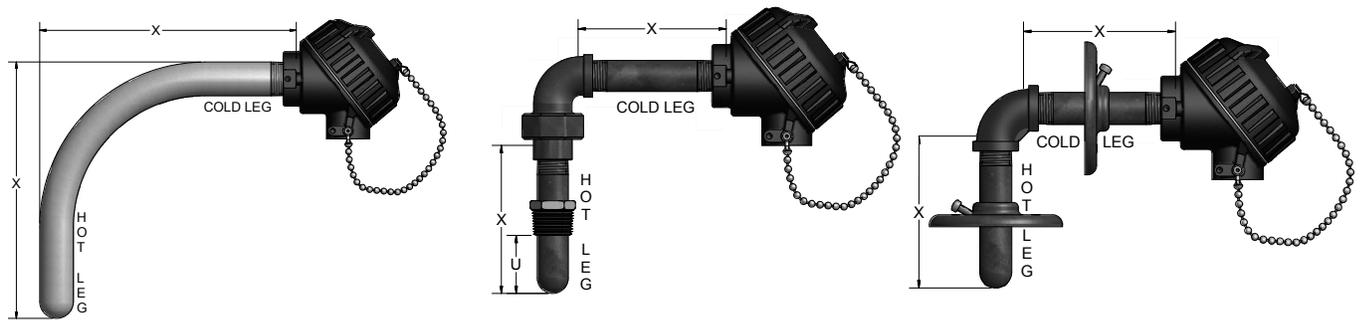


Angle Thermocouples with Metal-Alloy Protection Tubes

Angle thermocouple assemblies are most commonly used in general process applications requiring the use of "over-the-side" temperature sensors with metal-alloy protection tubes. Special construction designs are available. Assemblies may be shipped with the hot leg unattached for assembly at time of installation due to size limitations. Cold leg as standard is supplied as carbon steel.



ORDER CODES

Example Order Number:

K8A - **8** - **75** - **18** - **18** - **8E16** - **34**, **GS**

1 Thermocouple Type and Wire Gauge Size

| CODE | | |
|------|------|------|
| J8A | K8A | N8A |
| | K11A | |
| J14A | K14A | N14A |

For duplex assemblies use the T/C type code letter twice. Example: J8A - 7 - 75 becomes JJ8A - 7 - 75

2 Hot Leg Protection Tube Material

| CODE | MATERIAL | CODE (inches) | | |
|------|--------------|---------------|-----|-----|
| | | 1/2 | 3/4 | 1 |
| 6 | CARBON STEEL | 50 | 75 | 100 |
| 8 | 316 SS | 50 | 75 | 100 |
| 5 | 446 SS | 50 | 75 | 100 |
| 3 | ALLOY 600 | 50 | 75 | N/A |
| 7 | ALLOY 601 | 50 | 75 | 100 |

3 Hot Leg NPT Thread Pipe Size

4 Hot Leg "X" Length

| LENGTH (inches) | LENGTH (inches) |
|-----------------|-----------------|
| 12 | 30 |
| 18 | 36 |
| 24 | |

Specify other lengths in 1" increments.

5 Cold Leg "X" Length

| LENGTH (inches) | LENGTH (inches) |
|-----------------|-----------------|
| 12 | 30 |
| 18 | 36 |
| 24 | |

Specify other lengths in 1" increments.

Continuous Bend Radius

| |
|--------------------|
| 1/2" NPT = 4(5/8)" |
| 3/4" NPT = 4(5/8)" |
| 1" NPT = 5(7/8)" |

6 Optional Welded Bushings

| CODE | | DESCRIPTION |
|-------|-------|--------------------------------------|
| STEEL | 316SS | BUSHING SIZE (inches) |
| 6D(U) | 8D(U) | 3/4 NPT Bushing (50 tubes only) |
| 6E(U) | 8E(U) | 1 NPT Bushing (50 and 75 tubes only) |
| 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.

7 Head Terminations

| CODE | DESCRIPTION |
|------|----------------------------|
| 31 | Aluminum screw-cover head |
| 34 | Cast-Iron screw-cover head |
| 49 | Flip-top aluminum head |

7-1 Assembly Options

| CODE | DESCRIPTION |
|-------------------|------------------------------------|
| SB | 1/2" NPT conduit reducer bushing |
| GS | Ground screw |
| H | Adjustable steel mounting flange |
| HC | Adjustable steel flange (cold leg) |
| L | Insulated hot junction |
| I | Stainless tag |
| UL | Steel union elbow |
| CB ^[1] | Continuous bend-angle assembly |

^[1] Requires 12" minimum on Hot Leg and Cold Leg

Standard Assembly Specifications

| ELEMENT | HOT LEG TUBE CODE AVAIL. | COLD LEG SUPPLIED |
|---------------|--------------------------|--|
| SINGLE | | |
| 8, 11, 14 GA. | 50, 75, 100 | 3/4" NPT on HL tube codes 50, 75. 1" NPT on HL tube codes 100. |
| DUPLEX | | |
| 8, 11 GA. | 75, 100 | 1" NPT on duplex 8 and 11 gauge assemblies. |
| 14 GA. | 50, 75, 100 | |