



RTD

Sheath with Leadwires or Plug

United Electric Controls is
ISO 9001:2015 certified



AST-SWRTD 01

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SHEATH WITH LEADWIRE AND ARMOR CABLE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

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

SENSOR TYPE (See page 4 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

03T - Teflon® coated armor

*For assembly with sheath, armor and terminal head, see Style 65 in datasheet AST-WPRTD

SHEATH DIAMETER (in inches) (see Table 1 for restrictions)

4 - 0.125

6 - 0.188

7 - 0.250

9 - 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 UE-AST)

L# - (e.g., L6 = 6 inch sheath)

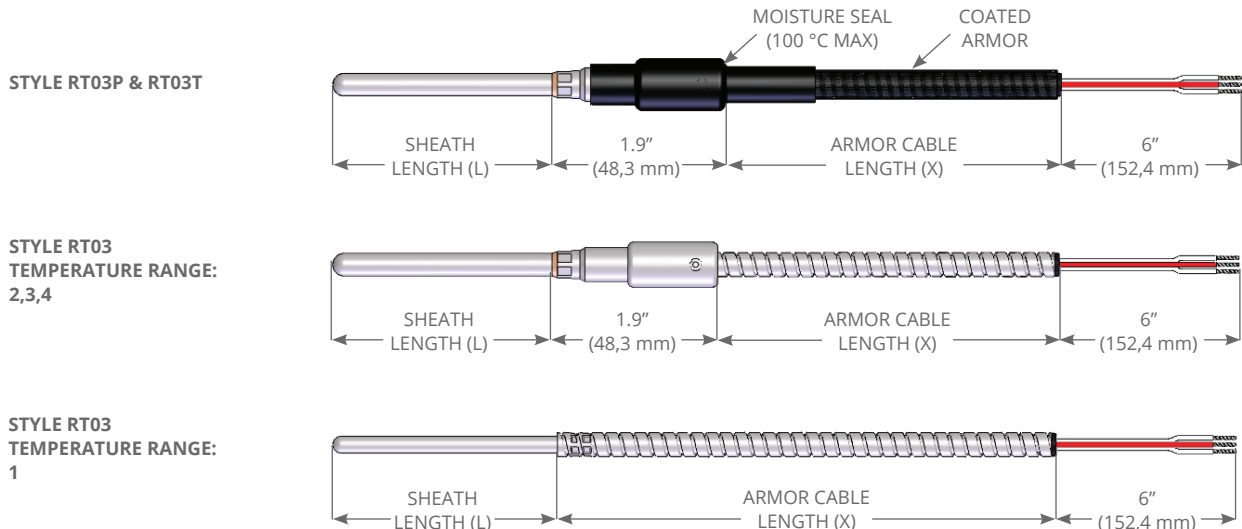
ARMOR CABLE LENGTH

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

OPTIONS - see page 4

SMALLEST DIAMETER SHEATH AVAILABLE BY SENSOR TYPE AND TEMPERATURE RANGE							
TEMP RANGE	SINGLE						
	RTP1	RTP1A	RTP1AA	RTP6	RTP7	RTP7A	RTP7AA
1	0.125	0.125	0.125	0.125	0.188	0.188	0.188
2	0.188	0.188	0.188	0.188	0.188	0.188	0.188
3	0.188			0.188	0.188		
4	0.125			0.125	0.188		
TEMP RANGE	DUAL						
	DRTP1	DRTP1A	DRTP1AA	DRTP6	DRTP7	DRTP7A	DRTP7AA
1	0.188	0.188	0.188	0.188	0.250	0.250	0.250
2	0.250	0.250	0.250	0.188	0.375	0.375	0.375
3	0.250			0.250	0.250		
4	0.188			0.188	0.250		

Table 1



AVAILABLE OPTIONS AND MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE*	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire
RTP7A	±0.06%	4-wire
RTP7AA	±0.01%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6)
Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6 [minimum length = 3"])
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6 [minimum length = 3"])

ARMOR OPTIONS

BA50	Bayonet cap on armor (Style 03, temperature range 1 only)
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PLUG AND JACK OPTIONS

