

SERV-RITE Wire

Thermocouple and Extension Wire

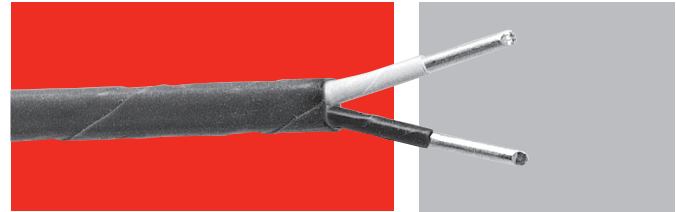
TFE Insulated SERIES 508

The primary and duplex insulation of SERIES 508 is fused TFE tape which is spirally applied to the conductor and heated. This process, called sintering, forms the tape into a homogeneous layer. When sintered, the tape exhibits all of the advantages of extruded TFE insulation, while eliminating the concentricity problems associated with TFE extrusions.

The SERIES 508 is fully color coded and capable of continuous operation in excess of 500°F (260°C). Because the fusing process causes the duplex tape to fuse with the primary insulation, SERIES 508 is not recommended for applications where it is necessary to remove the outer tape while leaving the primary insulation intact.

Performance Capabilities

- Continuous temperature rating: 500°F (260°C)
- Fused TFE tape insulation
- Available with an optional metallic overbraid for additional abrasion resistance



Applications

- Aircraft
- Petroleum processing

Specifications

Continuous use temperature

- 500°F (260°C)

Single use temperature

- 600°F (315°C)

Resistance properties

- Moisture: Excellent
- Chemical: Excellent
- Abrasion: Good

Popular Constructions

Grade	AWG	Wire Type	Limits of Error	Type K	Type J	Type T	Type E
Thermocouple	20	Solid	Standard	K20-1-508	J20-1-508	T20-1-508	E20-1-508
		Stranded	Standard	K20-3-508	J20-3-508	T20-3-508	E20-3-508
		Solid	Special	K20-2-508	J20-2-508	T20-2-508	E20-2-508
	24	Solid	Standard	K24-1-508	J24-1-508	T24-1-508	E24-1-508
		Stranded	Standard	K24-3-508	J24-3-508	T24-3-508	E24-3-508
		Solid	Special	K24-2-508	J24-2-508	T24-2-508	E24-2-508

Note: Bolded products are stocked.

Wire Specifications

AWG	Nominal Conductor Size		Nominal Insulation Thickness				Nominal Overall Size		Approximate Shipping Weight	
			Conductor		Overall					
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	lbs/1000 ft	(kg/km)
26	0.016	(0.406)	0.006	(0.152)	0.008	(0.203)	0.044 x 0.072	(1.12 x 1.83)	4	(6.0)
24	0.020	(0.508)	0.006	(0.152)	0.008	(0.203)	0.047 x 0.077	(1.19 x 1.95)	5	(7.5)
24 S* (7/32)	0.024	(0.610)	0.006	(0.152)	0.008	(0.203)	0.049 x 0.084	(1.24 x 2.13)	6	(8.9)
20	0.032	(0.813)	0.006	(0.152)	0.008	(0.203)	0.061 x 0.106	(1.55 x 2.69)	11	(16.4)
20 S* (7/28)	0.038	(0.965)	0.006	(0.152)	0.008	(0.203)	0.064 x 0.112	(1.63 x 2.84)	12	(17.9)
18	0.040	(1.02)	0.006	(0.152)	0.008	(0.203)	0.068 x 0.120	(1.73 x 3.05)	16	(23.8)
18 S* (7/26)	0.048	(1.22)	0.006	(0.152)	0.008	(0.203)	0.076 x 0.136	(1.93 x 3.45)	18	(26.8)

* "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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TFE Insulated SERIES 508 (Continued)

Ordering Information

Part Number

① ASTM E 230 Calibration	② ③ AWG	④ Conductor Type/ Tolerance	⑤	⑥	⑦
			5	0	8

①	ASTM E 230 Calibration
E =	Type E
J =	Type J
K =	Type K
S =	Type S
T =	Type T

② ③	AWG
26 =	26 gauge solid
24 =	24 gauge solid or 24 gauge stranded (7/32)
20 =	20 gauge solid or 20 gauge stranded (7/28)

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

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