

Fixed-Sheath Thermocouple Assemblies with miniature connection heads are offered with mounting fittings that are welded or brazed to the sheath for direct immersion into a process. The miniature heads offer a compact design and are ideal for laboratory applications or applications where space is limited. The MgO-insulated thermocouple assemblies are offered in a variety of calibrations, sheath diameters, and sheath materials.



### ORDER CODES

**Example Order Number:** **J** **3** **8** **U** - **012** - **05A** - **8HPB** **25**

#### 1-0 Thermocouple Types

CODE	
SINGLE	DUPLEX
E	EE
J	JJ
K	KK
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 <sup>[1]</sup>
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

#### 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

CODE	MOUNTING THREAD NPT (inches)	AVAILABLE SHEATH DIAMETERS (inches)
316 SS		
8A __ <sup>[1]</sup>	1/8	1/8, 3/16, 1/4
8B __ <sup>[1]</sup>	1/4	1/8, 3/16, 1/4, 3/8
8C __ <sup>[1]</sup>	1/2	1/8, 3/16, 1/4, 3/8
8D __ <sup>[1]</sup>	3/4	1/8, 3/16, 1/4, 3/8

[1] 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
9HNB	1/4" x 1/4" stainless steel hex nipple
8HPB	1/4" stainless steel hex bushing (no process threads)
8CFB	1/4" NPT 316 stainless steel compression fitting (no process threads)
22CFB	1/4" NPT brass compression fitting (no process threads)

#### 4-1 Miniature Head Terminations

CODE	DESCRIPTION
17	Miniature plastic head (3/8" NPT conduit opening)
25	Miniature nickel-plated head