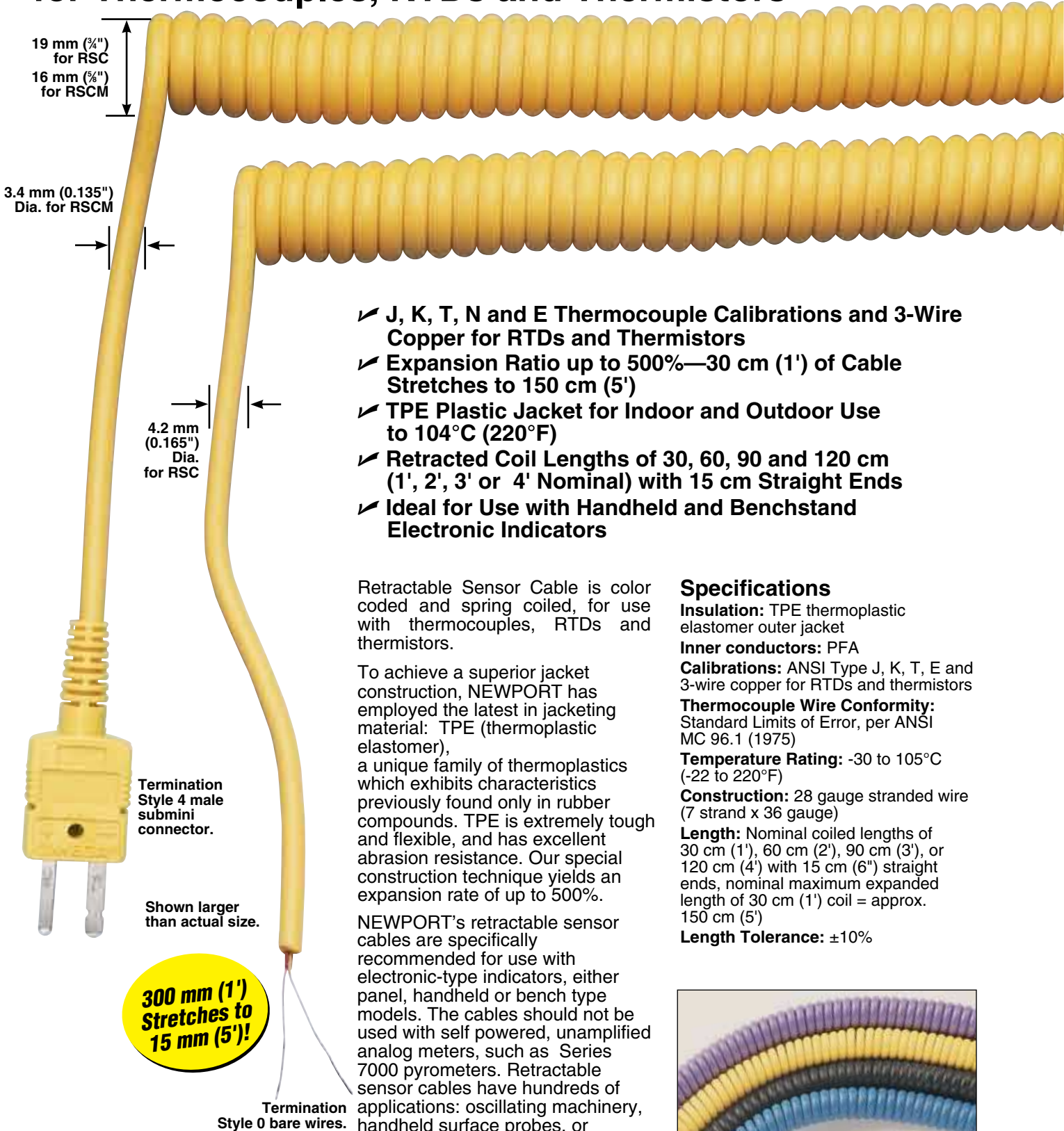


# Retractable Sensor Cables

## Color Coded, Spring Coiled Retractable Cables for Thermocouples, RTDs and Thermistors



Termination Style 4 male submini connector.

Shown larger than actual size.

**300 mm (1') Stretches to 15 mm (5)!**

Termination Style 0 bare wires.

ANSI color code shown

- ✓ J, K, T, N and E Thermocouple Calibrations and 3-Wire Copper for RTDs and Thermistors
- ✓ Expansion Ratio up to 500%—30 cm (1') of Cable Stretches to 150 cm (5')
- ✓ TPE Plastic Jacket for Indoor and Outdoor Use to 104°C (220°F)
- ✓ Retracted Coil Lengths of 30, 60, 90 and 120 cm (1', 2', 3' or 4' Nominal) with 15 cm Straight Ends
- ✓ Ideal for Use with Handheld and Benchstand Electronic Indicators

Retractable Sensor Cable is color coded and spring coiled, for use with thermocouples, RTDs and thermistors.

