

LUTZE MOTIONFLEX® (C) TRAY-ER TPE, Shielded

Flexing Control Cable for Linear and Twisting Motion Applications



Application

- Shielded multi-conductor cable suitable for continuous motion applications with repetitive movement, linear flexing, and torsional stress
- Compatible with all major drag chain brands
- Compliant with NFPA 79 for wiring of industrial machinery
- TC-ER for use in cable trays without conduit, which can reduce installation costs in industrial environments
- WTTC – wind turbine tray cable rating for use in wind power generation
- Dry, damp or wet conditions

Characteristics

- Highly flexible conductor design
- Specially formulated jacket for oil resistance and easy strip
- Cutting oil resistant - mineral & bio/vegetable based oils *specifically tested with plant based cutting oil*
- Crush impact resistant
- Gas/vapor-tight sheath per UL 1277
- Sunlight resistant
- Flame retardant
- Talc and silicone free

Technical Data

| | |
|--------------------|--|
| Voltage | 600V 90C TC-ER 1000V 90C WTTC 600V 105C AWM |
| Temperature range | Moving -5°C - +90°C Fixed -40°C - +105°C |
| Bending radius min | Moving 12 x cable OD Fixed 6 x cable OD |
| Torsion angle max. | +/- 130° / 1m cable length |
| Conductor marking | Black with white numbers and one green/yellow ground |
| Oil resistance | Oil Res I, Oil Res II |
| Approvals | UL Type TC-ER WTTC UL/AWM/CE AWM 21270 Meets NEC 336, 392 Class I & II, Div. 2 and Class I Zone 2 per NEC 501, 502, 505 c(UL) TC, CIC FT4 UL 1277 RoHS, REACH |

Construction

- AWG conductor
- Flexible fine wire stranded bare copper conductors
- Special low friction PVC/Nylon insulation
- Tinned copper braid shield with >80% coverage
- Oil resistant TPE jacket
- Black jacket similar to RAL 9005

Specifications are subject to change without prior notice

| Part No. | Description No. of conductors incl. ground | OD / Ø ca. mm | OD / Ø inches | Weight Lbs/Mft | Copper Lbs/Mft |
|------------------------|--|------------------|------------------|-------------------|-------------------|
| AWG 18 (41/34) | | | | | |
| A4211803 | AWG18/03C | 7.8 | 0.310 | 59 | 26 |
| A4211804 | AWG18/04C | 8.3 | 0.330 | 70 | 32 |
| A4211805 | AWG18/05C | 9.0 | 0.354 | 83 | 39 |
| A4211807 | AWG18/07C | 10.2 | 0.405 | 110 | 52 |
| A4211812 | AWG18/12C | 12.0 | 0.475 | 153 | 85 |
| AWG 16 (65/34) | | | | | |
| A4211603 | AWG16/03C | 8.6 | 0.340 | 79 | 42 |
| A4211604 | AWG16/04C | 9.4 | 0.370 | 91 | 47 |
| A4211605 | AWG16/05C | 10.2 | 0.400 | 113 | 61 |
| A4211607 | AWG16/07C | 11.6 | 0.460 | 167 | 76 |
| A4211612 | AWG16/12C | 14.7 | 0.580 | 237 | 132 |
| AWG 14 (104/34) | | | | | |
| A4211403 | AWG14/03C | 9.4 | 0.370 | 95 | 53 |
| A4211404 | AWG14/04C | 10 | 0.395 | 116 | 68 |
| A4211405 | AWG14/05C | 10.9 | 0.430 | 140 | 83 |
| A4211407 | AWG14/07C | 12.7 | 0.500 | 199 | 119 |
| A4211412 | AWG14/12C | 15.9 | 0.625 | 307 | 191 |
| AWG 12 (168/34) | | | | | |
| A4211203 | AWG12/03C | 11.3 | 0.445 | 133 | 80 |
| A4211204 | AWG12/04C | 12.3 | 0.485 | 168 | 104 |
| A4211205 | AWG12/05C | 14.2 | 0.560 | 224 | 132 |
| A4211207 | AWG12/07C | 16.5 | 0.650 | 307 | 180 |
| AWG 10 (259/34) | | | | | |
| A4211004 | AWG10/04C | 15.3 | 0.604 | 263 | 151 |
| A4211005 | AWG10/05C | 16.6 | 0.657 | 345 | 219 |