

## **SHEATH WITH LEADWIRE**

### **How to build a part number:**

To order an Applied Sensor Technologies temperature sensor, select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Don't see exactly what you need? Give us a call!

SENSOR TYPE	ASSEMBLY STYLE	SHEATH DIAMETER	SHEATH MATERIAL	CALIBRATION	HOT JUNCTION	SHEATH LENGTH	LEADWIRE LENGTH	OPTIONS

#### **SENSOR TYPE\***

**GP** – General purpose thermocouple  
**MI** – Mineral insulated thermocouple

#### **ASSEMBLY STYLE**

**02** – Sheath with leadwire; fiberglass insulated conductors; fiberglass jacket  
**04** – Sheath with leadwire; fiberglass insulated conductors; fiberglass jacket; stainless steel overbraid overall  
**28** – Sheath with Teflon® insulated conductors; Teflon® jacketed cable

#### **SHEATH DIAMETER** (in inches)

**4** – 1/8 (0.125)  
**6** – 3/16 (0.188)  
**7** – 1/4 (0.250)  
**9** – 3/8 (0.375)

#### **SHEATH MATERIAL**

**3** – 316 stainless steel  
**5** – Inconel® 600 (MI only)

#### **CALIBRATION** - Standard limits

**J** – Single J      **JJ** – Dual J  
**K** – Single K      **KK** – Dual K  
**T** – Single T      **TT** – Dual T  
**E** – Single E      **EE** – Dual E

*Special limits are available – consult AST*

*Dual junction not available with all GP Thermocouples in sheath diameter 4 and GPO4 diameter 6*

#### **HOT JUNCTION**

**G** – Grounded junction  
**U** – Ungrounded junction  
**E** – Exposed junction

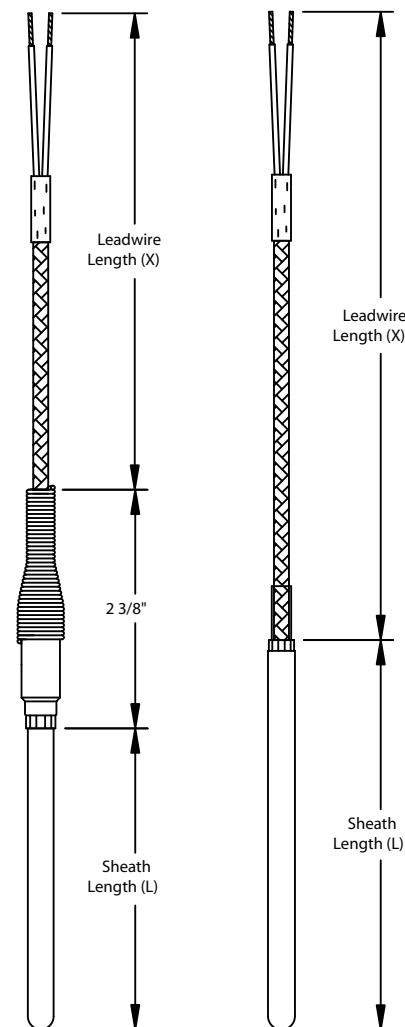
**SHEATH LENGTH** (Note: maximum L=96" for GP; for MI, lengths over L84 will be shipped coiled unless otherwise specified)

**L#** – (e.g., L6 = 6 inch sheath, L12.5 = 12.5 inch length)

#### **LEADWIRE LENGTH**

**X#** – (e.g., X72 = 72 inch length)

#### **OPTIONS** – see page 1-11b



\*Note: GP thermocouples, manufactured using hollow tubing and wire, tend to be lower cost than MI, but cannot be bent in the field and are standardly designed for sensing temperatures below 500°F. MI thermocouples are more rugged than GP due to compacted magnesium-oxide powder insulation, can be bent in the field, and are appropriate for the temperature range of the sensor and sheath.

**AVAILABLE OPTIONS and MODIFICATIONS**

<b>ASSEMBLY OPTIONS</b>	
Option Code	Description
TAG1	Stainless steel tag and wire
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6)
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6)
CAL1	NIST traceable calibration [specify point(s)]
CRT1	Certificate of conformance
HT10	High temperature (900°F) transition. (Standard transition on Styles 02 and 04 is 500°F/260°C)

<b>WIRING CONNECTION OPTIONS</b>			
WC76	#6 spade terminals, plated copper		
WC70	#10 spade terminals, plated copper		
WC84	1/4" push-on insulated terminals, plated copper		
WC90	#10 ring terminals		
WC98	#8 ring terminals		
For plugs and jacks, see Styles 05, 07, 69.			
<b>COMPRESSION FITTINGS</b> (for diameters 4, 6, 7)			
Option Code	NPT	Material	Ferrule
CF10	1/8"	Stainless steel	Stainless steel
CF11	1/8"	Stainless steel	Teflon®
CF12	1/8"	Brass	Brass
CF20	1/4"	Stainless steel	Stainless steel
CF21	1/4"	Stainless steel	Teflon®
CF22	1/4"	Brass	Brass
CF30	1/2"	Stainless steel	Stainless steel
CF31	1/2"	Stainless steel	Teflon®
CF32	1/2"	Brass	Brass
<b>WELD PADS</b>			
WP00	Horizontal pad/flat		
WP10	1" nominal pipe size		
WP15	1.5" nominal pipe size		
WP20	2" nominal pipe size		
WP25	2.5" nominal pipe size		
WP30	3" nominal pipe size		
WP35	3.5" nominal pipe size		
WP40	4" nominal pipe size		

**EXTENSION WIRE**

A selection of extension-grade thermocouple wire is available to connect the sensor to its input device. Consult Accessories section.