

## Technical data sheet

### Flexible Composite VFD Cable · shielded

#### LUTZE DRIVEFLEX® XLPE (C) 1 TSP PVC With one Control pair for Stationary Applications



#### Identification

Type DR XLPE (C) SE I PVC (4×AWG16+(2×AWG18))  
Part No. [A2171604](#)

#### Product version

Datasheet version 00

#### Use/Application/Properties

- |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application | <ul style="list-style-type: none"><li>• Dual-shielded motor supply cable to connect power to 3-phase-motors, VFDs and servo drives</li><li>• Cable design for harsh industrial environments and operating conditions with high noise levels</li><li>• Thermoset XLPE offering superior overload and short-circuit temperature</li><li>• Increased wall thickness insulation type RHW-2, offering lower capacitance and higher impedance making it ideal for applications with high voltage spikes and long cable run</li><li>• Compliant with NFPA 79 requirements</li><li>• TC-ER-JP for use with cable trays without conduit, which can reduce installation costs in industrial environments</li><li>• WTTC – wind turbine tray cable rating for use in wind power generation</li><li>• Dry, damp or wet conditions</li></ul> |
| Properties  | <ul style="list-style-type: none"><li>• Flexible XLPE conductors</li><li>• High insulation resistance</li><li>• Low-capacitance cable</li><li>• Effective EMC-compatible shielding thanks to 2-layer shield</li><li>• Specially formulated jacket for oil resistance and easy strip design</li><li>• Non-wicking fillers</li><li>• Ecolab certified resistance to common cleaning agents and chemicals used in food and beverage washdown procedures</li><li>• Crush impact resistant</li><li>• Gas/vapor-tight sheath per UL 1277</li><li>• Sunlight resistant</li><li>• Flame-retardant</li><li>• Direct burial</li><li>• Talc free and silicone free</li></ul>                                                                                                                                                               |

#### United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park  
Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU  
Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2  
[www.lutze.com](http://www.lutze.com) • [sales.gb@lutze.co.uk](mailto:sales.gb@lutze.co.uk)

#### Germany: Friedrich Lütze GmbH

Postfach 12 24 (PLZ 71366) • Bruckwiesenstraße 17-19 • D-71384 Weinstadt  
Tel. +49 (0)7151 6053-0 • Fax +49 (0)7151 6053-277(-288)  
[www.luetze.de](http://www.luetze.de) • [info@luetze.de](mailto:info@luetze.de)

17.04.2023 • Subject to technical modification

Part No. [A2171604](#) • Datasheet version: 00

page 1 of 3



SYSTEMATIC TECHNOLOGY

## Technical data sheet

### Flexible Composite VFD Cable · shielded

#### Construction

|                                    |                               |
|------------------------------------|-------------------------------|
| Description                        | DRIVEFLEX® XLPE (C) 1 TSP PVC |
| Number of conductors/cross-section | (4AWG16+1×2×AWG18)            |
| Number of conductors               | 6                             |
| Cross-section, metric              | 1.5 mm <sup>2</sup>           |
| Cross-section AWG                  | AWG 16                        |
| Jacket material                    | PVC                           |
| Jacket color                       | black similar to RAL 9005     |
| Outer Ø                            | 15.7 mm                       |
| Outer Ø                            | 0.62 inch                     |
| Weight                             | 33.9 kg/100 m                 |
| Weight                             | 228 Lbs/Mft                   |
| Cu-Index                           | 90 Lbs/Mft                    |

#### Construction Element 1

|                        |                                                |
|------------------------|------------------------------------------------|
| Element construction   | AWG16/4C                                       |
| Conductor construction | AWG 16 (26/30)                                 |
| Conductor              | AWG conductor<br>CU-wire tin-plated            |
| Conductor category     | fine wire<br>Class K                           |
| Conductor marking      | black • with white number print • green/yellow |
| Conductor insulation   | XLPE<br>RHW-2                                  |
| Stranding              | strands braided together                       |

#### Construction Element 2

|                        |                                     |
|------------------------|-------------------------------------|
| Element construction   | AWG18/1TSP                          |
| Conductor construction | AWG 18 (19/30)                      |
| Conductor              | AWG conductor<br>CU-wire tin-plated |
| Conductor category     | fine wire                           |
| Conductor marking      | black • with white number print     |
| Conductor insulation   | XLPE<br>XHHW-2                      |
| Stranding              | conductors stranded in pairs        |

#### Overall construction

|                        |                                                                                  |
|------------------------|----------------------------------------------------------------------------------|
| Drain wire             | CU-wire tin-plated                                                               |
| Overall shield         | Foil shield<br>tinned copper wires<br>Braid shield<br>optical cover approx. 80 % |
| Jacket characteristics | Oil resistant<br>Silicone-free                                                   |

## Technical data sheet

### Flexible Composite VFD Cable · shielded

#### Technical data

|                              |                                                                                                           |
|------------------------------|-----------------------------------------------------------------------------------------------------------|
| Rated voltage U <sub>N</sub> | 600 V 90C UL TC-ER-JP<br>1000 V Flexible VFD servo cable 90C<br>1000 V WTTC 90C<br>Cable, 1000 V 105C AWM |
| Temperature range fixed      | -40 °C ... +105 °C                                                                                        |
| Minimum bending radius fixed | 6×D                                                                                                       |

#### Technical Data Element 1

|                      |          |
|----------------------|----------|
| Element construction | AWG16/4C |
|----------------------|----------|

#### Technical Data Element 2

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

#### Certifications/Standards

|                            |                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Certifications             | UL Flexible Motor Supply Cable<br>Flexible VFD Servo Cable<br>TC-ER-JP<br>WTTC<br>UL DP-1<br>Meets NEC 336,392<br>Class I and II, Div. 2 and Class I<br>Zone 2 per NEC 501, 502, 505<br>C(UL) TC and CIC FT4<br>UL 1277<br>P-07-KA130021-MSHA |
| UL style                   | AWM 20886                                                                                                                                                                                                                                     |
| Conformity                 | CE<br>RoHS<br>REACH<br>TSCA                                                                                                                                                                                                                   |
| Oil resistant according to | Oil Res II                                                                                                                                                                                                                                    |

#### General

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