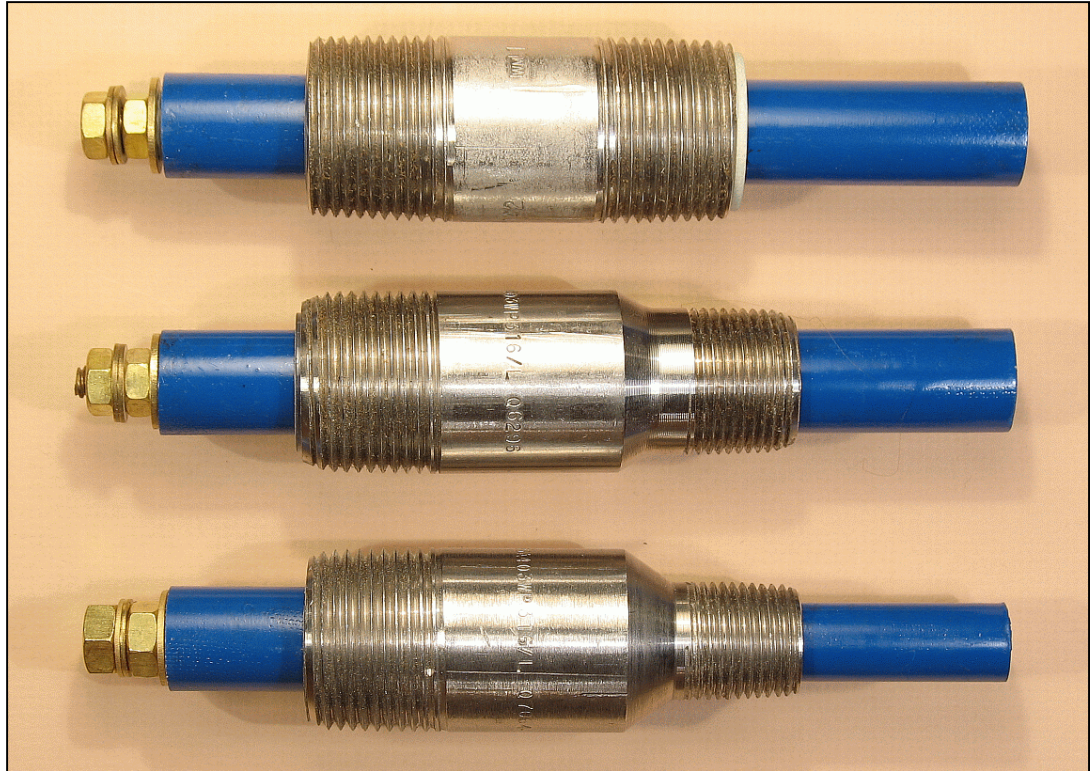


# Heavy Duty Through-wall Reference Electrode

## Model FH

Through-wall reference electrodes are used for measuring corrosion potential on the inside of condenser waterboxes, circulating pipes, tanks and vessels. These electrodes are installed by threading into a tapped hole on the wall; a junction box is typically attached to the other end to protect the wiring connections.



**Model FH**, with a glass reinforced epoxy (G-10 GRE) extension tube and a 316L stainless steel nipple, is designed for heavy duty usage. It can be used at pressures up to 75 psi (0.5 MPa) and at intermittent temperatures up to 210°F (98°C). Model FH is available in three size variations: **Model FH10** is threaded into a 1 inch NPT hole, **Model FH7** is threaded into a 3/4 inch NPT hole, **Model FH5** is threaded into a 1/2 inch NPT hole; all three variations have a 1 inch NPT thread on the termination side.

The temperature limits stated are those for the wetted materials of construction. Through-wall reference electrodes should not be used continuously at temperatures exceeding 110°F (45°C) because the reference potential will be significantly different from its value at ambient temperature and the electrode service life will be drastically shortened. This product will survive occasional brief temperature excursions up to the stated limits. For applications involving continuous exposure to temperatures over 110°F (45°C), our Process Vessel Reference Electrode, Model FE, is recommended.

