



General flexible rubber & portable power cords

Underground Lighting 110 V

Underground Lighting Cable (110 V · 18–10 AWG)

110 V Class K flexible XLPO/TPU underground mine illumination & luminaire cable



110 V Mine Lighting

ASTM B174 Class K

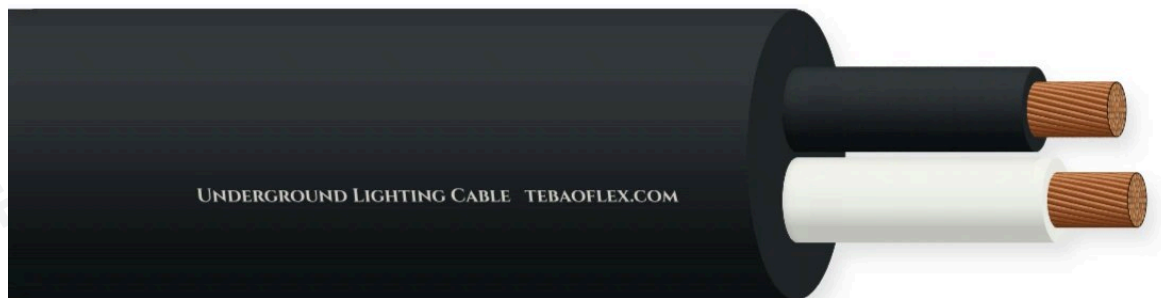
XLPO + TPU · MSHA

Application

Flexible 110 V underground mine lighting cable with ASTM B174 Class K copper conductors (18–10 AWG, 2–9C), +90 °C non-chlorinated XLPO core insulation, optional copper braid shield and an MSHA TPU outer jacket.

Typical uses: Longwall face luminaire strings, Continuous miner & bolter lighting, Haulageway & belt-drift LED trunks, Refuge alternative & portal lighting, Shaft-sinking & tunnel work lights, Mobile crusher & feeder task lighting

Construction



Cross-section, not to scale

1 Lighting conductors (2 to 9)

ASTM B174 Class K

2 Core insulation**3** Core assembly & separator**4** Optional copper braid shield**5** Outer jacket

MSHA 30 CFR Part 7

Technical data

Typical values

Rated voltage	110 V AC/DC (underground mine illumination, machine lighting and low-voltage auxiliary feeders)	Conductor size range	18 AWG, 16 AWG, 14 AWG, 12 AWG and 10 AWG (2 to 9 conductors per size)
Optional EMI/crush shield	Optional full copper braid shield over core assembly for mechanical crush and EMI protection	Max. continuous conductor temp.	+90 °C (cross-linked flame-retardant polyolefin)
Ambient operating range	-40 °C to +90 °C	Halogen-free core insulation	Chemically cross-linked, non-chlorinated, flame-retardant polyolefin (XLPO)
Min. bending radius	6 × OD (unshielded) · 8 × OD (with optional copper braid shield)	Conductor stranding	Class K extra-flexible bunch-stranded annealed copper per ASTM B174
Outer jacket material	Extra-tough thermoplastic polyurethane (TPU) jacket for cut, tear and rock-impact resistance	Flame retardance	MSHA 30 CFR Part 7 flame resistance (embossed MSHA marking)
Abrasion, cut & crush	Heavy-duty TPU outer sheath resists roof-bolt hangars, coal-face rock fall and luminaire relocation	Water, oil & emulsion	Resistant to mine water, hydraulic roof-support emulsions, diesel mist and mineral oils
Standards	ASTM B174 Class K extra-flexible copper		

