

# SERV-RITE Wire

## Thermocouple and Extension Wire

### FEP Insulated Thermocouple and Extension Wire SERIES 507

The SERIES 507 is the most economical fluoroplastic insulated wire. Individual conductors are coated with a layer of color coded FEP. The insulated conductors are then parallel duplexed with an additional layer of color coded FEP. The finished construction has a continuous temperature rating of 400°F (204°C). Abrasion, moisture and chemical resistance exceed most other insulations.

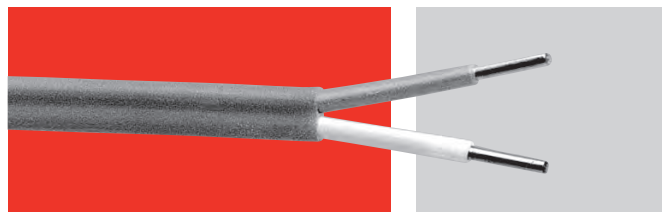
This construction is widely used when pulling long lengths of wire through conduit. FEP's low friction coefficient and abrasion resistance are suited for these applications.

For higher abrasion resistance consider SERIES 514 Tefzel® insulated constructions.

For higher temperatures specify SERIES 508.

### Performance Capabilities

- Continuous temperature rating: 400°F (204°C)
- Flexible FEP plastic insulation
- Available with an optional metallic overbraid for additional abrasion resistance



### Applications

- General use extension wire

### Specifications

#### Continuous use temperature

- 400°F (204°C)

#### Single use temperature

- 500°F (260°C)

#### Resistance properties

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

## Popular Constructions

Grade	AWG	Wire Type	Limits of Error	Type K	Type J	Type T	Type E	Type S
Extension	20	Solid	Standard	<b>K20-5-507</b>	<b>J20-5-507</b>	T20-5-507	E20-5-507	<b>S20-5-507</b>
	24	Solid	Standard					S24-5-507
Thermocouple	20	Solid	Standard	<b>K20-1-507</b>	<b>J20-1-507</b>	<b>T20-1-507</b>	<b>E20-1-507</b>	
		Stranded	Standard	<b>K20-3-507</b>	<b>J20-3-507</b>	<b>T20-3-507</b>	E20-3-507	
		Solid	Special	<b>K20-2-507</b>	<b>J20-2-507</b>	<b>T20-2-507</b>	E20-2-507	
	24	Solid	Standard	<b>K24-1-507</b>	<b>J24-1-507</b>	T24-1-507	E24-1-507	
		Stranded	Standard	<b>K24-3-507</b>	<b>J24-3-507</b>	T24-3-507	E24-3-507	
		Solid	Special	<b>K24-2-507</b>	<b>J24-2-507</b>	<b>T24-2-507</b>	E24-2-507	

Note: **Bolded** products are stocked.

## 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)	0.008 (0.203)	0.010 (0.254)	0.056 x 0.096	(1.42 x 2.44)	8	(11.9)
24 S* (7/32)	0.024	(0.610)	0.008 (0.203)	0.010 (0.254)	0.060 x 0.104	(1.52 x 2.64)	9	(13.4)
22	0.025	(0.635)	0.008 (0.203)	0.010 (0.254)	0.061 x 0.106	(1.55 x 2.69)	10	(14.9)
22 S* (7/30)	0.030	(0.762)	0.008 (0.203)	0.010 (0.254)	0.066 x 0.116	(1.68 x 2.95)	11	(16.4)
20	0.032	(0.813)	0.008 (0.203)	0.010 (0.254)	0.068 x 0.120	(1.73 x 3.05)	12	(17.9)
20 S* (7/28)	0.038	(0.965)	0.008 (0.203)	0.010 (0.254)	0.074 x 0.132	(1.88 x 3.35)	14	(20.9)
18	0.040	(1.02)	0.008 (0.203)	0.010 (0.254)	0.076 x 0.136	(1.93 x 3.45)	18	(26.8)
18 S* (7/26)	0.048	(1.22)	0.008 (0.203)	0.010 (0.254)	0.084 x 0.152	(2.13 x 3.86)	20	(29.8)

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

# SERV-RITE Wire

## Thermocouple and Extension Wire

*FEP Insulated Thermocouple  
and Extension Wire SERIES 507 (Continued)*

### Ordering Information

#### Part Number

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

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

② ③	AWG
24 =	24 gauge solid or 24 gauge stranded (7/32)
22 =	22 gauge solid or 22 gauge stranded (7/30)
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
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.