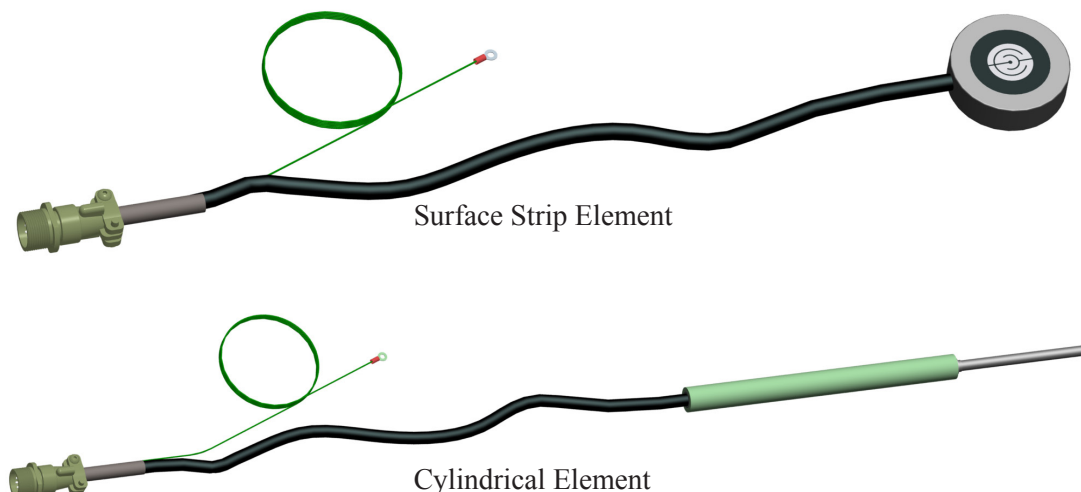


# Model ER0500

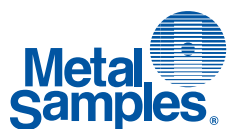
## Electrical Resistance Probe Surface Strip Element and Cylindrical Element Types



**Model ER0500** corrosion probes are designed for heavy duty service conditions such as underground and structural monitoring of pipelines, vessels, above and below ground storage tanks and structures - whether cathodically protected or not. The surface strip element assembly is suited to the “construction site” environment. The cylindrical element is economical and durable. Its slim profile is convenient for locations with restricted access such as concrete bridge structures and other infrastructure applications. Both probes provide good sealing of the reference element and the check element provides confidence in the continued performance of the corrosion sensor. Either probe may be connected to a cathodically protected structure using the attached grounding lead. This allows the probe to measure the effectiveness of the Cathodic Protection (C.P.) System under operating conditions. If left unconnected from the structure, the probe monitors the direct corrosivity of the soil or environment. The grounding lead is installed at the connector end, unless otherwise specified. This enables connection to the C.P. System to be made as required even after probe installation.

### Specifications:

	Surface Strip	Cylindrical (Standard)	Cylindrical (High-Temp)
Probe Body	PVC / Epoxy	FRP / Epoxy	Stainless Steel
Cable	High-Density Polyethylene Jacket Rated for Direct Burial		Teflon <sup>®</sup> FEP
Temperature Rating	176°F (80°C)		392°F (200°C)



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## ER0500 Ordering Information

Model					
AP	Electrical Resistance Probe				
	<b>Type</b>				
	40	Under ground cylindrical with ground strap			
	61	Under ground surface strip with ground strap			
	A0	High-temperature underground cylindrical with ground strap			
	<b>Element Thickness</b>				
	10	10 mil thickness (5 mil useful probe life) - cylindrical or surface strip			
	20	20 mil thickness (10 mil useful probe life) - cylindrical or surface strip			
	40	40 mil thickness (20 mil useful probe life) - surface strip only			
	50	50 mil thickness (25 mil useful probe life) - cylindrical only			
<b>Element Alloy</b>					
XXX	Use Code in Alloy Chart				
<b>Cable Length</b>					
10	10 ft. cable				
20	20 ft. cable				
<b>AP</b>	<b>61</b>	<b>40</b>	<b>375</b>	<b>20</b>	<b>Example of Probe Ordering #</b>

For alloys, sizes, cable lengths, or other special requirements not listed, contact our sales department.

Alloy Chart					
Code	Description	UNS #	Code	Description	UNS #
375*	Carbon Steel **	G10100	159	316L SS	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 SS	S41000	419	CDA110	C11000
141	304 SS	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

\* For CT50 cylindrical elements use alloy code 378 instead of 375.

\*\* Chemically equivalent to standard pipe-grade carbon steels.

### Installation/Clearance Dimenions:

