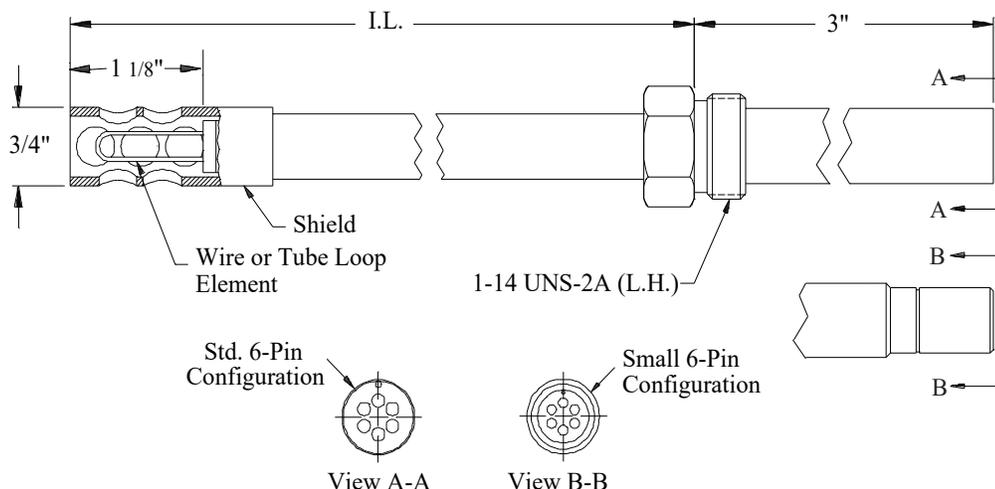


# Model ER7000

## Electrical Resistance Probe, Retrievable with Loop Element for High Pressure (HP™ and MH™) Access Systems



**Model ER7000** is a fixed-length, retrievable, electrical resistance probe for use with HP™ and MH™ high pressure access systems. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a hollow plug nut, which are all welded in place. A velocity shield can be added to the assembly if required. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retrieval tool and service valve, without process shutdown. The insertion length (I.L.) can range from 2.875" up to any length specified by the customer in 1/8" increments. Insertion length is calculated by the formula:

$$\text{I.L.} = \text{PD} + \text{WT} + 1.75''$$

(where PD = penetration depth, WT = wall thickness)

**Note:** Formula valid for access fitting heights of 5.25" (HP) and 5.5" (MH).

Several standard elements are available to meet your specific needs. Probe adaptors are available and must be ordered separately.

### Specifications:

**Probe Body** - 316 Stainless Steel

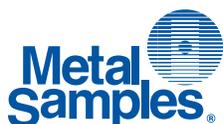
**Element Seal** - Glass

**Fill Material** - Ceramic

**Temperature Rating** - 500°F / 260°C

**Pressure Rating** - 3600 PSI / 245 Bar

**Mounting** - High Pressure (HP™ or MH™) Access System with Hollow Plug



### Metal Samples Company

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Houston Office: 6327 Teal Mist Lane, Fulshear, TX 77441 Phone: (832) 451-6825

## ER7000 Ordering Information

Model								
HR	Electrical Resistance Probe for High Pressure (HP™ and MH™) Access Systems							
	<b>Mounting Material</b>							
	2	316						
	3	C276						
	<b>Connector Type</b>							
	1	Small connector						
	2	Standard connector						
	<b>ER Element Options</b>							
	0	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)						
	1	WR80 Wire Loop - 80 mil thickness (40 mil useful probe life)						
	2	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)						
	3	TU08 Tube Loop - 8 mil thickness (4 mil useful probe life)						
	<b>Seal Type</b>							
	1	Glass						
	2	Teflon®						
	3	Epoxy						
	<b>Length</b> (Round calculated length down to the nearest 1/8")							
	XXXX	Length in inches, stated in 2 decimal place format (Ex: 6 1/8" = 0612)						
	<b>Element Alloy</b>							
	XXX	Use Code in Alloy Chart						
	<b>ER Probe Options</b>							
	00	No shield						
	01	Standard shield						
	02	Hi-velocity shield						
<b>HR</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0612</b>	<b>375</b>	<b>01</b>	<b>Example of Probe Ordering #</b>

For alloys, sizes, 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.

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