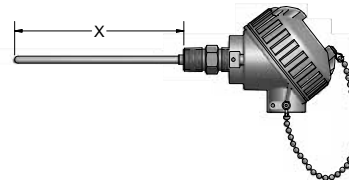
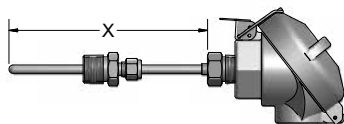


SENSORS WITH CONNECTION HEADS

Configuration Code GP02 Fixed-Sheath Thermocouple Assemblies with General-Purpose Connection Heads

Fixed-Sheath Thermocouple Assemblies with General-Purpose Connection Heads have head mounting fittings that are welded or brazed to the sheath for direct immersion into a process. To order an assembly with an optional 4 to 20 mA transmitter, select the assembly below and the transmitter from the back of this section. The MgO-insulated thermocouple assemblies are offered in a variety of calibrations, sheath diameters, and sheath materials.



ORDER CODES

Example Order Number:

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 1-0 | 1-1 | 1-2 | 1-3 | 2-0 | 3 | 4-0 | 4-1 | 4-2 | |
| J | 3 | 8 | U | - | 012 | - | 05A | - | 9HP 49, T |
| | | | | | | | | | Select Type and Range from back of section |

1-0 Thermocouple Types

| CODE | SINGLE | DUPLEX | TRIPLEX |
|------|--------|--------|---------|
| E | EE | - | - |
| J | JJ | JJJ | - |
| K | KK | KKK | - |
| T | TT | - | - |

1-1 Sheath Diameters

| CODE | DIAMETER (inches) |
|------|-------------------|
| 2 | 1/8 |
| 3 | 3/16 |
| 4 | 1/4 |
| 6 | 3/8 |

1-2 Sheath Materials

| CODE | MATERIAL | STANDARD AVAILABLE TYPES |
|------|-----------|--------------------------|
| 3 | Alloy 600 | K |
| 4 | 310 SS | K |
| 5 | 446 SS | K ^[1] |
| 8 | 316 SS | E, J, K, T |

[1] All sensors with 446SS sheaths must have an ungrounded measuring junction.

1-3 Measuring Junctions

| CODE | DESCRIPTION |
|------|---------------------|
| G | Grounded junction |
| U | Ungrounded junction |
| E | Exposed junction |

2-0 'X' Dimension

Insert three digit "X" length in inches

Sheath lengths over 72" will be shipped in a coiled configuration unless otherwise specified.

3-0 No Fitting

| CODE | 00 |
|------|----|
|------|----|

3-1 One-Time Adjustable Fittings

| CODE | TYPE | NPT SIZE (inches) | PRESSURE-RATED | AVAILABLE SHEATH DIAMETERS (inches) |
|------|-------------|-------------------|----------------|-------------------------------------|
| 05A | 316 SS | 1/8 | YES | 1/8, 3/16, 1/4 |
| 05B | 316 SS | 1/4 | YES | 1/8, 3/16, 1/4, 3/8 |
| 05C | 316 SS | 1/2 | YES | 1/8, 3/16, 1/4, 3/8 |
| 15A | Brass | 1/8 | NO | 1/8, 3/16, 1/4 |
| 15B | Brass | 1/4 | NO | 3/16, 1/4, 3/8 |
| 15C | Brass | 1/2 | NO | 1/4, 3/8 |
| 14 | Brass/Steel | Flange | NO | 1/8, 3/16, 1/4, 3/8 |

3-2 Re-Adjustable Compression Fittings

| CODE | TYPE | NPT SIZE (inches) | AVAILABLE SHEATH DIAMETERS (inches) |
|------|-------------------------------|-------------------|-------------------------------------|
| 12A | 316 SS | 1/8 | 1/8, 3/16, 1/4 |
| 12B | 316 SS | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 12C | 316 SS | 1/2 | 1/8, 3/16, 1/4, 3/8 |
| 11A | Brass | 1/8 | 1/8, 3/16, 1/4 |
| 11B | Brass | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 11C | Brass | 1/2 | 1/4, 3/8 |
| 19C | Spring-loaded SS well fitting | 1/2 | 3/16, 1/4 |

FEP gland standard 204 °C [400 °F] max.

3-3 Fixed Bushings^[1]

| CODE | MOUNTING THREAD NPT (inches) | AVAILABLE SHEATH DIAMETERS (inches) |
|---------------------|------------------------------|-------------------------------------|
| 316 SS | | |
| 8A _ ^[2] | 1/8 | 1/8, 3/16, 1/4 |
| 8B _ ^[2] | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 8C _ ^[2] | 1/2 | 1/8, 3/16, 1/4, 3/8 |
| 8D _ ^[2] | 3/4 | 1/8, 3/16, 1/4, 3/8 |

[1] Requires Table 4, Option 9HP Selection

[2] When ordering fixed bushings, specify order code above plus insert length "U", as measured from hot tip to bottom of threaded bushing. EXAMPLE: order code 8A06 is 1/8" NPT, 316 SS bushing located 6" from hot tip.

4-0 Head Mounting Fittings

| CODE | DESCRIPTION |
|------|--|
| 6HN | 1/2" x 1/2" NPT steel hex nipple 1" "E" length |
| 8HN | 1/2" x 1/2" NPT stainless steel hex nipple 1" "E" length |
| 9HP | 1/2" NPT stainless steel bushing (no process threads) |
| 8RND | 3/4" x 1/2" NPT stainless steel hex nipple |

4-1 Head and Sheath Terminations

| CODE | DESCRIPTION |
|-----------|---|
| 22 | 3" Individual fluoropolymer leads with terminal pins |
| 31 | Aluminum screw-cover head |
| 34 | Cast iron screw-cover head |
| 35T142A | (4 to 20) mA HART® Field Transmitter with aluminum general-purpose housing |
| 36T71-D10 | (4 to 20) mA isolated programmable transmitter with digital display and general purpose aluminum housing with glass lid |
| 36T72-D10 | (4 to 20) mA isolated programmable HART® transmitter with digital display and general purpose aluminum housing with glass lid |
| 36T82-D10 | (4 to 20) mA dual input HART® transmitter with digital display and general-purpose aluminum housing with glass lid |
| 49 | Flip-top aluminum head |
| 63 | White polypropylene screw-cover head |
| 91 | 316 L stainless steel screw-cover head |

4-2 Options

| | |
|------------------|--|
| W ^[1] | Epoxy Coating |
| GS | Ground screw |
| I | Stainless tag |
| NB | 1/2" NPT nylon conduit reducer bushing |
| SB | 1/2" NPT conduit reducer bushing |
| T71-00 | (4 to 20) mA isolated programmable transmitter |
| T72-00 | (4 to 20) mA isolated programmable HART® transmitter |
| T82-00 | (4 to 20) mA dual input HART® head-mounted transmitter |

See transmitter ordering information in back of section.

[1] Available with option 31 only.

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