



High-temperature wires & cables

M22759/32 & M22759/33 XL-ETFE

ETFE High-Temperature Aerospace Wire (SAE AS22759/32 & /33)

600 V lightweight radiation-crosslinked modified ETFE hook-up & airframe wire



SAE AS22759/32 & /33

600 V · 150 °C / 200 °C

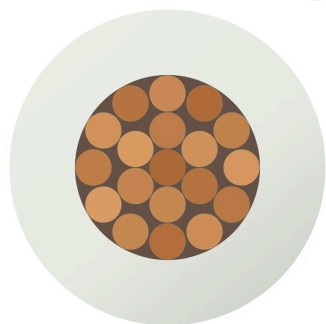
Crosslinked ETFE (XL-ETFE)

Application

Lightweight 600 V single-wall radiation-crosslinked modified ETFE (XL-ETFE) aerospace wire to SAE AS22759/32A (150 °C tin-coated copper, 30–12 AWG) and SAE AS22759/33A (200 °C silver-coated high-strength copper alloy, 30–20 AWG).

Typical uses: Commercial & military airframe harnesses, Avionics & flight-control cabinets, UAV, drone & satellite wiring, Defense ground vehicles & turret systems, High-density industrial test benches, Radiation-exposed instrumentation

Construction



Cross-section, not to scale

1	Stranded aerospace conductor core	SAE AS22759 / ASTM B33 & B624
2	Metallurgical conductor plating	SAE AS22759/32A & /33A
3	Single-wall XL-ETFE insulation	SAE AS22759/32A & /33A

Technical data

Typical values

Rated voltage	600 V RMS (AC aircraft & avionics power/signal rating)	Dielectric & spark test	2.5 kV RMS wet dielectric test + 6.0 kV RMS impulse spark test per SAE AS22759
Conductor material & plating	M22759/32: concentric stranded tin-coated annealed copper (30–12 AWG) · M22759/33: stranded silver-coated high-strength copper alloy (30–20 AWG)	Operating temperature range	–65 °C to +150 °C (M22759/32 tin-coated) · –65 °C to +200 °C (M22759/33 silver-coated alloy)
Crosslinked thermal behaviour	Radiation-crosslinked modified ETFE prevents melt-back during soldering and resists short-duration thermal overload up to +300 °C	Single-wall insulation thickness	Lightweight single-wall 0.006 in (0.15 mm) nominal wall on 30–16 AWG · 0.007 in (0.18 mm) on 14 AWG · 0.008 in (0.20 mm) on 12 AWG
Minimum bending radius	6 × OD fixed; 10 × OD flexing	Flammability	Self-extinguishing aerospace vertical/60° flame resistance per SAE AS22759 & FAR Part 25.869
Fluid, chemical & radiation resistance	Resists Skydrol hydraulic fluid, Jet A/J-P-8 fuel, de-icing fluids, lubricating oils, UV, ozone and high-altitude radiation	Standards	SAE AS22759/32A (MIL-DTL-22759/32); SAE AS22759/33A (MIL-DTL-22759/33)

Sizes

16 standard constructions

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

Part designation	Size AWG	Nominal CSA mm ²	Stranding (count/AWG)	Conductor finish & T	Cond. Ø mm	Wall mm	Nominal OD mm	Max. mass kg/km	Max. DC res. (20 °C) Ω/km
SAE AS22759/32 (M22759/32) · 600 V · 150 °C · Tin-Coated Copper (30–12 AWG) 10 sizes									
☐ M22759/32-30	30 AWG	0.057	19/42	SnCu (150 °C)	0.30	0.15	0.61	0.89	355.0
☐ M22759/32-28	28 AWG	0.089	19/40	SnCu (150 °C)	0.38	0.15	0.69	1.25	224.0
☐ M22759/32-26	26 AWG	0.155	19/38	SnCu (150 °C)	0.48	0.15	0.79	1.93	135.0
☐ M22759/32-24	24 AWG	0.241	19/36	SnCu (150 °C)	0.61	0.15	0.91	2.83	86.0
☐ M22759/32-22	22 AWG	0.382	19/34	SnCu (150 °C)	0.76	0.15	1.07	4.17	53.1
☐ M22759/32-20	20 AWG	0.616	19/32	SnCu (150 °C)	0.97	0.15	1.27	6.40	33.5
☐ M22759/32-18	18 AWG	0.963	19/30	SnCu (150 °C)	1.22	0.15	1.52	9.67	21.1
☐ M22759/32-16	16 AWG	1.23	19/29	SnCu (150 °C)	1.37	0.15	1.73	12.40	16.5
☐ M22759/32-14	14 AWG	1.94	19/27	SnCu (150 °C)	1.70	0.18	2.16	19.30	10.4
☐ M22759/32-12	12 AWG	3.08	37/28	SnCu (150 °C)	2.18	0.20	2.72	30.10	6.6
SAE AS22759/33 (M22759/33) · 600 V · 200 °C · Silver-Coated High-Strength Copper Alloy (30–20 AWG) 6 sizes									
☐ M22759/33-30	30 AWG	0.057	19/42	AgCu Alloy (200 °C)	0.30	0.15	0.61	0.91	381.0
☐ M22759/33-28	28 AWG	0.089	19/40	AgCu Alloy (200 °C)	0.38	0.15	0.69	1.28	240.0
☐ M22759/33-26	26 AWG	0.155	19/38	AgCu Alloy (200 °C)	0.48	0.15	0.79	1.98	147.0
☐ M22759/33-24	24 AWG	0.241	19/36	AgCu Alloy (200 °C)	0.61	0.15	0.91	2.87	94.2
☐ M22759/33-22	22 AWG	0.382	19/34	AgCu Alloy (200 °C)	0.76	0.15	1.07	4.24	57.4
☐ M22759/33-20	20 AWG	0.616	19/32	AgCu Alloy (200 °C)	0.97	0.15	1.27	6.50	35.1

– M22759/33 uses high-strength silver-coated copper alloy to prevent conductor breakage on fine 30–20 AWG aerospace signal harnesses under vibration.

Standards and approvals

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/etfe-high-temperature-aerospace-wire



Typical values for this cable type, based on SAE AS22759/32A & /33A. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.