown smaller than actual size.

- ✓ Assemblies Include Spring Loaded Probes for Improved Response Time and Vibration Resistance When Used in Thermowells\*
- ✓ Standard Probes Supplied with 100 Ω Thin Film Class "B" DIN Platinum Elements in 3-Wire Configurations (2- and 4-Wire Available) with IEC751/ASTM-E-1137 Color Codes
- ✓ Multiple Connection Head Options Include Screw Cover and Snap Locking Enclosures with Ceramic Terminal Boards
- ✓ Optional 4 to 20mA Transmitters Can Conveniently be Installed into PRTF-12 and PRTF-18 Protection Heads

*Note:* No transmitters are available for the -14 and -19 heads.

*\* Note:* When installed in a thermowell, the thread engagement will equal the spring loading compression length.

#### Standard Dimensions

To Order			
Model Number	Lead Type†	Ω at 0°C	Sheath Length
PRTF-(**)-2-100-(*)-6-E-SL	2	100	6"
PRTF-(**)-2-100-(*)-9-E-SL	2	100	9"
PRTF-(**)-2-100-(*)-12-E-SL	2	100	12"
PRTF-(**)-2-100-(*)-18-E-SL	2	100	18"
PRTF-(**)-2-100-(*)-24-E-SL	2	100	24"

\* Specify: "1/8", "3/16" or "1/4" for probe diameter in inches. Other lengths readily available.

\*\* See next page for connection head options.

† 3-wire lead configuration standard; others available, contact sales for other configurations.

**Ordering Example:** PRTF-12-2-100-1/14-6-E-SL, industrial RTD probe with cast iron head, 3-wire configuration (style 2), 100 Ω, 1/4" diameter, 6" length, European curve (α = 0.00385).

#### Metric Dimensions

To Order			
Model Number	Lead Type†	Ω at 0°C	Sheath Length
PRTF-(**)-2-100-(*)-150-E-SL	2	100	150 mm
PRTF-(**)-2-100-(*)-225-E-SL	2	100	225 mm
PRTF-(**)-2-100-(*)-300-E-SL	2	100	300 mm
PRTF-(**)-2-100-(*)-450-E-SL	2	100	450 mm
PRTF-(**)-2-100-(*)-600-E-SL	2	100	600 mm

\* Specify: "M30", "M45" or "M60" for probe diameter in millimeters. Other lengths readily available.

\*\* See next page for connection head options.

† 3-wire lead configuration standard; others available, contact sales for other configurations.

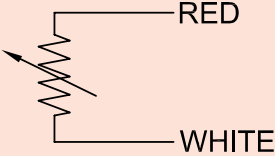
**Ordering Example:** PRTF-12-2-100-M60-150-E-SL, industrial RTD probe with cast iron head, 3-wire configuration (style 2), 100 Ω, 6 mm diameter, 150 mm length, European curve (α = 0.00385).

**Connection Head Options**

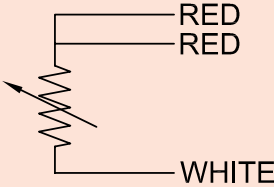
Model No.	Connection Head Style	Material	Conduit Connection
PRTF-12	NB1 screw top	Cast iron	½ NPT
PRTF-14	NB2 screw top sub miniature	Aluminum	½ NPT with compression fitting for ⅛ to ¼" OD cable
PRTF-18	NB3 flip top	Aluminum	½ NPT
PRTF-19	NB4 screw down, subminiature	Aluminum	M16 x 1.0 with compression fitting

All of these sensors are supplied with ceramic terminal blocks with the sensors wired as shown.

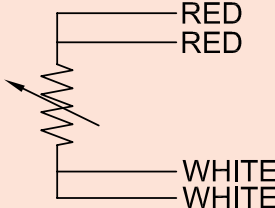
Use RTD Extension Wire, e.g., EXTT-3CU Series. Please visit [omega.com](http://omega.com)



STYLE 1  
2-WIRE



STYLE 2  
3-WIRE  
(STANDARD)



STYLE 3  
4-WIRE

**For Additional Transmitter Options Visit Us Online**



TX92 miniature transmitter.



TX94 ultra-low profile transmitter.



TX904 field rangeable transmitter.

When the sensors are used in remote locations, or in environments where electro-magnetic noise is prevalent. Transmitters are a perfect choice. The transmitters shown above will convert the resistance of the RTD to a 4 to 20 mA signal (for use in PRTF-12 and -18 heads only, no transmitters available for -14 and -19 heads).

**OMEGA can supply your thermowell needs, the following are styles available from stock:**



260S Series general use thermowell, visit us online.



260L Series lagging extension thermowell, visit us online.



260A Series limited space thermowell, visit us online.



260F Series flanged thermowell, visit us online.