High-temperature fluoropolymer, silicone & HV wires

SAE AS22759/18

600 V 150 °C Thin-Wall ETFE Wire

Lightweight thin-wall ETFE tinned copper aerospace airframe wire

SAE AS22759/18 | 600 V · +150 °C | Fluoropolymer HT



Application

SAE AS22759/18 uses reduced-wall extruded ETFE fluoropolymer over stranded tinned copper conductors, saving harness mass and bundle diameter in weight-critical UAV, satellite, and avionics racks.

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 B172 / B33 Class K flexible tinned annealed copper · ASTM B172 / B33
2	**Extruded insulation**	Thin-wall yellow extruded ETFE fluoropolymer insulation · SAE AS22759/18

Technical data

Typical values

Rated voltage	600 V	Test voltage	2.5 kV AC
Conductor	Tinned Cu · Cl.K	Insulation	Thin-wall yellow extruded ETFE
Impedance / insulation	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-65 °C to +150 °C
Temp. range (flexing)	-55 °C to +150 °C	Peak / short-circuit	+160 °C (5 s)
Min. bending radius	6 × OD (fixed)	Flame / fire rating	Thin-Wall Weight Saving
Thermal / chemical	150 °C ETFE Dielectric	Mechanical / special	FAR 25.869 Flame
Outer finish	Yellow thin-wall extruded ETFE		

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 B172 / B33.
- Minimum bending radius calculated at 6 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- SAE AS22759/18
- MIL-W-22759/18
- ASTM B33 Tinned 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/sae-as22759-18-600v-150c-thin-wall-etfe-wire

Typical values for this cable type, based on SAE AS22759/18 · MIL-W-22759/18 · ASTM B33 Tinned Cu. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.