2 and 3-wire construction only. Plug is designed to be attached to sensor assemblies. Jack should only be specified if plug option is also included. Cable clamp is included for both plug and jack options.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

WELD PAD OPTIONS

WP00	Horizontal pad/flat
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FOR MATCHING A PIPE RADIUS

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

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

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

BX CONNECTOR OPTIONS

WC40	1/2"
WC50	3/4"

SPRING-LOADED FITTINGS

STAINLESS STEEL, NON-SEALED, FOR SENSOR DIAMETERS 6, 7 & 9

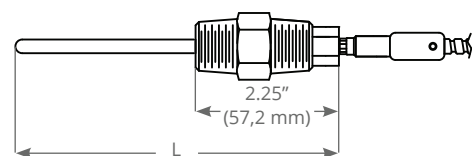
OPTION CODE	DESCRIPTION
HF50	1/2" x 1/2"

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	1/2" 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.



HF50 Option

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

SHEATH WITH MALE PLUG

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	SHEATH DIAMETER	SHEATH MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	OPTIONS

SENSOR TYPE (See page 6 for optional elements)
RTP1 – Platinum; DIN 0.00385; 100 ohm +/- 0.12% @ 0 °C; 3-wire construction

ASSEMBLY STYLE
14 – Sheath with standard male plug; hollow pins; maximum termination temperature 177 °C (350 °F)

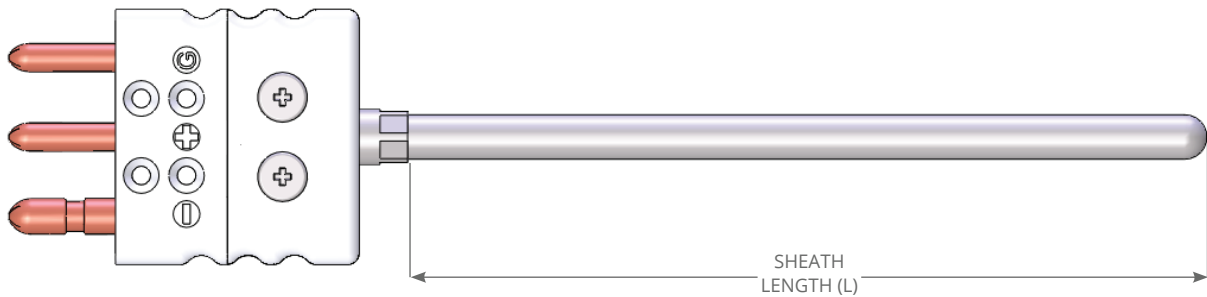
SHEATH DIAMETER (in inches)
6 – 0.188
7 – 0.250

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)

SHEATH LENGTH (for lengths greater than L=36", consult UE-AST)
L# – (e.g., L6 = 6 inch sheath)

OPTIONS – see page 6



AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE*	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire

* Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance

JACK OPTIONS

For 2 and 3 wire constructions only. Plug is designed to be attached to sensor assemblies. Jack 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)
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COMPRESSION FITTINGS

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

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

SHEATH WITH LEADWIRE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	SHEATH DIAMETER	SHEATH MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	LEADWIRE LENGTH	OPTIONS
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SENSOR TYPE (See page 8 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

20 – Sheath with leadwire; Teflon® insulated conductors; no jacket
28 – Sheath with Teflon® jacketed cable; Teflon® insulated conductors
 For flexible stainless steel armor, see style 03 on page 3.

SHEATH DIAMETER (in inches) (see Table 1 for restrictions)

4 – 0.125 **7** – 0.250
6 – 0.188 **9** – 0.375

SHEATH MATERIAL

3 – 316 stainless steel

TEMPERATURE RANGE - Minimum and maximum operating temperatures

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

SHEATH LENGTH (for lengths greater than L=36”, consult UE-AST)

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

LEADWIRE LENGTH

X# – (e.g., X72 = 72 inch length)

