

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

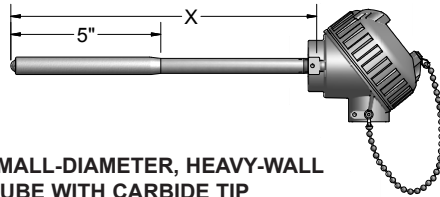


FIG. 2 RUGGEDIZED BULLET-NOSED, HARDENED-TOOL STEEL WITH CARBIDE TIP



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

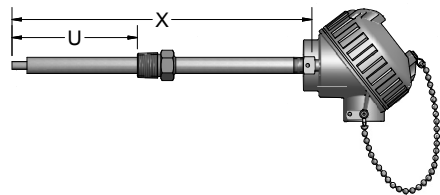
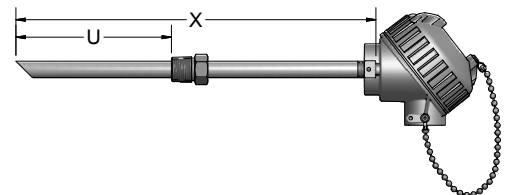


FIG. 4 BEVELED OPEN END TIP



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 ^[1] | 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