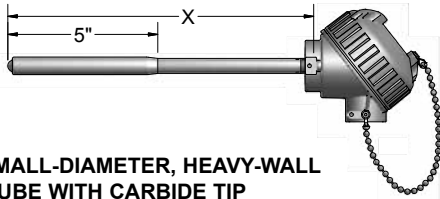


The hardened tip aggregate temperature sensor assemblies illustrated in Figures 1, 2, and 3 below are typically used to measure the temperature of severely abrasive materials found in asphalt aggregate mixers and other granular material mixing and drying processes. Three styles of hardened tip constructions are offered to resist destructive abrasion and wear. Figure 4 illustrates an open-end tube style thermocouple assembly used to measure the temperature of hot sand and other similar free flowing materials on conveyors, or at drop chutes, where abrasion is not as severe, but where product temperature response time is important.

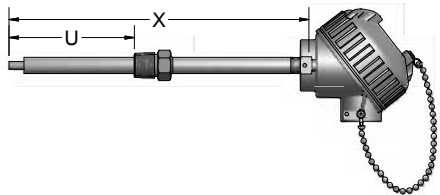
**FIG. 1 FLAME-SPRAYED, TUNGSTEN CARBIDE TIP**



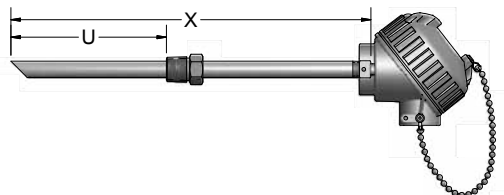
**FIG. 2 RUGGEDIZED BULLET-NOSED, HARDENED-TOOL STEEL WITH CARBIDE TIP**



**FIG. 3 SMALL-DIAMETER, HEAVY-WALL TUBE WITH CARBIDE TIP**



**FIG. 4 BEVELED OPEN END TIP**



### ORDER CODES

**Example Order Number:**

**J29GA1** - **18** - **6D12** - **31, H**

#### 1 Thermocouple Styles

CODE	T/C TYPE	NOM. PIPE DIA. (inches)	MEASURING TIP CONSTRUCTION	FIG. NO.
J29GA1	J	0.540	Flame-sprayed tungsten carbide	1
J29GA2	J	0.840	Tool steel with carbide tip	2
J29GA3	J	0.540	Carbide tip	3
J14CS	J	0.540	Open end tube	4

For ungrounded junctions, change 'G' in above order code to 'U'. Consult factory for availability of other thermocouple types and duplex elements.

#### 2 Length 'X'

CODE	LENGTH (inches)	CODE	LENGTH (inches)
12	12	20	20
14	14	24	24
18	18	Specify other lengths	

#### 4 Head Terminations

CODE	DESCRIPTION
22 <sup>[1]</sup>	3" individual leads with terminal pins
31	Aluminum screw-cover head
34	Cast iron screw-cover head
49	Flip-top aluminum head
91	316L stainless steel screw-cover head

[1] Not available with J14CS Series

#### Options

H	Adjustable steel mounting flange
SB	1/2" NPT conduit reducer bushing

#### 3 Welded Bushings

CODE	DESCRIPTION
6C(U)	1/2" NPT steel bushing (for use with figures 1, 3, and 4 only)
6D(U)	3/4" NPT welded steel bushing
6E(U)	1" NPT welded steel bushing

Substitute length in inches from hot tip to bottom of bushing for 'U' above