OPTIONS – see page 8

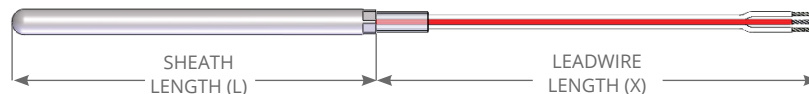
SMALLEST DIAMETER SHEATH AVAILABLE BY SENSOR TYPE AND TEMPERATURE RANGE							
TEMP RANGE	STYLE 20, SINGLE						
	RTP1	RTP1A	RTP1AA	RTP6	RTP7	RTP7A	RTP7AA
1	0.125	0.125	0.125	0.125	0.188	0.188	0.188
2	0.188	0.188	0.188	0.188	0.188	0.188	0.188
3	0.188			0.188	0.188		
4	0.125			0.125	0.188		
TEMP RANGE	STYLE 20, DUAL						
	DRTP1	DRTP1A	DRTP1AA	DRTP6	DRTP7	DRTP7A	DRTP7AA
1	0.188	0.188	0.188	0.188	0.250	0.250	0.250
2	0.250	0.250	0.250	0.188	0.375	0.375	0.375
3	0.250			0.250	0.250		
4	0.188			0.188	0.250		
TEMP RANGE	STYLE 28, SINGLE ONLY						
	DRTP1	DRTP1A	DRTP1AA	DRTP6	DRTP7	DRTP7A	DRTP7AA
1	0.125	0.125	0.125				
2	0.188	0.188	0.188				
3	0.188						
4	0.125						

Table 1

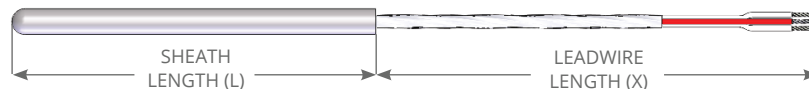
STYLE 20,
RANGE 3



STYLE 20,
RANGES 1,2,4



STYLE 28,
RANGE 1



STYLE 28,
RANGES 2,3,4



AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE*	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire
RTP7A	±0.06%	4-wire
RTP7AA	±0.01%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6).
Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6 [minimum length = 3"])
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6 [minimum length = 3"])

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

PLUG AND JACK OPTIONS

For 2 and 3 wire constructions only. Plug is designed to be attached to sensor assemblies. Jack should only be specified if plug option is also included. Cable clamp is included for both plug and jack options.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

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

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

SHEATH WITH WELDED PROCESS MOUNTING

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	SHEATH DIAMETER	SHEATH MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	LEADWIRE LENGTH	OPTIONS
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SENSOR TYPE (See page 10 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
231 - Sheath with single sided instrument mounting: Teflon® insulated conductors; 1/2" NPT stainless steel connection with leadwire
23P - Sheath with single sided process mounting: Teflon® insulated conductors; 1/2" NPT stainless steel connection with leadwire
24 - Sheath with double-sided mounting: Teflon® insulated conductors; 1/2" NPT stainless steel connection
 For terminal heads, see styles 15 and 21 in datasheet AST-WPRDT. For spring loaded design with terminal head, see style 75 in datasheet AST-WPRDT.

SHEATH DIAMETER (see Table 1 for restrictions)
4 - 0.125" **7** - 0.250"
6 - 0.188" **9** - 0.375"

SHEATH MATERIAL
3 - 316 stainless steel

TEMPERATURE RANGE - Minimum and maximum operating temperatures
1 - -45 to 260 °C (-50 to 500 °F) **3** - -45 to 788 °C (-50 to 1450 °F)
2 - -45 to 482 °C (-50 to 900 °F) **4** - -200 to 260 °C (-328 to 500 °F)

SHEATH LENGTH (for lengths greater than L=36", consult UE-AST)
L# - (e.g., L6 = 6 inch sheath)

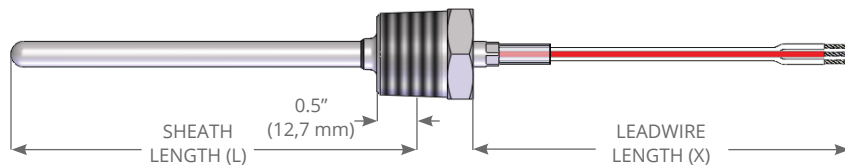
LEADWIRE LENGTH
X# - (e.g., X72 = 72 inch length)

