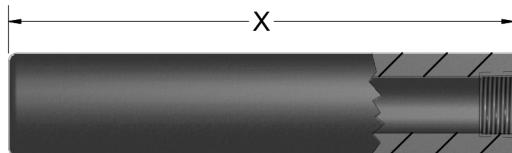
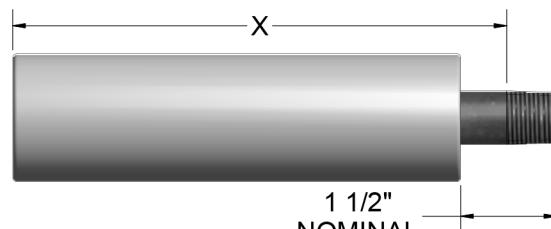
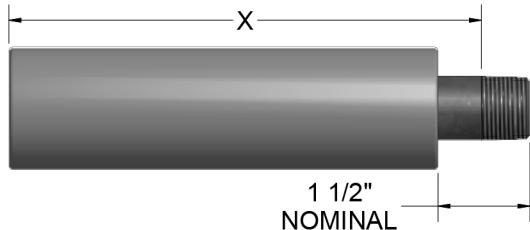


The Series 11, 13, and 14 protection tubes are used to protect thermocouple elements in molten aluminum and zinc applications such as diecasting, melting, smelting, and high temperature holding furnace environments. Series 13 and 14 protection tubes should be preheated and slowly immersed into any molten materials.

TUBE CODE 11

TUBE CODE 14<sup>[1]</sup>TUBE CODE 13<sup>[1]</sup>

[1] Refractory length is 1" shorter than specified length

## ORDER CODES

**Example Order Number:**

1 **11-75** - 2 **24**

**1 Protection Tube NPT Connections**

CODE	DESCRIPTION	NPT SIZE (inches)	TUBE		MAX. LENGTH (inches)
			Nominal O.D. (inches)	Nominal I.D. (inches)	
CAST-IRON 871 °C [1600 °F] Max.					
11 - 75	Internally threaded	3/4	1.625	0.470	36
VESUVIUS 927 °C [1700 °F] Max.					
13 - 75		3/4	2.00	0.824	36
CERITE® 815 °C [1500 °F] (36" maximum "X" length)					
14-50 <sup>[1]</sup>	Cerite® II	1/2	2.00	0.622	36
[1] For Cerite® protection tubes supplied with 316SS pipe instead of a carbon steel pipe, change model number prefix code 14 to 148. EXAMPLE: 148-50-24					

**2 Tube "X" Length**

LENGTH (inches)
12
18
24
30
36

**Recommended Applications**

CAST-IRON	Aluminum
VESUVIUS	Aluminum
CERITE®	Aluminum, Zinc