

# Industrial Replacement Probes

## Rigidly Mounted or Spring Loaded

### 1/2" NPT Mounting Thread

MEETS OR EXCEEDS  
SPECIAL LIMITS  
OF ERROR (SLE)  
AND EN 60584-2:  
Tolerance Class 1

Available as  
**SUPER**  
OMEGACLAD<sup>™</sup> XL  
THERMOCOUPLE PROBES  
  
OMEGACAL<sup>™</sup>  
Factory CAL  
AVAILABLE

- ✓ Direct Surface Contact
- ✓ For Use in Thermowells
- ✓ Faster Response

- ✓ 300 mm (12") Length Stock†
- ✓ Custom Lengths Available
- ✓ Inconel or 304 Stainless Steel Sheath
- ✓ J, K, T and E Calibrations in Stock
- ✓ 1.5, 3.0, 4.5, and 6.0 mm (1/16", 1/8", 3/16", and 1/4") Diameters In Stock

- ✓ Use with Any Protection Head!
- ✓ Made with Special Limits of Error Material

Visit us online for probes with lead wires

Spring loaded thermocouple probes are designed to provide fast response when used in a thermowell. Approximately 13 mm (1/2") of travel is standard. Thermocouple junction cannot be damaged when installed into a thermowell. This probe is also ideal for use as a bearing sensor.

Rigidly mounted probes have 1/2" NPT mounting thread. They are supplied with a hex nipple for attachment to tank walls, pipe fittings, or conduit. The fitting is silver soldered to the probe sheath for a positive pressure seal. Supplied with 38 mm (1 1/2") of bare leads with epoxy seal.

### Replacement Probe

To Order: Add suffix RP to part numbers of NB series probes.

Example: NB1-CAIN-14G-12-RP  
Nipple Assembly Probe Length Includes 1/2" Thread Allowance

Note: Head sold separately.  
†Other lengths available, consult Sales Dept.

To Order: Add Suffix "-RP-HNSL" to model numbers of NB1 and NB2 probe.

Example: NB1-ICSS-316G-12-RP-HNSL  
Nipple Assembly Probe Length Includes 1/2" Thread Allowance

Note: Head sold separately.

Dual Element Thermocouples Also Available! Consult Sales for price and availability.

# Weld Pad Probes

Weld Pad Probe	Suffix
Parallel	-PD
Perpendicular	-PD90
Curved*	-PDR†*

† Plus set-up fee.

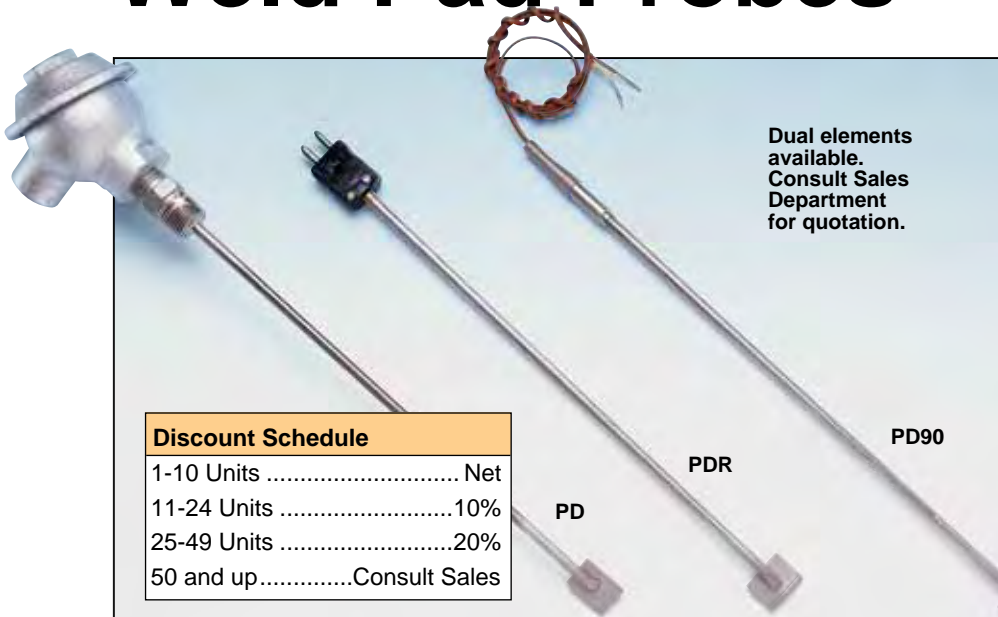
\* Specify pipe radius.

