

## Technical data sheet

PUR control cables · C-track compatible · shielded

### LUTZE SUPERFLEX® PLUS 4100 (C) PUR

For highest requirements



#### Identification

Type SU+ 4100 (C) PUR 18G2,5  
Part No. [113233](#)

#### Product version

Datasheet version 03

#### Use/Application/Properties

- |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application | <ul style="list-style-type: none"><li>• Machine and device construction, transport and conveyor technology, heating and climate technology</li><li>• In areas with high concentrations of people or material assets, where corrosive gases need to be avoided in the event of fire</li><li>• As a monitoring, measurement and control cable for industrial applications</li><li>• Especially for harsh environments</li><li>• For installation in energy chains with constant linear movement</li><li>• Anywhere where electrical interference fields can influence the signal transmission</li></ul>                                                                                                                                                                                                                                                                                                                     |
| Properties  | <ul style="list-style-type: none"><li>• Reduced friction due to very smooth conductor insulation (HGI) for high mechanical loads</li><li>• High protection against electromagnetic interferences (EMI)</li><li>• Braided shield optimised for continuous flexing use</li><li>• Low capacitance, very good electrical properties</li><li>• Flame retardant, self extinguishing</li><li>• Halogen free, no corrosive gases</li><li>• Very good alternating bending strength</li><li>• Low adhesion, abrasion-resistant, nick-resistant, tear-resistant</li><li>• Hydrolysis-resistant, microbe-resistant, and rot-resistant</li><li>• Weathering, ozone and UV resistant (normal lighting conditions)</li><li>• Industrial and salt water resistant</li><li>• Excellent coolant and lubricant resistance</li><li>• Largely resistant to oils, greases, alcohol-free benzines and kerosene</li><li>• 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  
[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  
[www.luetze.de](http://www.luetze.de) • [info@luetze.de](mailto:info@luetze.de)

04.03.2025 • Subject to technical modification

Part No. [113233](#) • Datasheet version: 03

page 1 of 3

## Technical data sheet

PUR control cables · C-track compatible · shielded

### Construction

|                                    |                              |
|------------------------------------|------------------------------|
| Description                        | SUPERFLEX® PLUS 4100 (C) PUR |
| Number of conductors/cross-section | (18G2,5)                     |
| Number of conductors               | 18                           |
| Cross-section, metric              | 2.5 mm <sup>2</sup>          |
| Jacket material                    | PUR                          |
| Jacket color                       | grey similar to RAL 7001     |
| Outer Ø                            | 20.4 mm                      |
| Weight                             | 74.3 kg/100 m                |
| Weight                             | 497.81 Lbs/Mft               |
| Cu-Index                           | 54 kg/100 m                  |

### Construction Element 1

|                            |                                                             |
|----------------------------|-------------------------------------------------------------|
| Element construction       | (18G2,5)                                                    |
| Conductor                  | CU-wire bare                                                |
| Conductor category         | DIN EN 60228, Class 6<br>IEC 60228, Class 6<br>DIN EN 13602 |
| Conductor marking standard | DIN VDE 0293                                                |
| Conductor insulation       | TPE                                                         |
| Wrapping                   | Non-woven material                                          |

### Overall construction

|                   |                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------|
| Overall stranding | Conductors layered construction<br>Conductors twisted without mechanical stress<br>Layer pitch optimised |
| Inner jacket      | TPE                                                                                                      |
| Overall shield    | Braid shield<br>Tinned copper wires<br>Optical cover approx. 85 %                                        |

### Technical data

|                               |                     |
|-------------------------------|---------------------|
| Rated voltage UL              | 1000 V              |
| Test voltage type             | AC 4000 V           |
| Temperature range moving      | -25 °C ... +90 °C   |
| Temperature range fixed       | -40 °C ... +90 °C   |
| Minimum bending radius moving | 7.5×D               |
| Minimum bending radius fixed  | 5×D                 |
| Bending cycles                | ≥10 Mio             |
| Speed                         | 5 m/s               |
| Acceleration                  | 10 m/s <sup>2</sup> |
| Torsion cycles                | ≥ 1 Mio             |
| Torsion                       | ± 30°/m             |
| Speed of torsion              | 60 °/s              |
| Acceleration of torsion       | 30 °/s <sup>2</sup> |

## Technical data sheet

PUR control cables · C-track compatible · shielded

---

### Technical Data Element 1

---

|                                   |           |
|-----------------------------------|-----------|
| Element construction              | (18G2,5)  |
| Insulation resistance at 20 °C    | 100 MΩ×km |
| Conductor resistance              | 7.98 Ω/km |
| Operating capacitance wire-wire   | 77 pF/m   |
| Operating capacitance wire-shield | 116 pF/m  |

---

### Certifications/Standards

---

|                               |                                                                                                 |
|-------------------------------|-------------------------------------------------------------------------------------------------|
| Certifications                | cURus                                                                                           |
| UL style                      | AWM 21209                                                                                       |
| Conformity                    | CE<br>RoHS<br>REACH                                                                             |
| Burning behavior according to | VDE 0482-332-1-2<br>DIN EN 60332-1-2<br>IEC 60332-1<br>UL 1581 part VW-1 Flame Test<br>CSA FT 1 |
| Oil resistant according to    | Oil Res II                                                                                      |
| Halogen free according to     | IEC 60754-1<br>DIN EN 60754-1                                                                   |

---

### General

---

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