High-temperature fluoropolymer, silicone & HV wires

MIL-DTL-16878/5 Type EE

1000 V PTFE Hook-Up Wire

200 °C 1000 V heavy-wall 15-mil PTFE silver-plated copper wire

MIL-DTL-16878/5 Type EE | 1000 V · +200 °C | Fluoropolymer HT

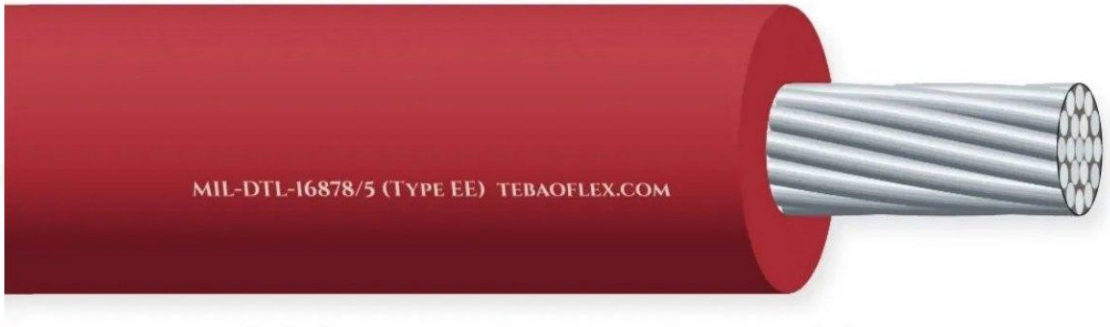


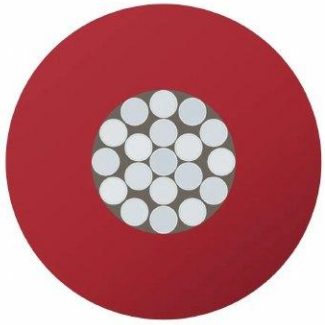
Application

MIL-DTL-16878/5 Type EE (NEMA HP3) increases extruded PTFE wall thickness to 15 mil around silver-plated copper conductors for 1000 V high-voltage avionics, microwave supplies, and defence equipment.

Typical uses: Industrial ovens, kilns & thermal processing, Aerospace avionics, defence & instrumentation, Steelworks, glassworks & foundry equipment, Switchgear cabinets, motors & heating appliances

Construction





Cross-section, not to scale

1	Conductor	ASTM B298 Class K stranded silver-plated annealed copper · ASTM B298 Silver Cu
2	Extruded insulation	15-mil heavy-wall red extruded PTFE fluoropolymer insulation · MIL-DTL-16878/5 Type EE

Technical data

Typical values

Rated voltage	1000 V	Test voltage	5 kV AC
Conductor	Silver-Plated Cu	Insulation	15-mil heavy-wall red extruded PTFE
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-65 °C to +200 °C
Temp. range (flexing)	-55 °C to +200 °C	Peak / short-circuit	+220 °C (short-term)
Min. bending radius	6 × OD (fixed)	Flame / fire rating	1000 V Heavy-Wall PTFE
Thermal / chemical	200 °C Continuous	Mechanical / special	Chemical & Solvent Inert
Outer finish	Red 15-mil extruded PTFE fluoropolymer		

Sizes

8 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Conductor AWG	Outer Ø ≈ mm	Max. R20 Ω/km	Metal index kg/km	Weight ≈ kg/km	Min. bend R 6×D mm
☐ 1×28 AWG	0.9	238.00	1	9	5.4
☐ 1×26 AWG	1.0	150.00	1	9	6.0
☐ 1×24 AWG	1.1	94.20	2	11	6.6
☐ 1×22 AWG	1.3	59.40	3	12	7.8
☐ 1×20 AWG	1.5	36.70	5	14	9.0
☐ 1×18 AWG	1.7	23.20	7	17	10.2
☐ 1×16 AWG	2.0	14.70	12	23	12.0
☐ 1×14 AWG	2.4	9.07	19	35	14.0

- Conductor DC resistance R20 at 20 °C per ASTM B298 Silver Cu.
- Minimum bending radius calculated at 6 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- MIL-DTL-16878/5 Type EE
- NEMA HP3
- ASTM B298 Silver Cu
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/mil-dtl-16878-5-type-ee-1000v-ptfe-hook-up-wire

Typical values for this cable type, based on MIL-DTL-16878/5 Type EE · NEMA HP3 · ASTM B298 Silver Cu. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.