Quick Disconnect probes are available with 304 stainless steel or Inconel welding pads for permanent installation. These rugged assemblies are available in three styles, Parallel, Perpendicular, and Curved, to meet most industrial applications. (1/16" Diameter probes and larger.)

### PAD Dimensions:

25 x 19 x 3 mm (1" x 3/4" x 1/8")

Ordering Example: ICSS-14G-12-PDR-2", Iron-Constantan quick disconnect thermocouple 1/4" dia., 12" L, SS sheath with a curved weld pad for a 2" pipe radius. Setup fee for lot.



Dual elements available. Consult Sales Department for quotation.

Discount Schedule	
1-10 Units .....	Net
11-24 Units .....	10%
25-49 Units .....	20%
50 and up .....	Consult Sales

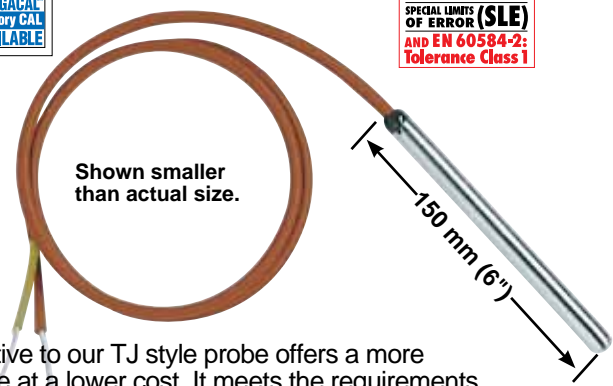
# Specialty Thermocouple Probes

## Low-Cost Hollow-Tube Thermocouple Probe

- ✓ 1 m (40") PFA-Insulated Lead Wire Epoxy Potted into a 304 SS Sheath
- ✓ Probe Rated Up to 450°F
- ✓ Probe Diameters of 1.5, 3.0, 4.5, and 6.0 mm (1/16", 1/8", 3/16", and 1/4")
- ✓ J, K, T, E, and N Calibrations
- ✓ Glass-Insulated Leads Available for Higher Temperatures (Up to 900°F)
- ✓ Made with Special Limits of Error Wire
- ✓ Grounded Junction



**MEETS OR EXCEEDS SPECIAL LIMITS OF ERROR (SLE) AND EN 60584-2: Tolerance Class 1**

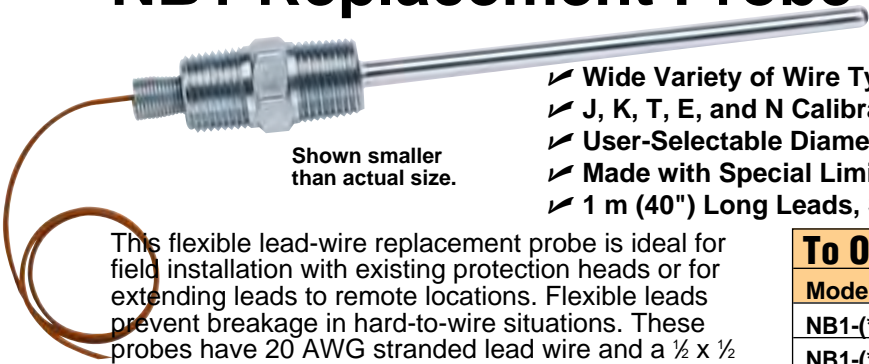


This alternative to our TJ style probe offers a more compact size at a lower cost. It meets the requirements of limited-space applications, without the metal transition fitting or strain relief spring.

