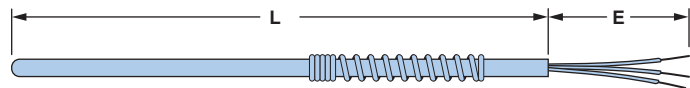


SANDELIUS R.T.D. ASSEMBLIES

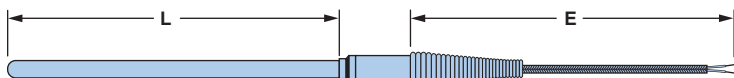
Sandelius offers a complete line of quality RTD assemblies available in both "standard" and "cut-away" configurations. In the standard configuration the leads are epoxy sealed where they exit the sheath. This results in a more rugged and moisture resistant probe. Standard configuration probes must be ordered to the exact lengths required as they cannot be shortened in the field. The cut-away configuration has leadwire passing through a hollow sheath to the RTD bulb. The resulting assembly can be shortened to any length down to a 3-inch minimum by carefully cutting off a section of the hollow sheath and adjusting the wire length to suit. While not quite as rugged as our standard RTD configuration cut-away assemblies offer the advantage of eliminating the need to stock a different spare for each probe length used in your plant.



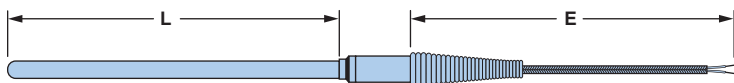
Style R1A – Epoxy sealed RTD probe
Style CR1A – Cut-to-length RTD probe



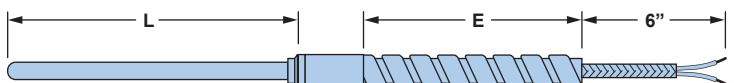
Style SR1A – Epoxy sealed RTD probe with spring
Style SCR1A – Cut-to-length RTD probe with spring



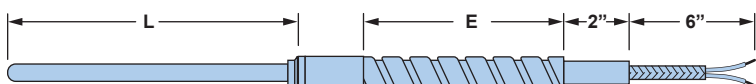
Style R1T – RTD probe with transition fitting and leadwire



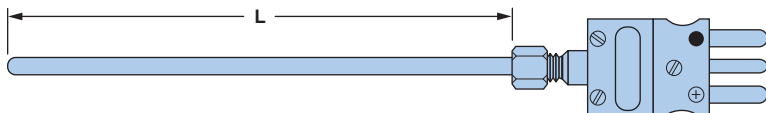
Style R2T – RTD probe with transition fitting and SS overbraid



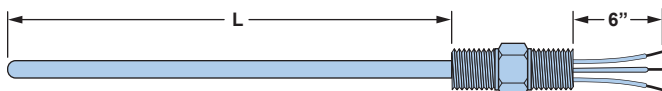
Style R4T – RTD probe with transition fitting and SS armor
Style R4TP – Same as R4T with PVC coated SS armor
Style R4TT – Same as R4T with Teflon coated armor



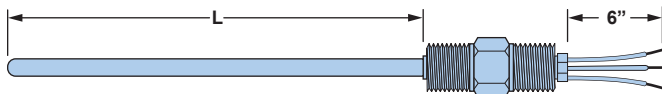
Style R6T – RTD probe with transition fitting and SS armor
 A 2-inch SS tube is brazed into the end of the armor to allow the use of a compression fitting to connect a head or transmitter
Style R6TP – Same as R6T with PVC coated armor
Style R6TT – Same as R6T with Teflon coated armor



Style R5B – RTD probe with standard 3-pole plug



Style R5H – RTD probe with 1/2" x 1/2" npt SS mounting
 Fitting brazed to sheath
Style RW5H – RTD probe with 1/2" x 1/2" npt SS mounting
 Fitting welded to sheath



Style SR5H – RTD probe with spring loaded 1/2" x 1/2" npt SS mounting fitting
Style SCR5H – Same as SR5H with cut-to-length probe
Style SPR5H – RTD probe with liquid tight spring-loaded 1/2" x 1/2" npt SS mounting fitting

To Order specify:

SR1A-4A3EL-L22-E4-OPTIONS

Assembly style above	Element Pg. A-21	L – Length (in inches)	E – Length (in inches)	Heads pgs. A-18 & A-19 Fittings pgs. A-16, A-17 Terminations pg. A-5 Copper Tip, see note 4
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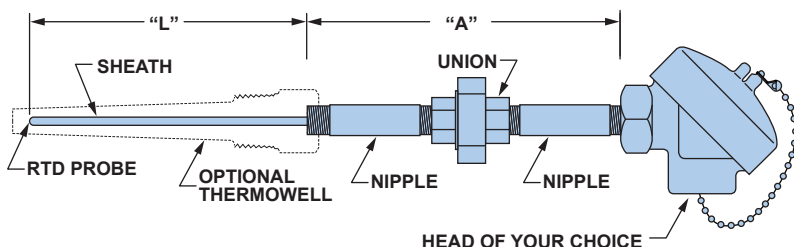
NOTES:

1. Cut-to-length RTDs are not available in the "M" high temperature range.
2. Standard leadwire insulation on RTD probes are as follows:
 "L" Range – Teflon "K" Range – Kapton "F" Range – Fiberglass
 "M" Range – Teflon "C" Range – PVC
3. If your application requires bending in the field, an "M" series RTD probe should be specified. We do not recommend field bending of any other RTD series.
4. Most 0.215 & 0.25" diameter RTD probes can be supplied with a copper insert tip for faster response and better tip sensitivity. To order specify CP909B at the end of the part number.

