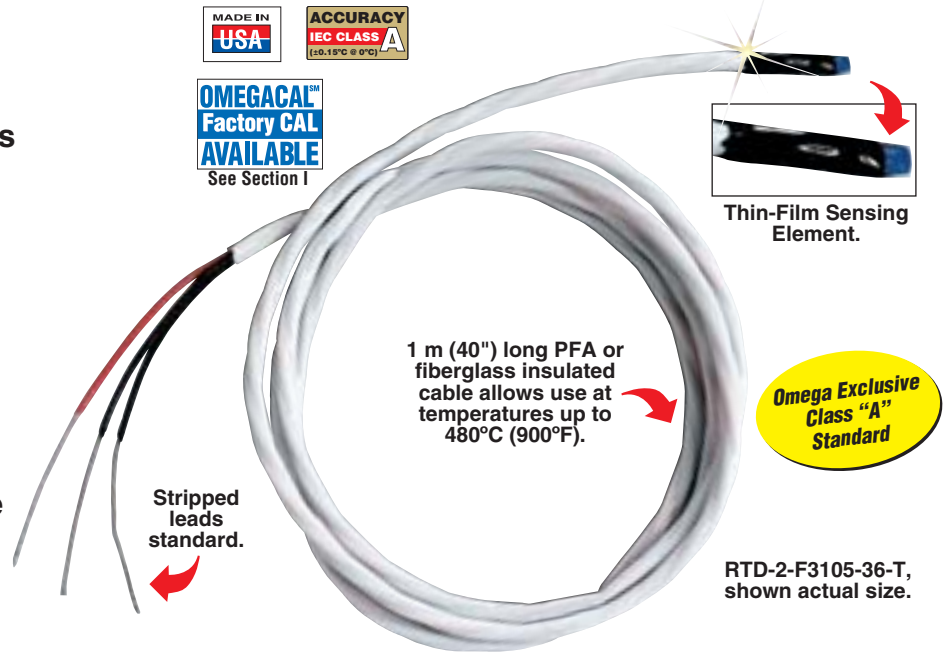


# RTD Sensors—Fast Response

## Exposed RTD Element with Lead Wires

- ✓ Thermal Response (63%)  
Less Than 75 Milliseconds  
in Water Flowing at  
3 Feet per Second
- ✓ High-Accuracy Class  
“A”, 100 Ω DIN Platinum  
Elements Standard
- ✓ Ultra Precise Accuracy  
1/3 and 1/10 DIN, and  
Economical Class “B”  
Also Available\*
- ✓ Operating Range Up  
to 480°C (900°F) Available
- ✓ 1 m (40") Long 2-, 3-, or  
4-Wire #26 AWG Cables  
for Connecting to Most  
Handheld Instruments






**OMEGACAL™**  
Factory CAL  
AVAILABLE  
See Section I

Thin-Film Sensing Element.

**Omega Exclusive Class “A” Standard**

RTD-2-F3105-36-T, shown actual size.

**MOST POPULAR MODELS HIGHLIGHTED!**

To Order (Specify Model Number)							
Model Number	Element	Lead Wire	Potting Material	Maximum Temperature	Style 1	Style 2	Style 3
					(2 wire)	(3 wire)	(4 wire)
							
RTD-2-F3105-36-T, shown actual size							
RTD-(*)-F3105-36-T	F3105 (2 x 2 mm)	PFA	Epoxy	230°C (450°F)			
RTD-(*)-F3102-36-T	F3102 (4 x 5 mm)	PFA	Epoxy	230°C (450°F)			
							
RTD-2-F3102-36-G provides larger measuring area (2x) than the F3105 (shown larger than actual size)							
RTD-(*)-F3105-36-G	F3105 (2 x 2 mm)	Fiberglass	Ceramic	480°C (900°F)			
RTD-(*)-F3102-36-G	F3102 (4 x 5 mm)	Fiberglass	Ceramic	480°C (900°F)			
							
RTD-2-1PT100K2515-36-T, shown larger than actual size							
RTD-(*)-1PT100K2515-36-T	1PT100K2515	PFA	Epoxy	230°C (450°F)			
RTD-(*)-1PT100KN2528-36-T	1PT100KN2528	PFA	Epoxy	230°C (450°F)			

\* 1/3B and 1/10B DIN accuracies only available with wire wound elements and 4-wire configurations.

**Note:** For longer leads, change “-36” in model number to length desired for additional cost. Other RTD elements are also available with lead wires attached; consult Sales. Accuracies of 1/3 and 1/10 DIN are only available in 1PT100K2515 and 1PT100KN2528 wire-wound elements and require 4-wire construction. For 1/3 DIN and 1/10 DIN elements add additional cost. Terminations available for additional cost: “-LUG” “-OTP” and “-MTP” connectors. To order sensors with bare wires and connections for use to 600°C (1112°F), replace “-T” or “-G” with “-B” in model number.

**Ordering Examples:** RTD-3-1PT100K2515-36-T-1/3, 1PT100K2515 1/3 DIN accuracy element with 1 m (40”) of 4-conductor PFA insulated cable attached (epoxy potted). RTD-3-F3102-72-G, F3102 class “A” element with 2 m (72”) of 4-conductor fiberglass-insulated cable attached (ceramic potting).