OPTIONS - see page 10

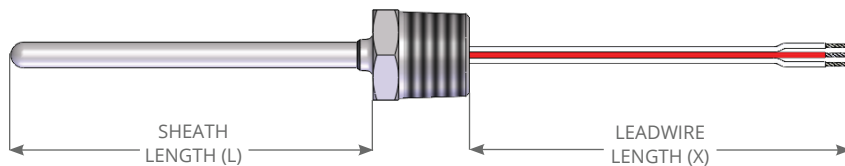
SMALLEST DIAMETER SHEATH AVAILABLE BY SENSOR TYPE AND TEMPERATURE RANGE							
SINGLE							
TEMP RANGE	RTP1	RTP1A	RTP1AA	RTP6	RTP7	RTP7A	RTP7AA
1	0.125	0.125	0.125	0.125	0.188	0.188	0.188
2	0.188	0.188	0.188	0.188	0.188	0.188	0.188
3	0.188			0.188	0.188		
4	0.125			0.125	0.188		
DUAL							
TEMP RANGE	DRTP1	DRTP1A	DRTP1AA	DRTP6	DRTP7	DRTP7A	DRTP7AA
1	0.188	0.188	0.188	0.188	0.250	0.250	0.250
2	0.250	0.250	0.250	0.188	0.375	0.375	0.375
3	0.250			0.250	0.250		
4	0.188			0.188	0.250		

Table 1

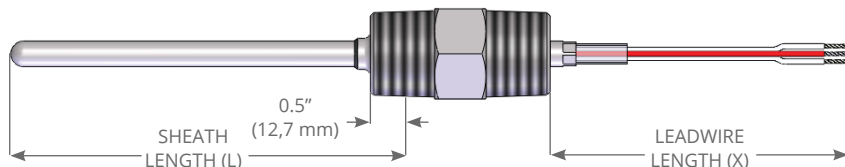
STYLE 23P



STYLE 231



STYLE 24



STYLE 23I, 23P & 24

AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE*	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire
RTP7A	±0.06%	4-wire
RTP7AA	±0.01%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6).
Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6 [minimum length = 3"])
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6 [minimum length = 3"])

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

PLUG AND JACK OPTIONS

Available on 23P, 2 and 3 wire constructions only. Plug is designed to be attached to sensor assemblies. Jack should only be specified if plug option is also included. Cable clamp is included for both plug and jack options.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

WELD PAD OPTIONS (STYLE 23I ONLY)

WP00	Horizontal pad/flat
FOR MATCHING A PIPE RADIUS	
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

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

WASHER STYLE WITH LEADWIRE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	WASHER SIZE	WASHER MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	LEADWIRE LENGTH	OPTIONS

SENSOR TYPE (See page 12 for options and restrictions)
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
32 - Washer with leadwire; Teflon® insulated conductors; armor cable; washer thickness 3/16" (0.188"); Sheath diameter 0.188" only

WASHER SIZE (in inches)

OPTION CODE	INCHES	ID	OD
6	0.188	0.193	0.375
7	0.250	0.255	0.500
9	0.375	0.380	0.750
10	0.500	0.510	1.000

WASHER 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)

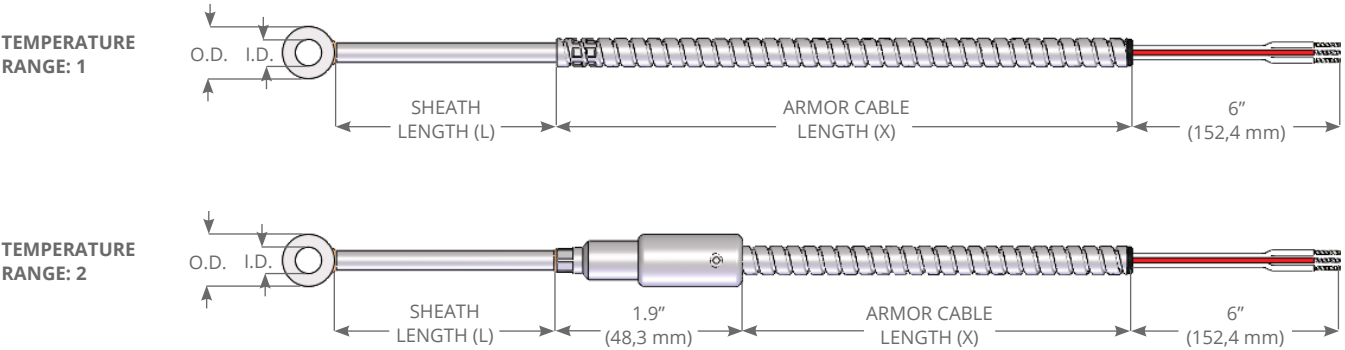
SHEATH LENGTH (for lengths greater than L=36", consult UE-AST)

