



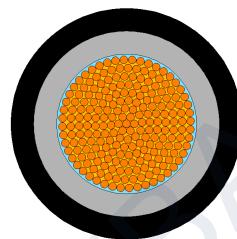
TEBAOFLEX CABLE

DATA SHEET

Industrial cable

DLO

2000 V flexible diesel locomotive cable, EPR / XL-CPE



APPLICATION

Flexible 2000 V power cable for switchgear, diesel-electric locomotives, mining and earth-moving equipment, and general-purpose flexible power leads. Suitable for applications requiring continuous movement, high flexibility and resistance to oil, sunlight, ozone, heat and flame. Sizes 1/0 AWG and larger may also be used as flexible power leads in cable trays in accordance with the applicable installation requirements.

CONSTRUCTION

Component	Description
Conductor	Class I fully annealed flexible stranded tinned copper, 14 AWG through 1111.1 kcmil, according to AAR 589
Separator	Paper separator tape over the conductor to facilitate stripping
Insulation	Flame-retardant, lead-free cross-linked ethylene-propylene rubber (EPR)
Outer jacket	Black flame-retardant, sunlight-, ozone- and oil-resistant lead-free cross-linked chlorinated polyethylene (XL-CPE)
Options	Fully annealed flexible bare copper conductor and alternative jacket colours available on request

CHARACTERISTICS

- Flexible diesel locomotive cable for continuous-flexing power applications.
- Rated for 90 deg C wet or dry service.
- Lubricant resistant, heat resistant and flame retardant.
- Sunlight, ozone and oil resistant.
- Flexible tinned copper stranding across a wide conductor-size range.
- Suitable as flexible power leads and for cable-tray use in sizes 1/0 AWG and larger.

TECHNICAL INFORMATION

Parameter	Unit	Value
Rated voltage - UL RHH/RHW-2	V	2000
Rated voltage - c(UL) RW90	V	1000
Temperature range	°C	-40 to +90
Minimum bending radius		8 x overall diameter
Torsion endurance		+/-180 deg/m for 5000 cycles at -40 deg C; cable weight compensated to 18 m
Primary standards		UL 44; CSA C22.2 No. 38
Industry standards		ICEA S-95-658 / NEMA WC70; NEC
Flame performance		UL 2556 VW-1; IEEE 1202 / CSA FT4 for 1/0 AWG and larger
Additional compliance		MSHA flame resistant; RoHS compliant
AC test voltage - 14 AWG to 4/0 AWG	V	14-10: 6000; 8-2: 7500; 1-4/0: 9000
AC test voltage - 262.6 to 1111.1 kcmil	V	262.6-444.4: 10000; 535.3-929.9: 11000; 1111.1: 13500

TECHNICAL DATA

DIMENSIONS AND WEIGHT

Nominal construction dimensions and approximate cable weights by conductor size.

Size AWG/kcmil / mm2	Strand	Conductor OD in / mm	Insulation in / mm	Jacket in / mm	Overall diameter in / mm	Approx. weight lb/1000 ft / kg/km
DLO 2000 V - 14 AWG to 3/0 AWG						
14 / 2.08	19/.0147	0.070 / 1.8	0.045 / 1.1	0.015 / 0.4	0.20 / 5.1	30 / 45
12 / 3.31	19/.0185	0.088 / 2.2	0.045 / 1.1	0.015 / 0.4	0.22 / 5.6	39 / 58
10 / 5.26	27/24	0.117 / 3.0	0.045 / 1.1	0.015 / 0.4	0.25 / 6.4	56 / 83
8 / 8.36	37/24	0.144 / 3.7	0.055 / 1.4	0.030 / 0.8	0.33 / 8.3	87 / 129
6 / 13.3	61/24	0.190 / 4.8	0.060 / 1.5	0.030 / 0.8	0.38 / 9.7	131 / 195
4 / 21.1	105/24	0.262 / 6.7	0.060 / 1.5	0.030 / 0.8	0.46 / 11.7	202 / 301
2 / 33.6	158/24	0.315 / 8.0	0.060 / 1.5	0.030 / 0.8	0.51 / 13.0	285 / 424
1 / 42.4	224/24	0.375 / 9.5	0.080 / 2.0	0.045 / 1.1	0.64 / 16.3	417 / 621
1/0 / 53.5	280/24	0.435 / 11.0	0.080 / 2.0	0.045 / 1.1	0.70 / 17.8	494 / 735
2/0 / 67.4	329/24	0.465 / 11.8	0.080 / 2.0	0.045 / 1.1	0.73 / 18.5	587 / 874
3/0 / 85	456/24	0.535 / 13.6	0.080 / 2.0	0.045 / 1.1	0.80 / 20.3	718 / 1069

NOTES

- Conductor size, conductor OD, insulation, jacket and overall diameter are shown in dual units.
- Approximate net weight is shown as lb/1000 ft / kg/km.

TECHNICAL DATA

DIMENSIONS AND WEIGHT

Nominal construction dimensions and approximate cable weights by conductor size.

Size AWG/kcmil / mm2	Strand	Conductor OD in / mm	Insulation in / mm	Jacket in / mm	Overall diameter in / mm	Approx. weight lb/1000 ft / kg/km
DLO 2000 V - 4/0 AWG to 1111.1 kcmil						
4/0 / 107	551/24	0.581 / 14.8	0.080 / 2.0	0.045 / 1.1	0.84 / 21.3	845 / 1258
262.6 / 133	650/24	0.617 / 15.7	0.090 / 2.3	0.065 / 1.7	0.94 / 23.9	1050 / 1563
313.3 / 158	777/24	0.671 / 17.0	0.090 / 2.3	0.065 / 1.7	1.00 / 25.3	1195 / 1778
373.7 / 189	925/24	0.735 / 18.7	0.090 / 2.3	0.065 / 1.7	1.06 / 26.9	1384 / 2060
444.4 / 225	1110/24	0.786 / 20.0	0.090 / 2.3	0.065 / 1.7	1.11 / 28.2	1634 / 2432
535.3 / 271	1332/24	0.877 / 22.3	0.090 / 2.3	0.065 / 1.7	1.20 / 30.5	1925 / 2865
646.4 / 327	1609/24	0.960 / 24.4	0.090 / 2.3	0.065 / 1.7	1.29 / 32.8	2307 / 3433
777.7 / 394	1924/24	1.054 / 26.8	0.090 / 2.3	0.065 / 1.7	1.38 / 35.1	2728 / 4060
929.9 / 475	2318/24	1.230 / 31.2	0.090 / 2.3	0.065 / 1.7	1.56 / 39.6	3570 / 5313
1111.1 / 562	2745/24	1.328 / 33.7	0.115 / 2.9	0.095 / 2.4	1.77 / 44.9	4232 / 6298

NOTES

- Conductor size, conductor OD, insulation, jacket and overall diameter are shown in dual units.
- Approximate net weight is shown as lb/1000 ft / kg/km.

CERTIFICATIONS



TEBAOFLEX CABLE