To achieve a superior jacket construction, NEWPORT has employed the latest in jacketing material: TPE (thermoplastic elastomer), a unique family of thermoplastics which exhibits characteristics previously found only in rubber compounds. TPE is extremely tough and flexible, and has excellent abrasion resistance. Our special construction technique yields an expansion rate of up to 500%.

NEWPORT's retractable sensor cables are specifically recommended for use with electronic-type indicators, either panel, handheld or bench type models. The cables should not be used with self powered, unamplified analog meters, such as Series 7000 pyrometers. Retractable sensor cables have hundreds of applications: oscillating machinery, handheld surface probes, or wherever retractable sensor cables are required.

### Specifications

**Insulation:** TPE thermoplastic elastomer outer jacket

**Inner conductors:** PFA

**Calibrations:** ANSI Type J, K, T, E and 3-wire copper for RTDs and thermistors

**Thermocouple Wire Conformity:** Standard Limits of Error, per ANSI MC 96.1 (1975)

**Temperature Rating:** -30 to 105°C (-22 to 220°F)

**Construction:** 28 gauge stranded wire (7 strand x 36 gauge)

**Length:** Nominal coiled lengths of 30 cm (1'), 60 cm (2'), 90 cm (3'), or 120 cm (4') with 15 cm (6") straight ends, nominal maximum expanded length of 30 cm (1') coil = approx. 150 cm (5')

**Length Tolerance:** ±10%



## Available Terminations

### Style 0

1 inch  
Trimmed Ends  
Standard



All shown smaller than actual size.

### Style 1

Compensated  
Spade Lugs



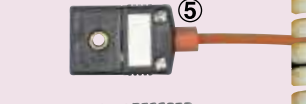
### Style 4

SMPW-M (Male)



### Style 5

SMPW-F (Female)



### Style 2

OSTW-M (Male)



### Style 3

OSTW-F (Female)



### Style 6

OTP-F (Female)  
(RTD &  
Thermistor)



### Style 7

OTP-M (Male)  
(RTD and  
Thermistor)



### Style 8†

TA3-FL (Female)



### Style 9†

TA3-ML (Male)



### Style 10

MTP-F (Female)  
(RTD and Thermistor)



### Style 11

MTP-M (Male)  
(RTD and Thermistor)



Also Available  
in ANSI  
Color Code "N"

## Discount Schedule

Note: Models can be mixed and matched

1 to 10 units	Net
11 to 24 units	10%
25 to 49 units	15%
50 to 99 units	20%
100 units and up	Consult Sales

## Color Code of Cables

ANSI Code	Calibration	Jacket	+Wire	-Wire
J	Iron/Constantan	Black	White	Red
K	CHROMEGA®/ALOMEGA®	Yellow	Yellow	Red
T	Copper/Constantan	Blue	Blue	Red
E	CHROMEGA®/Constantan	Purple	Purple	Red
RTD/TH	Copper (3-Wire)	White	2 Black	Red

## Typical Resistance of Cables

Ω Per Running Foot of Cable 1' Coiled (5' Extended)				Ω Per Foot of Wire (Three Wires Per Cable)
J	K	T	E	RTD and thermistor
16.3	27.5	14.0	33.1	0.57

## How To Order

- Fill the 1<sup>st</sup> box (1) with desired ANSI Calibration. Use ANSI symbols "J", "K", "T", "N", "E" for thermocouple calibration; "RTD" for resistance temperature detector; or "TH" for thermistor.
- Fill in 2<sup>nd</sup> box (2) with retracted coil length in feet: 1' (30 cm), 2' (60 cm), 3' (90 cm), or 4' (120 cm).
- Fill in 3<sup>rd</sup> box (3) with termination style number (one end).
- Fill in 4<sup>th</sup> box (4) with termination style number (other end).

## To Order Visit [newportUS.com/RSC\\_M](http://newportUS.com/RSC_M) for Pricing and Details

Model No.** ANSI Color Code	Input Type	OD mm (inch)
RSC-(1)-(2)-(3)-(4)	Thermocouple	4.2 (0.165)
RSC-RTD-(2)-(3)-(4)	RTD	4.4 (0.175)
RSC-TH-(2)-(3)-(4)	TH	4.4 (0.175)
RSCM*-(1)-(2)-(3)-(4)	Thermocouple	3.4 (0.135)

- Thermocouple Type: J, K, T or E
- Retracted Length in feet: 1' = 30 cm, 2' = 60 cm, 3' = 90 cm, 4' = 120 cm nom.
- Termination Style (End #1)
- Termination Style (End #2)

\* RSCM = Miniature Retractable Cable.

† Indicate associated meter or pin out desired for connector.

\*\* Add suffix "-IEC" for IEC color code.

Ordering Example: RSC-K-2-1-2, retractable sensor cable, Type K, 60 cm (2') long, with spade lugs on one end and a male OST connector on the other.