

# Electrical Resistance (ER) Probes

Request A Quote

MODEL 2500/2500HT



## Features

- **Cylindrical Element**
- **Mounting -  $\frac{3}{4}$ " NPT Fixed**
- **Temperature Rating - +500°F / +260° C Standard Model 2500**  
- +1000°F / +540° C High Temp. Model 2500HT
- **Pressure Rating - 4000 PSI / 27.6 MPa**
- **Element Seal Material - All Welded**
- **Fill Material - Ceramic**
- **Body Material - Same as element**

Model 2500 fixed electrical resistance probes have a thin walled cylindrical sensing element which is welded onto a body of the same material. No other materials are in contact with the corrosive medium. Welds are vacuum annealed during assembly to avoid preferential corrosion

effects. They may be used in aggressive organic or inorganic fluids over the entire pH range. These probes are standard in mild steel, 304 S.S. and 316 S.S. but can be supplied in other materials. These probes cannot be removed while system is under pressure.

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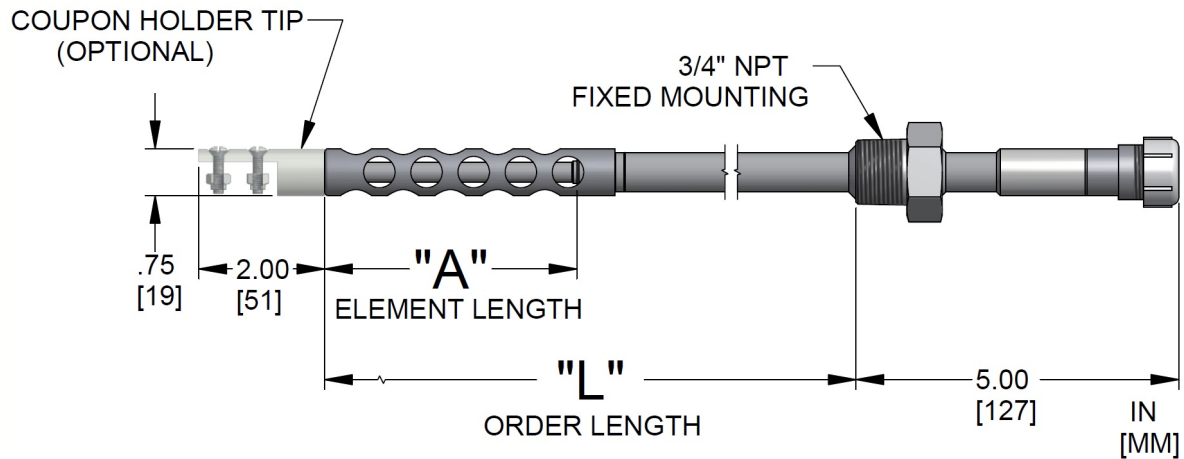
## Element Availability

UNS Number	Alloy	T10	T20	T50	UNS Number	Alloy	T10	T20	T50
K03005	Pipe Grade Carbon Steel	•	•	•	N08020	CARP 20-Cb3	•	•	
A106GRB	A106 Gr.B	•	•		S50400	9% Cr 1% Mo	•	•	
S30400	304 S.S.	•	•	•	N04400	Monel 400	•	•	
S30403	304L S.S.	•	•		N06600	Inconel 600	•	•	
S31600	316 S.S.	•	•		N06625	Inconel 625	•	•	
S31603	316L S.S.	•	•		N08825	Incoloy 825	•	•	
S31703	317 S.S.	•	•	•	N10276	Hastelloy C-276	•	•	
S31803	2205 Duplex S.S.	•	•		A333GR6	A333 GR.6		•	
S32100	321 S.S.	•	•						
S41000	410 Stainless Steel	•	•						
S50200	502 S.S. (5% Cr 1/2% Mo)	•	•						
N08904	904L S.S.	•	•						
	<b>Inches</b>	.005	.010	.025		<b>Inches</b>	.005	.010	.025
	<b>Useful Range (mm)</b>	.127	.254	.635		<b>Useful Range (mm)</b>	.127	.254	.635

**Table 1**

Other element alloys or styles may be supplied subject to material availability.

## Dimensions



Element Type	"A" Dimension Element Length	"L" Dimension Order Length
T10	2.25 (57mm)	5.00 (127 mm)
T20	4.00 (102mm)	5.00 (127mm)
T50	10.00 (254 mm)	12.00 (305 mm)

# MODEL 2500/2500HT

## Ordering Information

Model	Fixed NPT Mounting Probes – Cylindrical Element				
2500	Complete Probe Assembly				
2500HT	Complete Probe Assembly – High Temperature				
	<b>Code</b>	<b>Element Form: See Table 1 for availability</b>			
	<b>T10</b>	10 mil thickness (5 mil useful probe life)			
	<b>T20</b>	20 mil thickness (10 mil useful probe life)			
	<b>T50</b>	50 mil thickness (25 mil useful probe life)			
	<b>Code</b>	<b>Element Alloy: See Table 1 for availability</b>			
	XXXXXX	Enter UNS Number			
	<b>Code</b>	<b>Order Length</b>			
	0	Standard Length – 5.00 inches for T10 or T20, 12.00 inches for T50			
	<b>Code</b>	<b>Shield</b>			
	0	Not Included (max liquid velocity 8 ft./sec, gases 25 ft./sec)			
	1	Element Support (max liquid 25 ft./sec, gases 75 ft./sec)			
	2	High Velocity (max liquid 50 ft./sec, gases 150 ft./sec)			
	3*	Coupon Holding (max liquid 25 ft./sec, gases 75 ft./sec)			
<b>2500</b>	<b>— T20</b>	<b>— K03005</b>	<b>— 0</b>	<b>— 1</b>	<b>← Example</b>
<b>2500HT</b>	<b>— T20</b>	<b>— K03005</b>	<b>— 0</b>	<b>— 1</b>	<b>← Example</b>

**Unit Weight:** 3 lbs./1.36 kg

\*Coupon holding tip will extend 2" beyond order length coupon holding shields, use CI-RS strip coupons.

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