

## Technical data sheet

TPE Motor cables · static · shielded

### LUTZE SILFLEX® M (C) MOTOR TPE

Flexible Motor Cable for Allen-Bradley and other systems



#### Identification

Type SI M(C)TPE SE(4GAWG4+(2×AWG16)) 0,6/1KV OR  
Part No. [A3170404](#)

#### Product version

Datasheet version 00

#### Use/Application/Properties

- |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application | <ul style="list-style-type: none"><li>• Shielded motor supply cable to connect power to 3-phase motors. VFD's and Servo Drives</li><li>• Cable design for harsh industrial environments and operating conditions with high noise levels</li><li>• Improved insulation design with additional conductor stress relief layer as a power distortion suppressant</li><li>• Compliant with NFPA 79 requirements</li><li>• TC-ER for use with cable trays without conduit, which can reduce installation costs in industrial environments</li><li>• Dry, damp or wet locations</li></ul>                                  |
| Properties  | <ul style="list-style-type: none"><li>• Improved Design with conductor stress relief layer helps to prevent premature cable failure and reduces corona effects, increasing reliability and lifetime</li><li>• Crush impact resistant</li><li>• Gas/vapor-tight sheath per UL 1277</li><li>• Very round cable with small Diameter</li><li>• Specially formulated TPE jacket for superior oil resistance</li><li>• Largely resistant to mineral and vegetable-based cutting oils</li><li>• Non-wicking fillers</li><li>• Sunlight resistant</li><li>• Flame-retardant</li><li>• Talc free and silicone free</li></ul> |

#### Construction

Description SILFLEX® M (C) TPE

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SYSTEMATIC TECHNOLOGY

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|                                    |                    |
|------------------------------------|--------------------|
| Number of conductors/cross-section | (4×AWG4+1×2×AWG18) |
| Number of conductors               | 6                  |
| Cross-section, metric              | 25 mm <sup>2</sup> |
| Cross-section AWG                  | AWG 4              |
| Jacket material                    | TPE                |
| Jacket color                       | orange RAL 2003    |
| Outer Ø                            | 29.5 mm            |
| Outer Ø                            | 1.162 inch         |
| Weight                             | 1119 Lbs/Mft       |
| Cu-Index                           | 613 Lbs/Mft        |

#### Construction Element 1

|                        |                                     |
|------------------------|-------------------------------------|
| Element construction   | AWG4/4C                             |
| Conductor construction | AWG 4 (413/30)                      |
| Conductor              | AWG conductor<br>CU-wire bare       |
| Conductor category     | fine wire<br>Class K                |
| Conductor marking      | brown · black · blue · green/yellow |
| Conductor insulation   | PVC/Nylon                           |

#### Construction Element 2

|                        |                               |
|------------------------|-------------------------------|
| Element construction   | AWG18/1TSP                    |
| Conductor construction | AWG 18                        |
| Conductor              | AWG conductor<br>CU-wire bare |
| Conductor category     | fine wire                     |
| Conductor marking      | black · white                 |
| Conductor insulation   | PVC/Nylon                     |
| Stranding              | conductors stranded in pairs  |

#### Overall construction

|                        |                                                                              |
|------------------------|------------------------------------------------------------------------------|
| Overall shield         | Braid shield<br>tinned copper wires<br>optical cover approx. 85 %            |
| Jacket characteristics | Oil resistant<br>mineral oil-resistant<br>bio-oil-resistant<br>Silicone-free |

#### Technical data

|                              |                                                                                                   |
|------------------------------|---------------------------------------------------------------------------------------------------|
| Rated voltage U <sub>N</sub> | 600 V UL TC<br>600 V UL MTW<br>1000 V WTTC<br>1000 V Flexible Motor Supply<br>600 V UL AWM 105 °C |
| Temperature range fixed      | -40 °C ... +105 °C                                                                                |

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|                              |     |
|------------------------------|-----|
| Minimum bending radius fixed | 6×D |
|------------------------------|-----|

#### Technical Data Element 1

|                      |         |
|----------------------|---------|
| Element construction | AWG4/4C |
|----------------------|---------|

#### Technical Data Element 2

|                      |            |
|----------------------|------------|
| Element construction | AWG18/1TSP |
|----------------------|------------|

#### Certifications/Standards

|                            |                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certifications             | UL Flexible Motor Supply Cable<br>UL Type TC-ER<br>cULus<br>UL AWM<br>UL MTW<br>WTTTC<br>Class I and II, Div. 2<br>Class 1 Div. 2 per NEC<br>Zone 2 per NEC 501, 502, 505<br>cUL TC<br>CIC FT4<br>UL 1277 |
| Conformity                 | CE<br>RoHS<br>REACH<br>TSCA                                                                                                                                                                               |
| Oil resistant according to | Oil Res I<br>Oil Res II                                                                                                                                                                                   |

#### General

|      |                                                                                  |
|------|----------------------------------------------------------------------------------|
| Note | CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU |
|------|----------------------------------------------------------------------------------|