



SERV-RITE Wire and Cable

Thermocouple Wire PVC Insulated Extension Wire SERIES 502



SERIES 502 is an economical wire that's also available in UL® listings for PLTC (Power Limited Tray Cable) applications.

The primary and duplex insulation is PVC. It yields a construction that's inexpensive while performing continuously at temperatures to 105°C (220°F).

SERIES 502 is often used in conduit and wiring trays where its flexibility allows for easy installation. The SERIES 502 can be easily stripped using hand tools or mechanical methods.

The SERIES 502 is also available as a UL® PLTC construction (see page 193).

Continuous Use Temp.	Single Use Temp.
105°C (220°F)	105°C (220°F)

Resistance Properties		
Moisture	Chemical	Abrasion
Excellent	Excellent	Excellent

Popular Constructions

Grade	AWG	Wire Type	Limits of Error	Type K	Type J	Type T
Extension	16	Solid	Standard	K16-5-502	J16-5-502	
		Stranded	Standard	K16-7-502	J16-7-502	
	20	Solid	Standard	K20-5-502	J20-5-502	T20-5-502
		Stranded	Standard	K20-7-502	J20-7-502	T20-7-502
	24	Solid	Standard	K24-5-502	J24-5-502	T24-5-502
		Stranded	Standard	K24-7-502	J24-7-502	T24-7-502

Grade	AWG	Wire Type	Limits of Error	Type E	Type S
Extension	20	Solid	Standard	E20-5-502	S20-5-502

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

Available Constructions

1. ASTM E 230 Calibrations

B E K S
C J N T

2-3. AWG

24 20 16 14
24 stranded (7/28) 20 stranded (7/28) 16 stranded (7/24) 14 stranded (7/22)

4. Conductor Type/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 105°C (220°F)
- Flexible PVC plastic insulation
- Available with optional metallic overbraid for additional abrasion resistance

Applications

- General use extension wire

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)		
24	0.020 (0.508)	0.015 (0.381)	0.015 (0.381)	0.080 x 0.130 (2.03 x 3.30)	10 (14.9)
24 S* (7/32)	0.024 (0.610)	0.015 (0.381)	0.015 (0.381)	0.084 x 0.138 (2.13 x 3.51)	11 (16.4)
20	0.032 (0.813)	0.015 (0.381)	0.015 (0.381)	0.092 x 0.154 (2.34 x 3.91)	14 (20.9)
20 S* (7/28)	0.038 (0.965)	0.015 (0.381)	0.015 (0.381)	0.098 x 0.166 (2.49 x 4.22)	16 (23.8)
18	0.040 (1.02)	0.020 (0.508)	0.020 (0.508)	0.120 x 0.200 (3.05 x 5.08)	21 (31.3)
18 S* (7/26)	0.048 (1.22)	0.020 (0.508)	0.020 (0.508)	0.128 x 0.216 (3.25 x 5.49)	23 (34.3)
16	0.051 (1.29)	0.020 (0.508)	0.020 (0.508)	0.131 x 0.222 (3.33 x 5.64)	28 (41.7)
16 S* (7/24)	0.060 (1.52)	0.020 (0.508)	0.020 (0.508)	0.140 x 0.240 (3.56 x 6.10)	30 (44.7)
14	0.064 (1.628)	0.020 (0.508)	0.025 (0.635)	0.144 x 0.248 (3.66 x 6.30)	44 (65.6)
14 S* (7/22)	0.076 (1.930)	0.020 (0.508)	0.025 (0.635)	0.166 x 0.282 (4.22 x 7.16)	48 (71.5)

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

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