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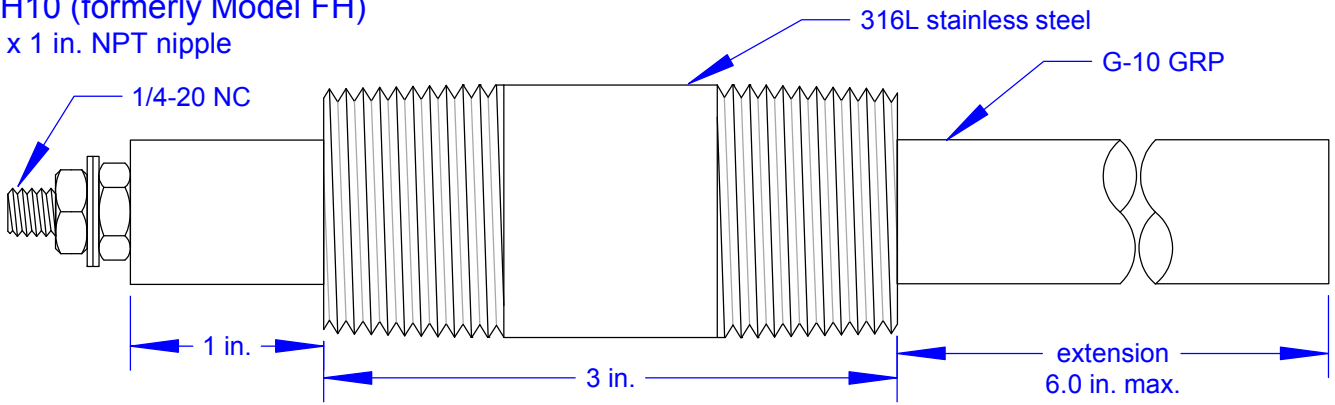
info@edi-cp.com

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*F Series  
Through-Wall  
Reference  
Electrodes*

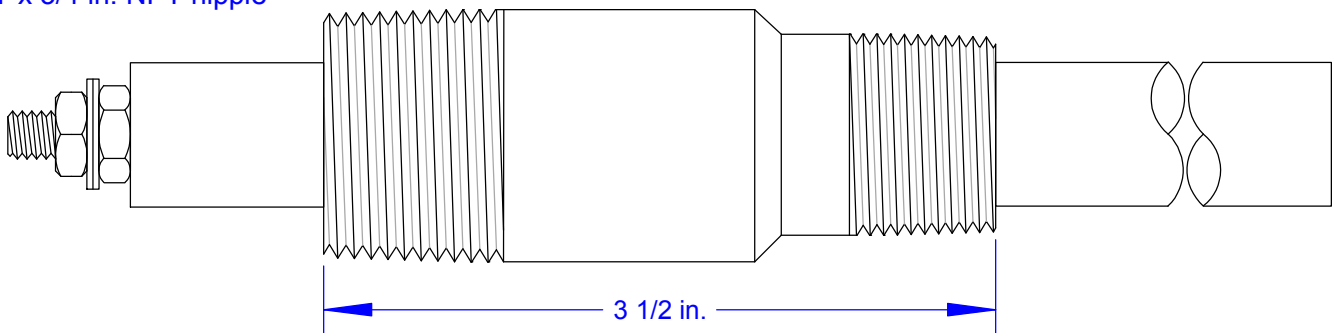
**Model FH10 (formerly Model FH)**

1 in. NPT x 1 in. NPT nipple



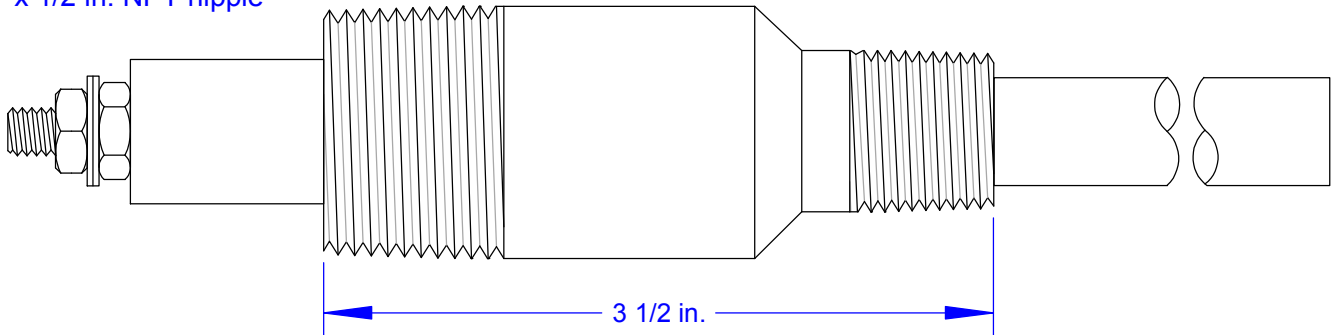
**Model FH7 (formerly Model FX06A)**

1 in. NPT x 3/4 in. NPT nipple



**Model FH5 (formerly Model FX06B)**

1 in. NPT x 1/2 in. NPT nipple



Specify as EDI Model FH $z$ -xxx-n.n

where  $z$  = size code: 10, 7 or 5

xxx = element type:

AGG = sat. gelled Ag/AgCl

CUG = sat. gelled Cu/CuSO<sub>4</sub>

AGD = open-type Ag/AgCl

ZIN = open-type zinc

and n.n = extension length, inches

**Notes:**

1. Standard termination is the stud end unless otherwise specified.
2. Stud end units are tested to 150 psi and pressure rated to 75 psi . Other pressure ratings are available on request.
3. Wire end units are rated to 50 psi.
4. Contact EDI sales office if extensions over 6 inches are required.