L# - (e.g., L6 = 6 inch sheath)

LEADWIRE LENGTH

X# - (e.g., X6 = 6 inch length)

OPTIONS - see page 12



AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire
RTP7A	±0.06%	4-wire
RTP7AA	±0.01%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6). Dual available on temperature range 1 only, with 2 and 3-wire constructions. Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6 [minimum length = 3"])
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6 [minimum length = 3"])

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

PLUG AND JACK OPTIONS

Plug is designed to be attached to sensor assemblies. Jack should only be specified if plug option is also included. Cable clamp is included for both plug and jack options.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

BX CONNECTOR OPTIONS

WC40	1/2"
WC50	3/4"

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

CUTTABLE SHEATH WITH LEADWIRE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	SHEATH DIAMETER	SHEATH MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	LEADWIRE LENGTH
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SENSOR TYPE - (see page 14 for optional elements)

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

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

ASSEMBLY STYLE

38 - Field cuttable sheath length with leadwire; Teflon® insulated conductors for temperature range 1; Fiberglass insulated conductors for temperature range 2; cannot be cut to less than 4"

SHEATH DIAMETER

6 - 0.188"

7 - 0.250"

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)

SHEATH LENGTH (for lengths greater than L=36", consult UE-AST)

L# - (e.g., L6 = 6 inch sheath)

LEADWIRE LENGTH

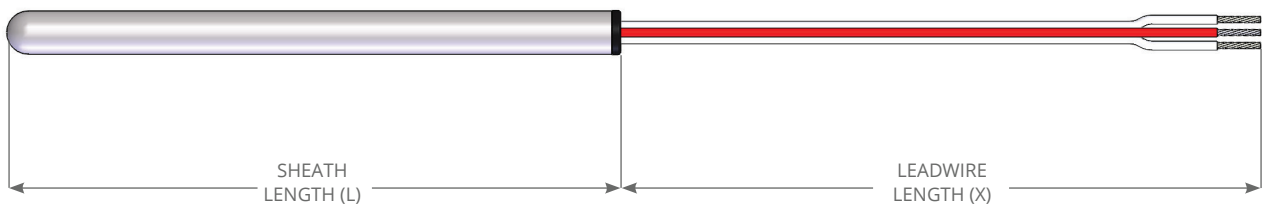
X# - (e.g., X72 = 72 inch length)

OPTIONS

See page 14

SMALLEST DIAMETER SHEATH AVAILABLE BY SENSOR TYPE AND TEMPERATURE RANGE							
SINGLE							
TEMP RANGE	RTP1	RTP1A	RTP1AA	RTP6	RTP7	RTP7A	RTP7AA
1	0.188			0.188	0.188		
2	0.188			0.188	0.188		
DUAL							
TEMP RANGE	DRTP1	DRTP1A	DRTP1AA	DRTP6	DRTP7	DRTP7A	DRTP7AA
1	0.188			0.188			
2	0.250			0.188			

Table 1



AVAILABLE OPTIONS and MODIFICATIONS

ASSEMBLY OPTIONS	
OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6). Additional materials, curves and resistance values are available - consult UE-AST.

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

WELD PAD WITH LEADWIRE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

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

SENSOR TYPE (See page 16 for optional elements)

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

ASSEMBLY STYLE

39 - Sheath with flat weld pad and leadwire; Teflon® insulated conductors; Teflon® jacket; pad same material as sheath, 1" X 1" pad size; 1/8" pad thickness; radiused pad available as an option.

