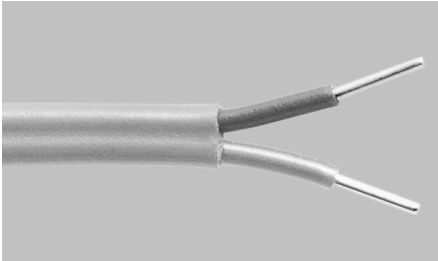


SERV-RITE Wire and Cable

Thermocouple Wire

PFA Insulated Thermocouple and Extension Wire SERIES 516



A relatively new fluoroplastic, PFA, is the insulation on SERIES 516. PFA's temperature rating is only slightly less than TFE. However, PFA can be applied using conventional extrusion techniques. This produces a smooth finish, as opposed to the spiral usually associated with TFE tape constructions. This is important in the food industry where taped constructions present cleaning problems. The smooth surface also allows this construction to be pulled through conduits and cut-outs more easily.

Once each conductor has been coated with a color coded PFA layer, they are laid parallel and again coated with PFA.

Continuous Use Temp.	Single Use Temp.
260°C (500°F)	290°C (550°F)

Resistance Properties		
Moisture	Chemical	Abrasion
Excellent	Excellent	Good

Popular Constructions

Grade	AWG	Wire Type	Limits of Error	Type K	Type J	Type T
Thermocouple	20	Solid	Standard	K20-1-516	J20-1-516	T20-1-516
		Solid	Special	K20-2-516	J20-2-516	T20-2-516
		Stranded	Standard	K20-3-516	J20-3-516	T20-3-516
	24	Solid	Standard	K24-1-516	J24-1-516	T20-1-516
		Solid	Special	K24-2-516	J24-2-516	T20-2-516
		Stranded	Standard	K24-3-516	J24-3-516	T20-3-516

Grade	AWG	Wire Type	Limits of Error	Type E
Thermocouple	20	Solid	Standard	E20-1-516
		Solid	Special	E20-2-516
		Stranded	Standard	E20-3-516
	24	Solid	Standard	E24-1-516
		Solid	Special	E24-2-516
		Stranded	Standard	E24-3-516

Note: Bolded products are stocked and shipped in 100, 250, 500 and 1000 foot spools.

Available Constructions

1. ASTM E 230 Calibrations

B J N T
E K S

2-3. AWG

36 24 20 16
30 24 stranded (7/32) 20 stranded (7/28) 16 stranded (7/24)

4. Conductor Type/Tolerance

- 1 = Thermocouple grade, solid wire, standard tolerance
- 2 = Thermocouple grade, solid wire, special tolerance
- 3 = Thermocouple grade, stranded wire, standard tolerance
- 4 = Thermocouple grade, stranded wire, special tolerance
- 5 = Extension grade, solid wire, standard tolerance
- 6 = Extension grade, solid wire, special tolerance
- 7 = Extension grade, stranded wire, standard tolerance
- 8 = Extension grade, stranded wire, special tolerance

Note: Minimum order sizes apply for non-stock constructions.

Performance Capabilities

- Continuous temperature rating 260°C (500°F)
- Flexible TFE plastic insulation
- Available with optional metallic overbraid for additional abrasion resistance

Applications

- General use extension wire

1 2 3 4 5 6 7
- -5 1 6

SERV-RITE Wire and Cable

Thermocouple Wire

PFA Insulated Thermocouple and Extension Wire SERIES 516 (con't)

Wire Specifications

AWG	Nominal Conductor Size in. (mm)	Nominal Insulation Thickness		Nominal Overall Size in. (mm)	Approximate Shipping Weight lbs/1000 ft (kg/km)
		Conductor in. (mm)	Overall in. (mm)		
36	0.005 (0.127)	0.003 (0.076)	0.003 (0.076)	0.017 x 0.028 (0.432 x 0.711)	3.0 (2)
30	0.010 (0.254)	0.003 (0.076)	0.003 (0.076)	0.022 x 0.038 (0.559 x 0.965)	4.5 (3)
24	0.020 (0.508)	0.008 (0.203)	0.010 (0.254)	0.056 x 0.092 (1.42 x 2.34)	11.9 (8)
24 S* (7/32)	0.024 (0.610)	0.008 (0.203)	0.010 (0.254)	0.060 x 0.100 (1.52 x 2.54)	13.4 (9)
20	0.032 (0.813)	0.008 (0.203)	0.010 (0.254)	0.068 x 0.116 (1.73 x 2.95)	17.9 (12)
20 S* (7/28)	0.038 (0.965)	0.008 (0.203)	0.010 (0.254)	0.074 x 0.128 (1.88 x 3.25)	20.9 (14)
16	0.051 (1.29)	0.010 (0.254)	0.012 (0.305)	0.095 x 0.166 (2.41 x 4.22)	40.2 (27)
16 S* (7/24)	0.060 (1.52)	0.010 (0.254)	0.012 (0.305)	0.104 x 0.184 (2.64 x 4.67)	43.2 (29)

* "S" denotes stranded wire: e.g., "24 S (7/32)" is seven strands of 32 gauge wire to make a 24 gauge stranded conductor.