**Heavy-duty through-wall reference electrode**

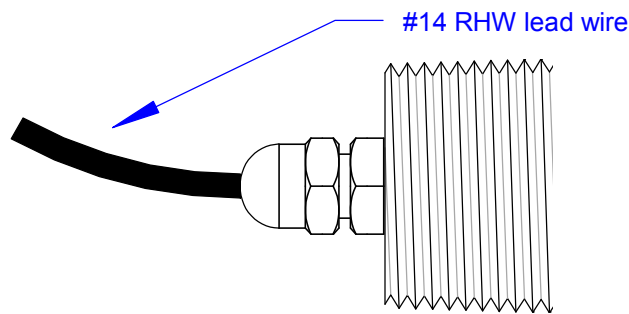
SCALE	FULL
DRAWN BY	FJA
DATE	05 APR 2013
DRAWING NUMBER	FH-3



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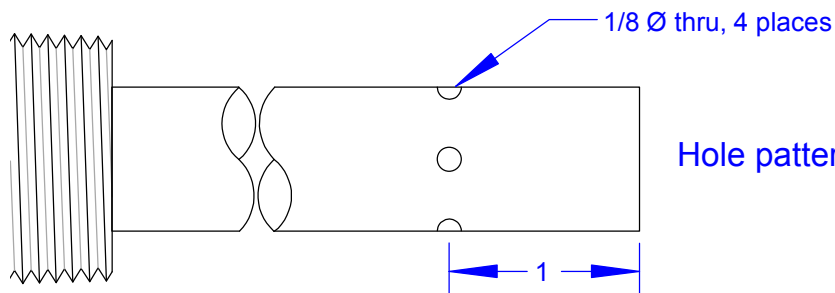
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2013



**Optional wire end**

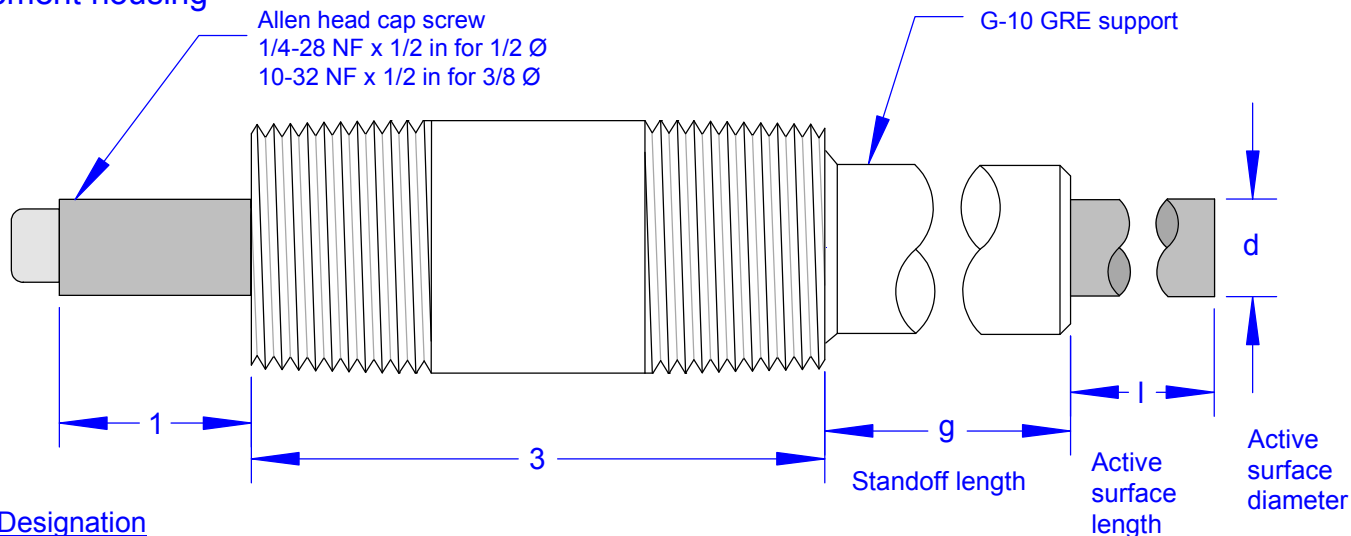
Lead wire length must be specified at time of order.

Wire end units are pressure rated to 50 psi.