To Order		
Model Number	Probe Dia.	Lead AWG
HTTC36-(*)-116G-(**)	1.5 mm (1/16")	30 Solid
HTTC36-(*)-18G-(**)	3.0 mm (1/8")	24 Stranded
HTTC36-(*)-316G-(**)	4.5 mm (3/16")	20 Stranded
HTTC36-(*)-14G-(**)	6.0 mm (1/4")	20 Stranded

\* Specify calibration type: J, K, T, E, or N. \*\* Specify probe length in inches 1 1/2 to 6" (38 to 150 mm). Over 150 mm (6"), for additional cost per inch. 32 mm (1.25") minimum; 1.2 m (48") maximum. Over 1.2 m (48") consult Custom Engineering Department. Over 1 m (40") leads, for additional cost per foot, and modify model number. Add suffix: "GG" for fiberglass insulated lead wire. [Does not include 1.5 mm (1/16") diameter.]  
**Ordering Example:** HTTC36-K-18G-6-GG, hollow tube thermocouple Type K calibration, 3 mm (1/8") diameter, 150 mm (6") probe length, 1 m (40") glass insulated leads.  
**Options:** Modify model number to meet your specific needs. For connector terminations add suffix "-OSTW-M" or "-SMPW-M" for an additional cost. For ungrounded probe change "G" in part number to "U" and for an additional cost.

## NB1 Replacement Probe With Lead Wire



- ✓ Wide Variety of Wire Types Available
- ✓ J, K, T, E, and N Calibration Types
- ✓ User-Selectable Diameter and Length
- ✓ Made with Special Limits of Error Wire
- ✓ 1 m (40") Long Leads, Standard; Other Lengths Available

**MEETS OR EXCEEDS SPECIAL LIMITS OF ERROR (SLE) AND EN 60584-2: Tolerance Class 1**



This flexible lead-wire replacement probe is ideal for field installation with existing protection heads or for extending leads to remote locations. Flexible leads prevent breakage in hard-to-wire situations. These probes have 20 AWG stranded lead wire and a 1/2 x 1/2 NPT hex fitting. Probe length includes 13 mm (1/2") of hex fitting threads.

To Order	
Model Number	Description
NB1-(*)SS-14G-(**)-RP-†	Up to 300 mm (12") probe length
NB1-(*)SS-14U-(**)-RP-†	Up to 300 mm (12") probe length

Over 1 m (40") leads, modify model number, for additional cost per foot. TT-SB: PFA with SS overbraiding, GG-SB: fiberglass with SB overbraiding and length in inches, for an additional cost. Over 1 m (40") leads, modify model number, for additional cost per foot.  
**Ordering Example:** NB1-CASS-14G-12RP-TT36, Type K "replacement probe", 300 mm (12") long, 6 mm (1/4") diameter, grounded junction with 1 m (40") PFA leads (for other diameters and configurations, contact Sales).

## Metal Handle Probe

- ✓ 1.5, 3.0, 4.5, and 6.0 mm (1/16, 1/8, 3/16, and 1/4") Diameters
- ✓ 300 mm (1') of Retractable Cable Expands to 1.5 m (5')
- ✓ Probe Leads Terminate in a Male SMP Miniature Connector
- ✓ Heavy-Duty Aluminum Handle
- ✓ Bendable Probe
- ✓ Variations Available—Contact the Quotations Department



The MHP handle probe picks up where the HPS handle probes leave off, offering unparalleled durability and no probe length limitations. A compression fitting rigidly secures the probe to the cast-aluminum handle and provides the rugged construction and stability that long probes and heavy-duty applications require.



**MEETS OR EXCEEDS SPECIAL LIMITS OF ERROR (SLE) AND EN 60584-2: Tolerance Class 1**

To Order
Model Number
MHP-(*)SS-14G-(**)-SMP

\* Specify calibration type: CA, IC, CP, CX, NN for K, J, T, E and N. \*\* Specify probe length in inches.  
**Ordering Example:** MHP-CASS-14G-12-SMP, metal handle probe, Type K calibration, 6 mm (1/4") diameter, 300 mm (12") length, SMP connector (for other diameters and configurations, contact Sales).