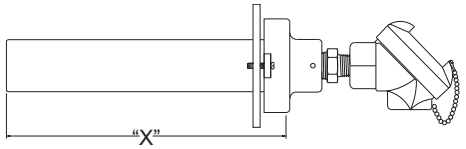
Configuration Code ID14

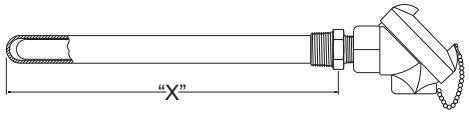
Thermocouple Assemblies with Double Protection Tubes

The straight noble metal thermocouple assemblies illustrated on this catalog page are provided with double protection tubes. Outer protection tube choices of ceramic materials, metal alloys, or composite materials offer thermocouple protection from a variety of high temperature process heating environments. All assemblies are provided with a ceramic inner tube. These assemblies are available with a variety of process mounting fittings and assembly options as listed below. Special construction designs are also available. **Note: Welded bushings will be welded at maximum length possible when X and U dimensions are specified as the same length. Actual U dimension will be 1 to 2 inches shorter than specified depending on bushing size.**

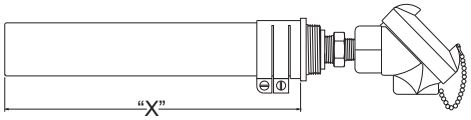
FLANGED ASSEMBLY **FIG. 1**



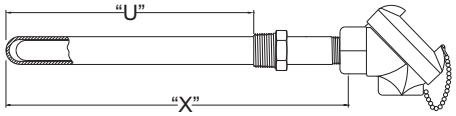
HEX FITTING **FIG. 2**



CLAMP ASSEMBLY **FIG. 3**



WELDED BUSHING **FIG. 4**



ORDER CODES

Example Order Number: **S24R - 16BH-18J - 36 - 31, H**

1 Thermocouple Type + Wire Gauge Size

CODE	
B24R R24R S24R	R26R S26R
For duplex T/C's, use element type twice. Example: RR24R	

2 Protection Tubes (Inner and Outer)

CODE	MATERIAL TYPE		SIZE	PROCESS MOUNTING FITTING	
	INNER	OUTER	O.D. (inches)	NPT. THREAD (inches)	FITTING TYPE
17A-17BH	Alumina	Alumina	11/16	3/4	Figure 2
17A-17B1	Alumina	Alumina	11/16	3/4	1" steel nipple
17A-17B(E)	Alumina	Alumina	11/16	3/4	Nipple (specify length)
17A-12-75	Alumina	LT-1	7/8	1	Figure 2
17BH-18J	Alumina	Silicon Carbide	1(3/4)	None	Figure 3
17BH-18JC	Alumina	Silicon Carbide	1(3/4)	None	Figure 1
16A-16BH	Mullite	Mullite	11/16	3/4	Figure 2
16A-16B1	Mullite	Mullite	11/16	3/4	1" steel nipple
16A-16B(E)	Mullite	Mullite	11/16	3/4	Nipple (specify length)
16A-12-75	Mullite	LT-1	7/8	1	Figure 2
16BH-18J	Mullite	Silicon Carbide	1(3/4)	None	Figure 3
16BH-18JC	Mullite	Silicon Carbide	1(3/4)	None	Figure 1
16B-41-75	Mullite	HR-160	1.050	None	Figure 4
16B-7-75	Mullite	Inc.601	1.050	None	Figure 4
The inner protection tubes are cemented to the outer tube and are not replaceable as separate items, except for Silicon Carbide assemblies.					

Optional Welded Bushings

(only on HR-160 and Inconel Tubes)

CODE		DESCRIPTION
STEEL	*316 SS*	BUSHING SIZE (inches)
6E(U)	8E(U)	1 NPT Bushing
6F(U)	8F(U)	1 (1/4) NPT Bushing
6G(U)	8G(U)	1 (1/2) NPT Bushing
Substitute insertion length, in inches, measured from hot tip to bottom of bushing for (U) above. Insert NW in place of insertion length (U) for bushing supplied loose on tube.		

5 Head Terminations

CODE	DESCRIPTION
31	Aluminum screw cover head
34	Cast iron screw cover head
49	Flip top aluminum head
91	316L SS head

5-1 Assembly Options

CODE	DESCRIPTION
GS	Ground screw
NT	No mounting threads on pipe nipple
HT	Threaded flange on nipple
I	Stainless tag
8	316SS nipple or hex tube fitting
H	Adjustable steel mtg. flange

3 Tube "X" Length

LENGTH (inches)	LENGTH (inches)
12	30
18	36
24	
Specify other lengths in 1 inch increments.	

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