SHEATH DIAMETER

6 - 0.188"

7 - 0.250"

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)

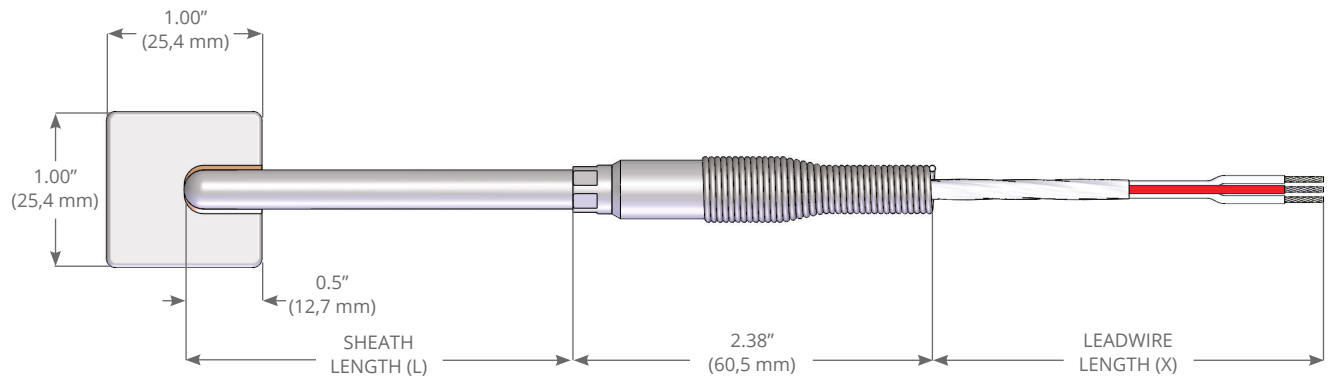
SHEATH LENGTH (for lengths greater than L=36", consult UE-AST)

L# - (e.g., L6 = 6 inch sheath)

LEADWIRE LENGTH

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

OPTIONS - see page 16



AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire

Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6 [minimum length = 3"])
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6 [minimum length = 3"])

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

PLUG AND JACK OPTIONS

Plug is designed to be attached to sensor assemblies. Jack should only be specified if plug option is also included. Cable clamp is included for both plug and jack options.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

WELD PAD OPTIONS

Pads are standardly supplied flat. For matching a pipe radius, use the codes below:

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

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

MOUNTING LUG WITH LEADWIRE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	LUG HOLE SIZE	TEMPERATURE RANGE	SHEATH LENGTH	LEADWIRE LENGTH	OPTIONS

SENSOR TYPE (See page 18 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
41 - Stainless steel mounting lug with Teflon® leadwire; diameter 0.312" only

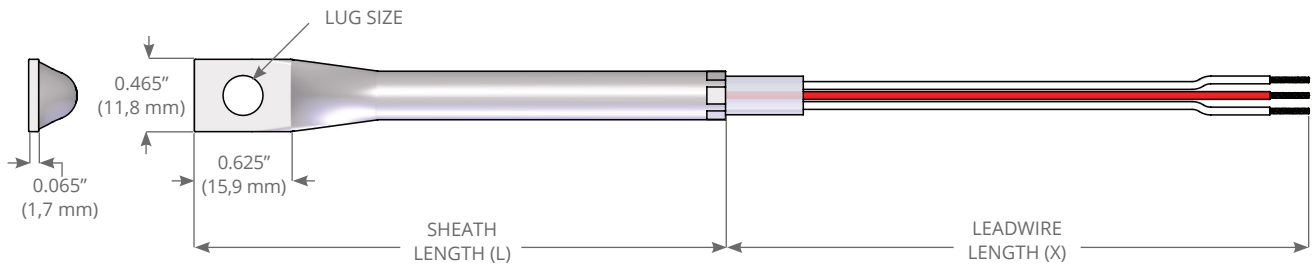
LUG HOLE SIZE (in inches)
6 - 0.188"
7 - 0.250"
9 - 0.375"

TEMPERATURE RANGE - Minimum and maximum operating temperatures
1 - -45 to 260 °C (-50 to 500 °F)

SHEATH LENGTH (Minimum L=1.75"; for lengths greater than L=36", consult UE-AST)
L# - (e.g., L6 = 6 inch sheath)

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

OPTIONS - see page 18



AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE*	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6). Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

PLUG AND JACKS 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.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

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

SHEATH WITH LEADWIRE AND PROTECTIVE TEFLON® SLEEVE

How to build a part number:

Select the requirements for the categories listed below and fill in the corresponding boxes with your selection. Consult UE-AST for custom solutions.

