

SHEATH WITH LEADWIRE AND PLUG

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

05 – Sheath with leadwire; standard male plug; fiberglass insulated conductors; fiberglass jacket

07 – Sheath with leadwire; stainless steel overbraid; standard male plug; fiberglass insulated conductors; fiberglass jacket

69 – Sheath with leadwire; miniature plug; fiberglass insulated conductors; fiberglass jacket

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 junctions not available with all GP Thermocouples in sheath diameter 4 and GP07 diameter 6

HOT JUNCTION

G – Grounded junction

U – Ungrounded junction

E – Exposed junction

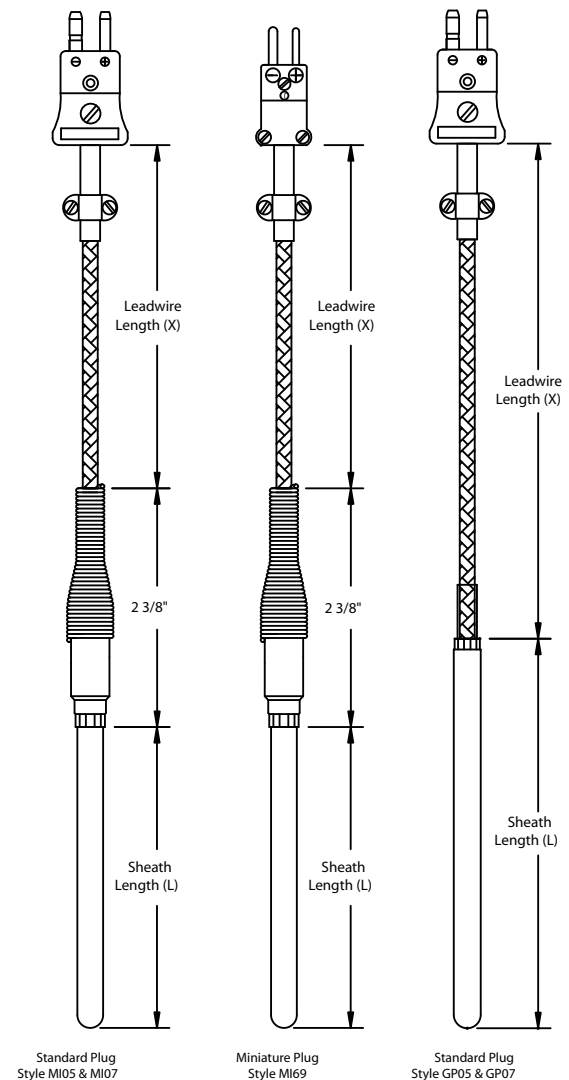
SHEATH LENGTH (Note: maximum L=96" for GP; for MI, lengths over L84 will be shipped coiled unless otherwise specified)

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 1-13b



*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

ASSEMBLY OPTIONS	
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 rated 500°F/260°C)
PLUG AND JACK OPTIONS (Note: plug is designed to be attached to sensor assemblies. Jack options – for customer wiring – should only be specified if plug option is also included. Cable clamp is included for both plug and jack options.)	
PJ20	Standard jack, rated to 177°C (350°F)
PJ40	Miniature jack, rated to 177°C (350°F)
PJ50	High temp. standard plug, rated to 260°C (500°F)
PJ60	High temp. standard jack, rated to 260°C (500°F)

EXTENSION WIRE

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

COMPRESSION FITTINGS (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
WELD PADS			
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		