SANDELIUS R.T.D. ASSEMBLIES

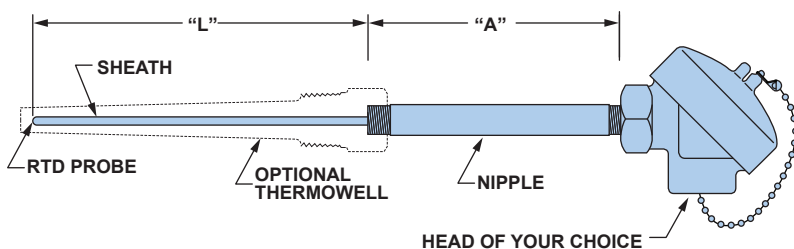
Style R1H – RTD with Nipple - Union - Nipple - Head

Style SR1H – Spring-Loaded RTD with Nipple - Union - Nipple - Head



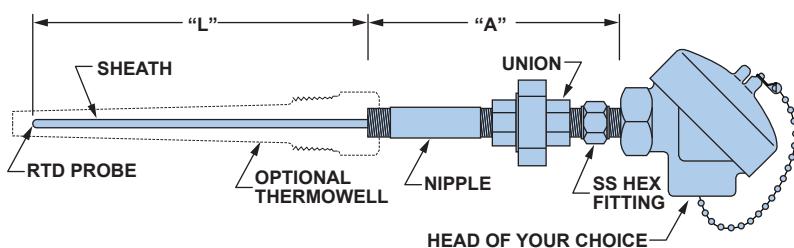
Style R2H – RTD with Nipple - Head

Style SR2H – Spring-Loaded RTD with Nipple - Head

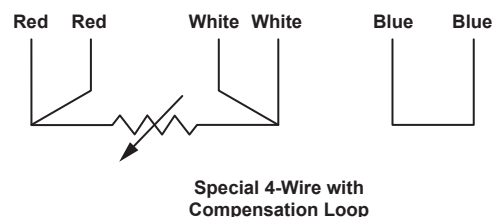
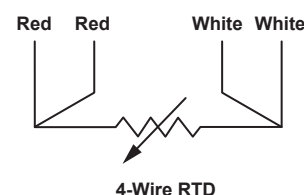
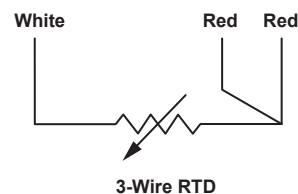
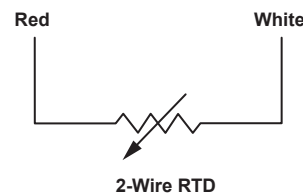


Style R7H – RTD with Nipple - Union - Brazed SS Fitting - Head

Style SR7H – RTD with Nipple - Union - Spring-loaded SS Fitting - Head



RTD Leadwire Configurations



To Order specify:

SR7H-4A3EL-L16-4G6-C46C-(Optional Thermowell*)

Assembly Style	Element See Below	L – Length in inches	Head See Pages A-18 & A-19	See Catalog Section B-2
	Thread Size 4 – 1/2" NPT 6 – 3/4" NPT 8 – 1" NPT		Nipple & Union Material C – Carbon Steel G – Galvanized Steel S – Stainless Steel	Nominal A Length in inches

*To order an assembly complete with a thermowell simply insert the part number of the thermowell from Sandelius catalog Section B. When ordering an assembly complete with a thermowell, the "L" length may be shown as "00" as we will size the element to fit the thermowell.

HOW TO SPECIFY RTD ELEMENTS

4 A 3 E L

Sheath Diameter

- 2 – 1/8"
- 3 – 3/16"
- 4 – 1/4"
- 6 – 3/8"
- 7 – 0.215"

Sheath Material

- A – 316SS
- B – Inconel 600
- C – 304SS

Number of Wires per Element

- 2 – Two Wire
- 3 – Three Wire
- 4 – Four Wire
- 5 – Four Wire Special Compensation Loop

RTD Type

- E - Platinum 100 @ 0° C. α = 0.00385 – Single
- EE - Platinum 100 @ 0° C. α = 0.00385 – Dual
- A - Platinum 100 @ 0° C. α = 0.003916 – Single
- AA - Platinum 100 @ 0° C. α = 0.003916 – Dual
- B - Platinum 100 @ 0° C. α = 0.003902 – Single
- P - Platinum 100 @ 0° C. α = 0.003926 – Single
- R - Platinum 100 @ 0° C. α = 0.003911 – Single
- W - Platinum 100 @ Sama Curve – Single
- N - Nickel 120 @ 0° C. Single
- C - Copper 100 @ 25° C – Single
- Y - Other (Specify at end of part number)

Temperature Range^{2,3} / Construction

- L – -328° F - 500° F with Teflon wire
- K – -328° F - 700° F with Kapton wire
- M – -328° F - 1000° F MgO with Teflon leads
- C – -20° F - 200° F with PVC wire (Recommended for cooling water)
- F – 50° - 700° F with Fiberglass wire
- H – -328° F - 1200° F MgO with Teflon leads, H range comes standard with Inconel 600 sheath material

Notes:

1. Alpha = 0.00385 is the DIN 43760 standard and is the most commonly used.
2. Not all items for which a part number can be made are available in actual fact.
3. The temperature ranges shown are for platinum RTDs.
4. Sandelius RTDs are normally manufactured for use at temperatures above -140° F. If an RTD is intended for use at temperatures below -140° F, this information must be specified on the order so the necessary modifications can be incorporated. (In very special cases, temperatures as low as -434° F are possible).