

# **SHEATH WITH LEADWIRE AND ARMOR CABLE**

# 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	ASSEMBLY	SHEATH	SHEATH	TEMPERATURE	SHEATH	LEADWIRE	OPTIONS
TYPE	STYLE	DIAMETER	MATERIAL	RANGE	LENGTH	LENGTH	

**SENSOR TYPE** (See page 2-11b for optional elements)

RTP1 - Platinum; DIN 0.00385; 100 ohm +/- 0.12% @ 0°C; 3-wire construction

(For dual element, add prefix "D"- e.g., DRTP1)

### **ASSEMBLY STYLE**

03 - Sheath with leadwire and flexible stainless steel armor cable; Teflon® insulated conductors

03P - PVC coated armor

**O3T** - Teflon® coated armor

#### **SHEATH DIAMETER** (in inches) (see below for restrictions)

- 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

## **TEMPERATURE RANGE** - Minimum and maximum operating temperatures

- **1** -45 to 260°C (-50 to 500°F)
- 2 -45 to 482°C (-50 to 900°F)
- **3** -45 to 788°C (-50 to 1450°F)
- **4** -200 to 260°C (-328 to 500°F)

# **SHEATH LENGTH** (for lengths greater than L=36", consult AST)

L# – (e.g., L6 = 6 inch sheath)

# ARMOR CABLE LENGTH

**X#** - (e.g., X72 = 72 inch length)

**OPTIONS** – see back page

COATED ARMOR Armor Cable Length (X) 0 MOISTURE SEAL (100°C MAX.) Sheath Length (L) Sheath Length (L) Length (L) Style RT03 Style RT03 Style RT03P & RT03T Temperature Range: 2,3,4 Range: 1

Smallest	Diamete	r Sheath A	vailable B	y Sensor T	ype and T	emperatu	re Range
			SIN	GLE			
Temp Range	RTP 1	RTP 1A	RTP 1AA	RTP 6	RTP 7	RTP 7A	RTP 7AA
1	1/8	1/8	1/8	1/8	3/16	3/16	3/16
2	3/16	3/16	3/16	3/16	3/16	3/16	3/16
3	3/16			3/16	3/16		
4	1/8			1/8	3/16		
			DL	JAL			
Temp Range	DRTP 1	DRTP 1A	DRTP 1AA	DRTP 6	DRTP 7	DRTP 7A	DRTP 7AA
1	3/16	3/16	3/16	3/16	1/4	1/4	1/4
2	1/4	1/4	1/4	3/16	3/8	3/8	3/8
3	1/4			1/4	1/4		
4	3/16			3/16	1/4		

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#### **AVAILABLE OPTIONS AND MODIFICATIONS**

OPTIONAL ELEMENTS			COMPRESSION	PRESSION FITTINGS			
	ly platinum, 100-ohm, DIN-cur	ve elements with a 0.00385	Option Code	NPT	Material	Ferrule	
alpha.			CF10	1/8"	Stainless steel	Stainless steel	
Option Code	Accuracy (at 0°C)	Construction	CE11	1 (0)	C. I. I. I.	T. (1 . (2)	
RTP1 (std.)	±0.12%	3-wire	CF11	1/8"	Stainless steel	Teflon®	
RTP1A	±0.06%	3-wire	CF12	1/8"	Brass	Brass	
			CF20	1/4"	Stainless steel	Stainless steel	
RTP1AA	±0.01%	3-wire		+			
RTP6	±0.12%	2-wire	CF21	1/4"	Stainless steel	Teflon®	
RTP7	±0.12%	4-wire	CF22	1/4"	Brass	Brass	
RTP7A	±0.06%	4-wire	CF30	1/2"	Stainless steel	Stainless steel	
RTP7AA	±0.01%	4-wire	CF31	1/2"	Stainless steel	Teflon®	
Notes:	1		CF32	1/2"	Brass	Brass	
1. For dual element, add prefix "D" (e.g., DRTP6)			WIDING CONNECTION OPTIONS				

WIRING CONNEC	CTION OPTIONS
Option Code	Description
WC76	#6 spade terminals
WC70	#10 spade terminals, plated copper
WC84	1/4" push-on insulated terminals, plated copper
WC90	#10 ring terminals
WC98	#8 ring terminals
BX CONNECTORS	5
WC40	1/2"
WC50	3/4"

Note: for assembly with sheath, armor and terminal head, see Style 66.

	SPRING-LOADED FITTINGS				
	Stainless steel, non-seal	ed, for sensor diameters 6, 7 & 9			
Option Code		Description			
	HF50	1/2" x 1/2"			
Stainless steel a vine seeled for some diameters C and 7. O vine is Dun					

Stainless steel, o-ring sealed, for sensor diameters 6 and 7. O-ring is Buna N, rated -10 to 200°F (-23 to 93°C). Maximum pressure 15 psi.

HF51   1/3	2" x 1/2"
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#### Notes:

- Fitting reduces effective sensor L length by 2.25" (e.g., to properly spring-load into a 9" well, the sensor should be specified with 11.25" minimum).
- Fitting position is adjustable in the field.

2.25" <b>-</b>
HF50 Option

# 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

Additional materials, curves and resistance values are available - see

Description

point(s)]

Style 25

(350°F)

(350°F)

**PLUGS AND JACKS** (2 and 3-wire construction only. 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

Stainless steel tag and wire

Certificate of conformance

from tip in inches e.g., B90-6)

Bayonet cap on armor (Style 03, temperature range 1 only) – formerly

Standard plug, rated to 177°C

Standard jack, rated to 177°C

Horizontal pad/flat

1" nominal pipe size

1.5" nominal pipe size

NIST traceable calibration [specify

45° bend in sheath (specify length from tip in inches e.g., B45-6) 90° bend in sheath (specify length

Capabilities brochure.

**ASSEMBLY OPTIONS** 

Option Code

TAG1

CAL<sub>1</sub>

CRT1

B45-

B90-

**BA50** 

PJ10

PJ20

WP10

WP15

WELD PADS

**ARMOR OPTIONS** 

included for both plug and jack options.)

APPLIED SENSOR TECHNOLOGIES
A Division of UNITED ELECTRIC CONTROLS

Note: Many non-standard options, including additional sheath diameters and materials, may also be available – consult AST for specific requirements.