

## **SHEATH WITH WELDED PROCESS CONNECTION AND EXPLOSION-PROOF TERMINAL HEAD**

### **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	OPTIONS

#### **SENSOR TYPE**

**MI** – Mineral insulated thermocouple

#### **ASSEMBLY STYLE**

**78** – Sheath with cast aluminum head and 1/2" NPT welded stainless steel process connection; head CSA/FM approved for Class I, Division 1, Groups B, C, D; Class II, Groups E, F, G; screw cover with chain and gasketed o-ring, meets NEMA 4; ceramic terminal block; 1/2" NPT conduit connection (Note: for spring-loaded fitting, see Style 75 and add optional head). Note: Approval applies to terminal head only.

#### **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**

- 2** - 310 stainless steel (available on diameters 6 & 7, with K or KK calibration)  
**3** - 316 stainless steel  
**5** - Inconel® 600

#### **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*

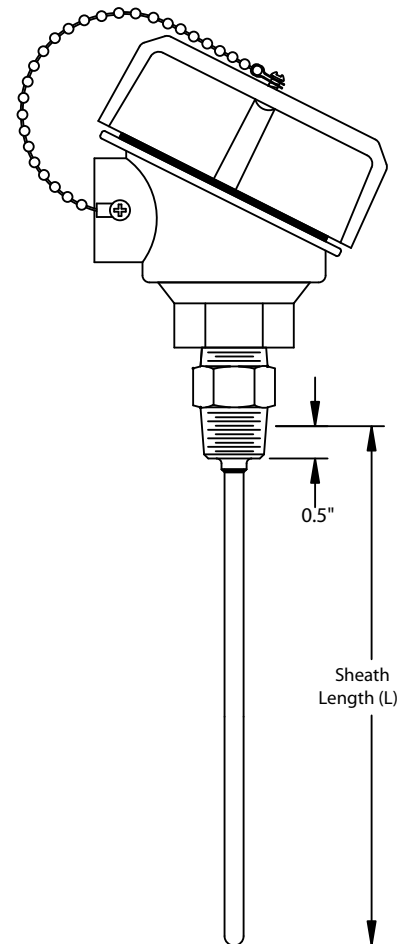
#### **HOT JUNCTION**

- G** – Grounded junction  
**U** – Ungrounded junction  
**E** – Exposed junction  
 (Note: lengths over L84 will be shipped coiled unless otherwise specified at time of order)

#### **SHEATH LENGTH**

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

**OPTIONS** – see back page



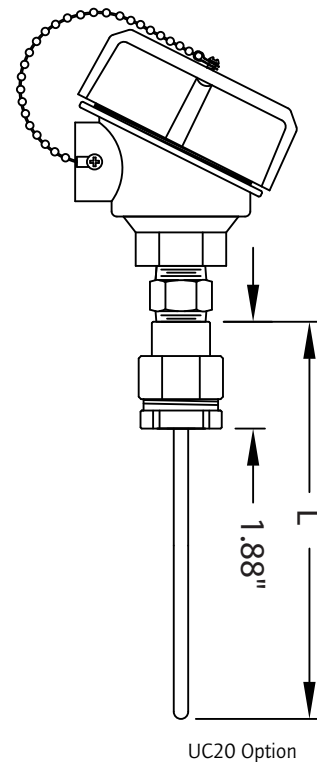
## STYLE 78

### AVAILABLE OPTIONS and MODIFICATIONS

ASSEMBLY OPTIONS	
Option Code	Description
TAG1	Stainless steel tag and wire
PC25	1/4" NPT process connection
PC75	3/4" NPT process connection
RB10	Replace terminal block with customer supplied part
RB11	Supply assembly with no terminal block inside head
CAL1	Calibration, NIST traceable calibration [specify point(s)]
CRT1	Certificate of conformance
<b>TRANSMITTERS</b> – For complete specs, see Transmitters section	
TR11	4-20 mA, 2-wire transmitter, single input, isolated output; specify range and units of measure (e.g., 0-200°C)
TR12	4-20 mA, 2-wire transmitter, single input, non-isolated output; specify range and units of measure (e.g., 0-200°C) and terminal head with *.
TR13	HART®/ 4-20 mA, 2-wire transmitter, single input, isolated output; specify range and units of measure (e.g., 0-200°C) and terminal head with *.
<b>UNION CONNECTOR</b> (converts male connection to female)	
Option Code	Description
UC20	Plated steel, 1/2" x 1/2" NPT, explosion-proof rating
Note: adding the union connector reduces the sensor's L length by 1.88" (see view). Adjust L dimension accordingly.	

EXPLOSION-PROOF TERMINAL HEAD OPTIONS		
Option Code	Process Connection	Conduit Connection
Cast aluminum; screw cover with chain; o-ring gasket (Gasket rated to 100°C exposure); ceramic terminal block; FM/CSA approved for Class I Div. 1, Groups B, C and D; Class II Groups E, F and G; internal ground screw.		
HD71	1/2"	3/4"
Stainless steel (same specs as HD71)		
HD74	1/2"	1/2"
HD75	1/2"	3/4"
Epoxy-coated (same specs as HD71)		
HD80	1/2"	1/2"
HD81	1/2"	3/4"

Note: See Accessories section for additional specs.



UC20 Option