

SERV-RITE Wire and Cable

Small Gauge FEP Insulated Thermocouple and Extension Wire

Series 506



Temp.	Resistance Properties		
	Moisture	Chemical	Abrasion
400°F (204°C)	Excellent	Excellent	Excellent

Series 506 is the smallest standard insulated wire construction. The thin FEP wall on both primary and duplex insulation yields a construction that can operate safely at temperatures far beyond common PVC and nylon insulations.

The Series 506 is fully color coded for ease of installation. Its small size allows use in high density circuits. Response time is minimized by small diameter conductors. Series 506 is available only in gauge sizes of #26 and smaller. For gauge sizes larger than #26 specify Series 507.

Construction Combinations

1. ASTM E 230 Calibrations

E N
J S
K T

2-3. B & S Gauge

36 30
32 28

4. Conductor Type/Tolerance

- 1 = Thermocouple grade, solid wire, standard tolerances
- 2 = Thermocouple grade, solid wire, special tolerances
- 3 = Thermocouple grade, stranded wire, standard tolerances
- 4 = Thermocouple grade, stranded wire, special tolerances
- 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

1 2 3 4 5 6 7
/ / 5 0 6

Performance Capabilities

- Continuous temperature rating: 400°F (204°C)
- Single reading: 500°F (260°C)

Features and Benefits

- **Extruded FEP single conductor and duplex insulation** for excellent protection.
- **ASTM E 230 color code** for easy identification.
- **Excellent abrasion, moisture and chemical resistance.**

- **Additional abrasion resistance** with optional stainless steel and tinned copper wire overbraids.
- **Custom constructions available, consult factory.**

Applications

- Industrial equipment testing

Wire Specifications

B & S Gauge	Nominal Conductor Size inches (mm)	Nominal Insulation Thickness		Nominal Overall Size inches (mm)	Approximate Shipping Weight lbs/1000 ft (kg/km)
		Conductor inches (mm)	Overall inches (mm)		
36	0.005 (0.127)	0.005 (0.127)	0.005 (0.127)	0.025 X 0.040 (0.635 X 1.02)	2 (3.0)
32	0.008 (0.203)	0.005 (0.127)	0.005 (0.127)	0.028 X 0.046 (0.711 X 1.17)	2 (3.0)
30	0.010 (0.254)	0.005 (0.127)	0.005 (0.127)	0.030 X 0.050 (0.762 X 1.27)	3 (4.5)
28	0.013 (0.330)	0.005 (0.127)	0.005 (0.127)	0.033 X 0.056 (0.838 X 1.42)	3 (4.5)