Sizes

40 standard constructions

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

Designation Cores × AWG	Cores No.	Insul. Ø in	Insul. Ø mm	Nominal OD in	Nominal OD mm	Weight ≈ lb/ft	Mass ≈ kg/km
18 AWG (2C-9C) 8 sizes							
☐ Mine Lighting 110 V · 2 × 18 AWG	2	0.115	2.92	0.440	11.2	87	129
☐ Mine Lighting 110 V · 3 × 18 AWG	3	0.115	2.92	0.460	11.7	100	149
☐ Mine Lighting 110 V · 4 × 18 AWG	4	0.115	2.92	0.488	12.4	116	173
☐ Mine Lighting 110 V · 5 × 18 AWG	5	0.115	2.92	0.520	13.2	135	201
☐ Mine Lighting 110 V · 6 × 18 AWG	6	0.115	2.92	0.560	14.2	156	232
☐ Mine Lighting 110 V · 7 × 18 AWG	7	0.115	2.92	0.560	14.2	163	243
☐ Mine Lighting 110 V · 8 × 18 AWG	8	0.115	2.92	0.640	16.3	198	295
☐ Mine Lighting 110 V · 9 × 18 AWG	9	0.115	2.92	0.660	16.8	215	320
16 AWG (2C-9C) 8 sizes							
☐ Mine Lighting 110 V · 2 × 16 AWG	2	0.125	3.18	0.460	11.7	106	158
☐ Mine Lighting 110 V · 3 × 16 AWG	3	0.125	3.18	0.480	12.2	114	170
☐ Mine Lighting 110 V · 4 × 16 AWG	4	0.125	3.18	0.512	13.0	134	199
☐ Mine Lighting 110 V · 5 × 16 AWG	5	0.125	3.18	0.550	14.0	158	235
☐ Mine Lighting 110 V · 6 × 16 AWG	6	0.125	3.18	0.590	15.0	183	272
☐ Mine Lighting 110 V · 7 × 16 AWG	7	0.125	3.18	0.590	15.0	191	284
☐ Mine Lighting 110 V · 8 × 16 AWG	8	0.125	3.18	0.670	17.0	225	335
☐ Mine Lighting 110 V · 9 × 16 AWG	9	0.125	3.18	0.690	17.5	247	368
14 AWG (2C-9C) 8 sizes							
☐ Mine Lighting 110 V · 2 × 14 AWG	2	0.140	3.56	0.490	12.4	119	177
☐ Mine Lighting 110 V · 3 × 14 AWG	3	0.140	3.56	0.510	13.0	138	205
☐ Mine Lighting 110 V · 4 × 14 AWG	4	0.140	3.56	0.550	14.0	166	247
☐ Mine Lighting 110 V · 5 × 14 AWG	5	0.140	3.56	0.588	14.9	195	290
☐ Mine Lighting 110 V · 6 × 14 AWG	6	0.140	3.56	0.630	16.0	225	335
☐ Mine Lighting 110 V · 7 × 14 AWG	7	0.140	3.56	0.630	16.0	238	354
☐ Mine Lighting 110 V · 8 × 14 AWG	8	0.140	3.56	0.720	18.3	278	414

Designation Cores × AWG	Cores No.	Insul. Ø in	Insul. Ø mm	Nominal OD in	Nominal OD mm	Weight ≈ lb/kft	Mass ≈ kg/km
☐ Mine Lighting 110 V · 9 × 14 AWG	9	0.140	3.56	0.755	19.2	302	449
12 AWG (2C–9C) 8 sizes							
☐ Mine Lighting 110 V · 2 × 12 AWG	2	0.160	4.06	0.526	13.4	148	220
☐ Mine Lighting 110 V · 3 × 12 AWG	3	0.160	4.06	0.555	14.1	177	263
☐ Mine Lighting 110 V · 4 × 12 AWG	4	0.160	4.06	0.596	15.1	213	317
☐ Mine Lighting 110 V · 5 × 12 AWG	5	0.160	4.06	0.642	16.3	254	378
☐ Mine Lighting 110 V · 6 × 12 AWG	6	0.160	4.06	0.690	17.5	297	442
☐ Mine Lighting 110 V · 7 × 12 AWG	7	0.160	4.06	0.690	17.5	316	470
☐ Mine Lighting 110 V · 8 × 12 AWG	8	0.160	4.06	0.770	19.6	388	577
☐ Mine Lighting 110 V · 9 × 12 AWG	9	0.160	4.06	0.815	20.7	426	634
10 AWG (2C–9C) 8 sizes							
☐ Mine Lighting 110 V · 2 × 10 AWG	2	0.180	4.57	0.570	14.5	186	277
☐ Mine Lighting 110 V · 3 × 10 AWG	3	0.180	4.57	0.598	15.2	226	336
☐ Mine Lighting 110 V · 4 × 10 AWG	4	0.180	4.57	0.645	16.4	276	411
☐ Mine Lighting 110 V · 5 × 10 AWG	5	0.180	4.57	0.698	17.7	331	493
☐ Mine Lighting 110 V · 6 × 10 AWG	6	0.180	4.57	0.750	19.0	401	597
☐ Mine Lighting 110 V · 7 × 10 AWG	7	0.180	4.57	0.750	19.0	462	688
☐ Mine Lighting 110 V · 8 × 10 AWG	8	0.180	4.57	0.835	21.2	519	772
☐ Mine Lighting 110 V · 9 × 10 AWG	9	0.180	4.57	0.875	22.2	626	932

- All 40 constructions use ASTM B174 Class K extra-flexible copper conductors with chemically cross-linked non-chlorinated polyolefin (XLPO) core insulation and a heavy-duty TPU outer jacket.
- Optional full copper braid shield and high-visibility orange TPU jacket available across all 2C to 9C sizes.

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/underground-lighting-cable



Typical values for this cable type, based on ASTM B174 Class K · MSHA 30 CFR Part 7 / 75.1719. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.