**Hole pattern for AGD elements**

**Zinc element housing**



**Model Designation**

Specify as EDI Model FH<sub>z</sub>-ZIN-d.g.l where

z = size code: 10, 7, or 5

d = rod diameter, inches: 3 for 0.3/8, 5 for 1/2

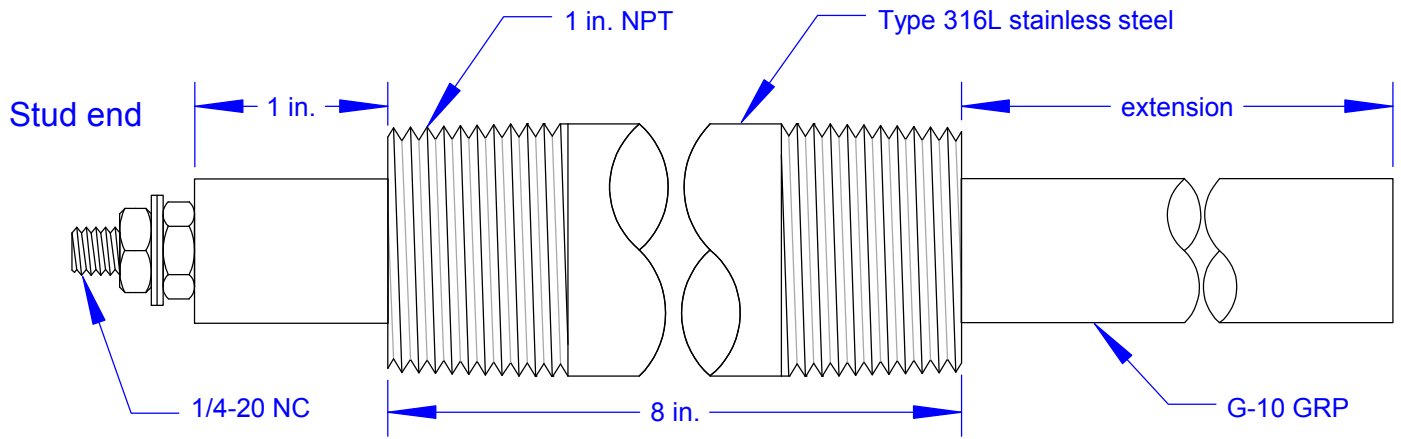
g = standoff length, inches: 1 to 9 in 1 inch increments

l = active length, inches: 1 to 4 in 1 inch increments

Note: A resilient mount is used between probe rod and support to minimize fatigue loading on rod.

**Heavy-duty through-wall termination styles**

SCALE	FULL
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DATE	15 APR 2014
DRAWING NUMBER	FH-4



Model FX13 is the same as Model FH10 except that the nipple length is 8 inches instead of 3 inches.

Optional wire end  
Lead wire length must be specified at time of order.

Specify as EDI Model FX13-xxx-n.n

xxx = element type:

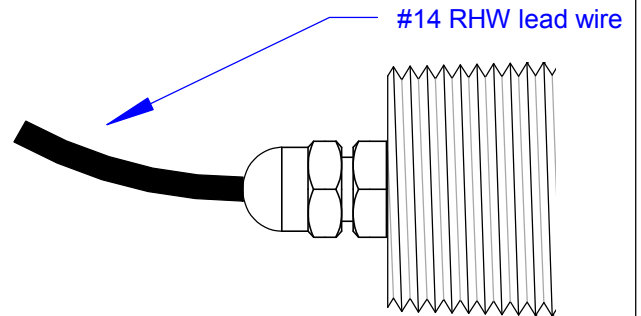
AGG = sat. gelled Ag/AgCl

CUG = sat. gelled Cu/CuSO<sub>4</sub>

AGD = open-type Ag/AgCl

ZIN = open-type zinc

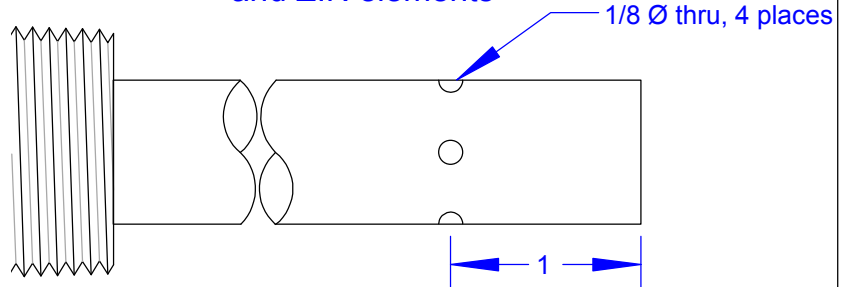
and n.n = extension length, inches



Notes:

1. Standard termination is the stud end unless otherwise specified.
2. Stud end units are tested to 150 psi and pressure rated to 75 psi . Other pressure ratings are available on request.
3. Wire end units are rated to 50 psi.

Hole pattern for AGD and ZIN elements



## Through-wall Reference with Long Nipple



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