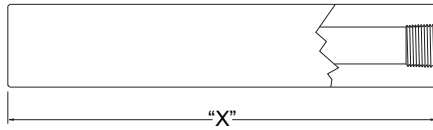
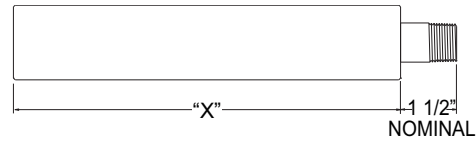


The Series 11, 13, and 14 protection tubes are used to protect thermocouple elements in molten aluminum and zinc applications such as diecasting, melting, smelting, and high temperature holding furnace environments. Series 18 Silicon Carbide protection tube can also be used in the above applications, however the Series 18 is a refractory silicate bonded tube and generally will not provide a service life equal to silicon nitride bonded silicon carbide protection tubes. The Series 18 is satisfactory for use in other molten metals, molten glass, and other high temperature applications. Series 13, 14, and 18 protection tubes should be preheated and slowly immersed into any molten materials.

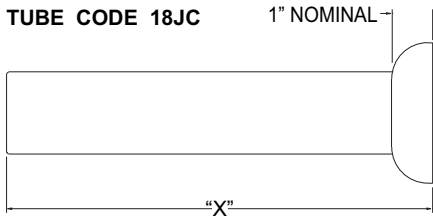
TUBE CODE 11



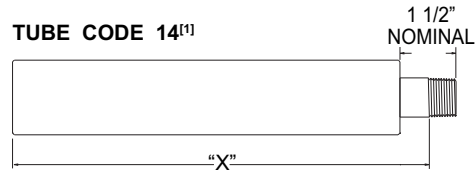
TUBE CODE 13



TUBE CODE 18JC



TUBE CODE 14^[1]



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

ORDER CODES

Example Order Number:

11-75 - 24

1 Protection Tube NPT Connections

CODE	DESCRIPTION	NPT SIZE (inches)	TUBE		MAX. LENGTH (inches)
			OD (inches)	ID (inches)	
CAST IRON 871 °C [1600 °F] Max.					
11 - 75	Internally threaded	3/4	1.625	0.875	72
VESUVIUS 927 °C [1700 °F] Max.					
13 - 75		3/4	2.00	0.824	48
SILICON CARBIDE 1649 °C [3000 °F] Max.					
18J	Plain tube w/o collar	None	1.75	1.00	48
18JC	3" OD collar	None	1.75	1.00	48
CERITE® 815 °C [1300 °F] (36" maximum "X" length)					
14-50 ^[1]	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
42
48

Recommended Applications

CAST IRON	Aluminum
VESUVIUS	Aluminum
SILICON CARBIDE (Silicate Bonded)	Aluminum (see comments above for Series 18 Tube), molten ferrous and non-ferrous metals, glass processing, kilns, incinerators, and other high temperature processes
CERITE®	Aluminum, Zinc