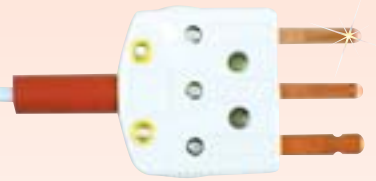
- ✓ **Class “B” Accuracy Available for High Volume, Lower Cost Applications. Also Available in Economical 5-Packs (See page C-30)**
- ✓ **Model Numbers Shown Available from Stock**
- ✓ **Choose from a Large Selection of Elements, Terminations, and Optional Equipment**

### Available Accuracies in Ohms @ 0°C

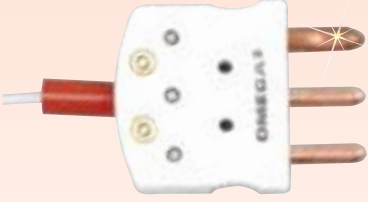
- ✓ Class “A” =  $\pm 0.06 \Omega$  (standard)
- ✓ Class “B” =  $\pm 0.12 \Omega$
- ✓  $\frac{1}{3}$  DIN =  $\pm 0.04 \Omega^*$
- ✓  $\frac{1}{10}$  DIN =  $\pm 0.012 \Omega^*$

**\*Note:**  $\frac{1}{3}$  and  $\frac{1}{10}$  DIN available only with 1PT100K2515 and 1PT100KN2528 wire-wound elements in 4-wire configurations. See accuracy formulas on page C-84 or C-9 for additional information.


Termination options are available for easy operation in conjunction with OMEGA handheld thermometers or other instruments:



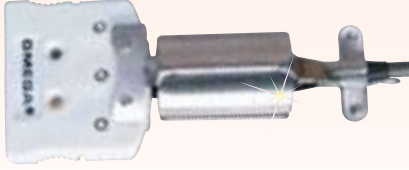
**Miniature Connector, MTP-U-M**  
(e.g., RTD-2-F3105-36-T-MTP).



**Heavy-Duty Connector, OTP-U-M**  
(e.g., RTD-2-F3102-36-G-OTP)




**Connectors, TA3F, TA4F**  
(e.g., RTD-2-F3105-36-T-TA3F).



**4 to 20 mA Transmitter, SPRTX**  
[e.g., RTD-2-F3105-36-G-SPRTX(M1)].

Turn these sensors into complete measurement systems with the following popular instrument options:

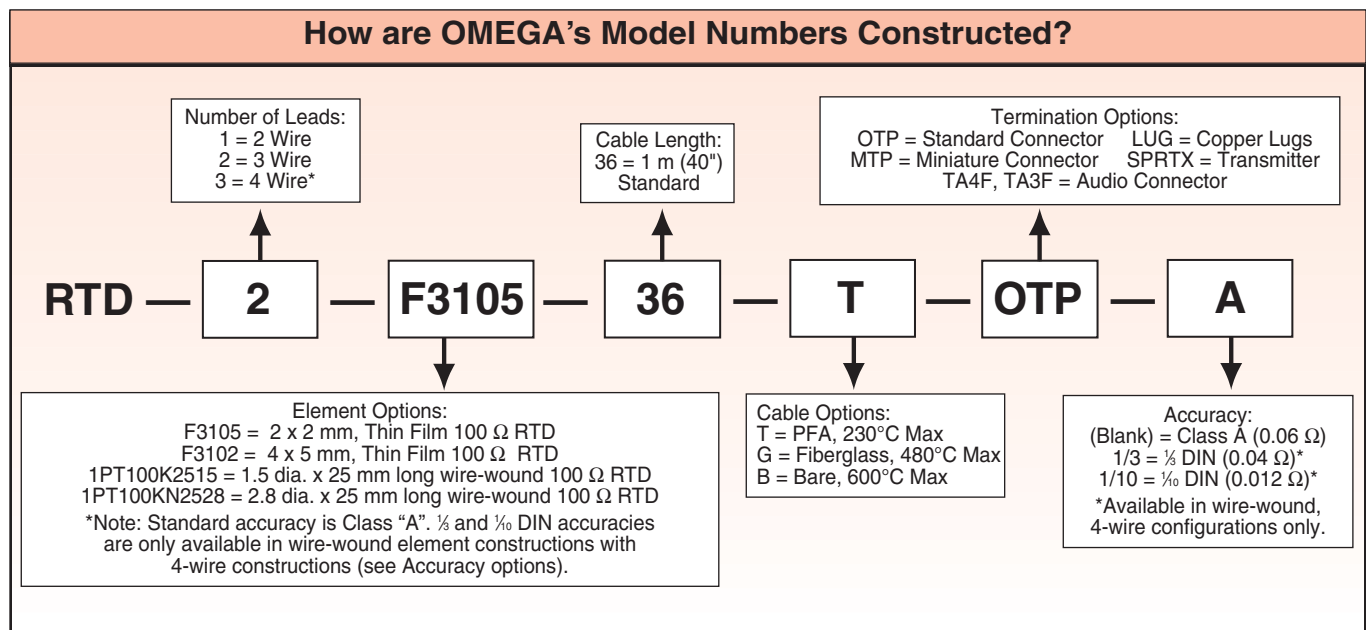


**HH504 Thermometer,**  
Note: Requires Two MTP-U-M Connectors (Included).



**HH505 Thermometer,**  
Note: MTP-U-M Connector (Included).

**Need a different resistance, temperature coefficient, cable length, cable type?** Use the Model Number Builder below to go beyond our stock product offering to construct the sensor that meets your specific needs. You can also visit our online store at [omega.com](http://omega.com), select “Order by Model Number,” and simply enter the model number and length modifications to automatically obtain price and availability.



**Ordering Example:** RTD-2-F3105-36-G.



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
Deckenpfronn, Germany  
0800-8266342

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)  
Manchester, England  
0800-488-488

#### FRANCE

[www.omega.fr](http://www.omega.fr)  
Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
Amstelveen, NL  
0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters