

**CONNECTION HEAD WITH WELDED HEX FITTING**

**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**

**21** – Sheath with cast aluminum head and welded stainless steel connection; for use as ambient sensor or with compression fitting for process mounting; head conforms to NEMA 4 requirements; 3/4" conduit connection; ceramic terminal block; gasketed screw cover with stainless steel chain. See page 1-7b for other head options.

**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

**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*

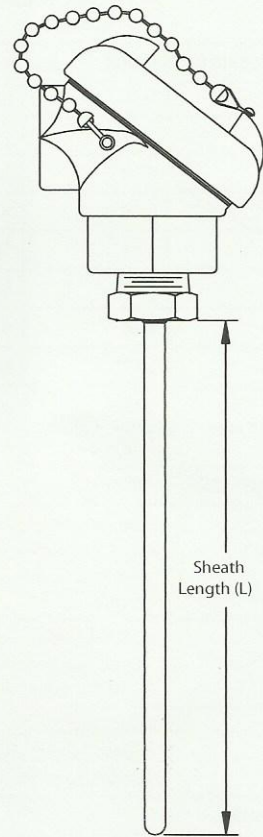
**HOT JUNCTION**

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

**SHEATH LENGTH** (Note: lengths over L84 will be shipped coiled unless otherwise specified at time of order)

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

**OPTIONS** – see page 1-7b



Style 21

# STYLE 21

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		
WC20	Wiring cable gland for 0.187 - 0.312 diameter cables, for terminal heads with 1/2" NPT conduit connections		
WC21	Wiring cable gland for 0.125 - 0.187 diameter cables, for terminal heads with 1/2" NPT conduit connections		
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
TRANSMITTERS - for complete specs, see Transmitters section			
TR11	4-20 mA, 2-wire, single input, isolated output; specify range, units of measure (e.g., 0-200°C) and optional head with *. See Accessories section for additional information.		
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 *.		
WELD PADS			
Option Code	Radius To Fit Pipe		
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		

## AVAILABLE OPTIONS and MODIFICATIONS

NEMA 4 OR 4X TERMINAL HEAD OPTIONS			
Head without ground screw	Head with internal ground screw	Process Connection	Conduit Connection
Cast aluminum, screw cover with chain			
HD10*	HD11*	1/2"	1/2"
Std.*	HD13*	1/2"	3/4"
Epoxy-coated, cast aluminum, NEMA 4X			
HD50*	HD51*	1/2"	1/2"
HD52*	HD53*	1/2"	3/4"
Cast iron, screw cover with chain			
HD20*	HD21*	1/2"	1/2"
HD22*	HD23*	1/2"	3/4"
316 stainless steel, screw cover; NEMA 4X			
HD40*	HD41*	1/2"	3/4"
Polypropylene, white, screw cover			
HD30	N/A	1/2"	3/4"
Polypropylene, black screw cover			
HD31	N/A	1/2"	3/4"
Nylon, screw cover			
HD32	N/A	1/2"	1/2"
EXPLOSION-PROOF TERMINAL HEAD OPTIONS			
Option Code	Process Connection	Conduit Connection	
Cast aluminum, screw cover with chain; o-ring gasket rated to 100°C; ceramic terminal block; FM/CSA approved for Class I Div. 1, Groups B, C, D; Class II, Groups E, F, G; internal ground screw			
HD70*	1/2"	1/2"	
HD71*	1/2"	3/4"	
Epoxy-coated			
HD80*	1/2"	1/2"	
HD81*	1/2"	3/4"	
Cast aluminum; ATEX approved for EEx d IIC; screw cover with chain; silicone rubber o-ring gasket; ceramic terminal block; rated for NEMA 4X, IP66 to IP68; internal and external ground screws			
HD72*	1/2"	1/2"	
HD73*	1/2"	3/4"	
Cast aluminum (Formerly Style 60); screw cover; plastic terminal block; UL/CSA approved for Class I Div. 1, Groups C and D; Class II Groups E, F and G.			
HD60	1/2"	1/2"	
HD61	1/2"	3/4"	
*can be used with transmitters			

Note: See Accessories section for outline drawings and additional specs.