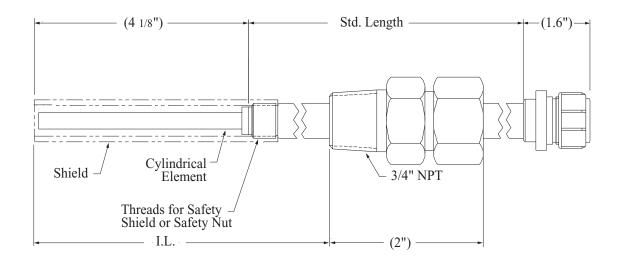
## **Model ER3100**

## Electrical Resistance Probe Adjustable Length with 3/4" NPT Pipe Plug and Cylindrical Element



**Model ER3100** is an adjustable-length, electrical resistance probe with a 3/4" NPT compression fitting. The compression fitting allows the probe to be inserted into the process to the required length. The probe requires process isolation or process shutdown to install and a threaded pipe fitting to mount. The all-welded construction allows the probe to be used in harsh environments. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector welded in place, a 3/4" compression fitting, and a safety nut to prevent blow out. A velocity shield can be added to the assembly if required. The insertion length (I.L.) is calculated to the end of the shield or to the end of the element if a shield is not present. Probe length can be specified by the customer. For standard probes, the maximum insertion length is given in the chart below. Several standard elements are available to meet your specific needs.

## **Specifications:**

**Probe Body -** 316 Stainless Steel

Element Seal - Welded

Fill Material - Ceramic

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

**Pressure Rating -** 1500 PSI / 102 Bar

Mounting - 3/4" NPT Pipe Plug

Std. Length	IL (max)
6"	8.58"
8"	10.58"
12"	14.58"
18"	20.58"



## **ER3100 Ordering Information**

Model											
ER3	Electr	ical Resistance Adjustable Length Pipe Plug Probe									
	Pipe I	Plug Size									
	2 3	3/4" NPT Pipe Plug 1" NPT Pipe Plug									
		Probe Body Material									
		22 44									
		44	ER Element Options								
			500	CT10	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)						
			600	l	0 Cylindrical - 20 mil thickness (10 mil useful probe life)						
			700		50 Cylindrical - 50 mil thickness (25 mil useful probe life)						
				Leng	ngth						
				06	8.58 inches max. insertion length						
				08	10.58 inches max. insertion length						
				12	14.58 inches max. insertion length						
				18	20.58 inches max. insertion length						
					Element Alloy						
					XXX	Use Code in Alloy Chart					
						ER Probe Options					
						00	No shield				
						03	Shield				
ER3	2	22	500	08	375	03	Example of Probe Ordering #				

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.

<sup>\*</sup> Chemically equivalent to standard pipe-grade carbon steels.