SENSOR TYPE	ASSEMBLY STYLE	SHEATH DIAMETER	SHEATH MATERIAL	TEMPERATURE RANGE	SHEATH LENGTH	TEFLON® SLEEVE LENGTH	LEADWIRE LENGTH	OPTIONS

SENSOR TYPE (See page 20 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
42 - Sheath with protective Teflon® sleeve; Teflon® insulated leadwire extension beyond Teflon® sleeve

SHEATH DIAMETER (in inches) (see Table 1 for restrictions)
6 - 0.188" Finished OD = 0.240
7 - 0.250" Finished OD = 0.300

SHEATH MATERIAL
3 - 316 stainless steel

TEMPERATURE RANGE - Minimum and maximum operating temperatures
1 - -45 to 260 °C (-50 to 500 °F)

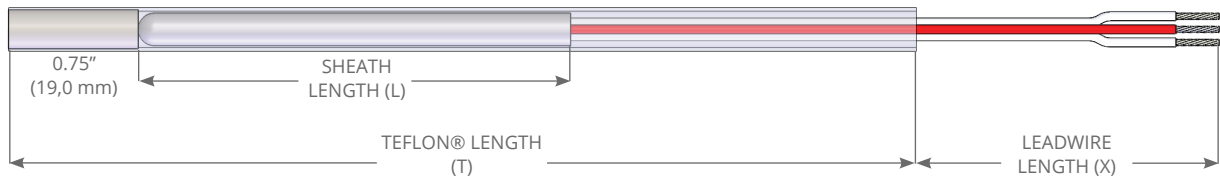
SHEATH LENGTH (for lengths greater than L=36", consult UE-AST)
L# - (e.g., L6 = 6 inch sheath)

TEFLON® SLEEVE LENGTH
T# - (e.g., T12 = 12" of Teflon®)

LEADWIRE LENGTH
X# - (e.g., X12.5 = 12.5 inch length beyond Teflon® sleeve)
OPTIONS - see page 20

SMALLEST DIAMETER SHEATH AVAILABLE BY SENSOR TYPE AND TEMPERATURE RANGE							
SINGLE							
TEMP RANGE	RTP1	RTP1A	RTP1AA	RTP6	RTP7	RTP7A	RTP7AA
1	0.188	0.188	0.188	0.188	0.188	0.188	0.188
DUAL							
TEMP RANGE	DRTP1	DRTP1A	DRTP1AA	DRTP6	DRTP7	DRTP7A	DRTP7AA
1	0.188	0.188	0.188	0.188	0.250	0.250	0.250

Table 1



AVAILABLE OPTIONS and MODIFICATIONS

OPTIONAL ELEMENTS

RTDs are standardly platinum, 100-ohm, DIN-curve elements with a 0.00385 alpha.

OPTION CODE*	ACCURACY (AT 0 °C)	CONSTRUCTION
RTP1 (std.)	±0.12%	3-wire
RTP1A	±0.06%	3-wire
RTP1AA	±0.01%	3-wire
RTP6	±0.12%	2-wire
RTP7	±0.12%	4-wire
RTP7A	±0.06%	4-wire
RTP7AA	±0.01%	4-wire

* For dual element, add prefix "D" (e.g., DRTP6)
Additional materials, curves and resistance values are available - consult UE-AST.

ASSEMBLY OPTIONS

OPTION CODE	DESCRIPTION
TAG1	Stainless steel tag and wire
CAL1	NIST traceable calibration, specify point(s)
CRT1	Certificate of conformance
B45-	45° bend in sheath (specify length from tip in inches e.g., B45-6 [minimum length = 3"])
B90-	90° bend in sheath (specify length from tip in inches e.g., B90-6 [minimum length = 3"])

WIRING CONNECTION OPTIONS

OPTION CODE	DESCRIPTION
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

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.

PJ10	Standard plug, rated to 177 °C (350 °F)
PJ20	Standard jack, rated to 177 °C (350 °F)

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

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