

# Technical data sheet - LÜTZE SUPERFLEX<sup>®</sup> PLUS (C) PUR FEEDBACK

## Feedback cables for Bosch-Rexroth and other systems

### For highest requirements in drive technology



PUR feedback cables · C-track compatible · shielded

|                       |           |   |
|-----------------------|-----------|---|
| <b>Identification</b> | Type      | SU+(C)P SE(2×1,0+4×2×0,25)UL 300V<br>OR |
|                       | Part-No.  | 110941                                  |
| INK Description*      | INK-0209* |   |

#### Use/Application/Properties

|             |   |
|-------------|---|
| Application | <ul style="list-style-type: none"> <li>• Incremental encoder cable, connection cable for tacho sensor, brake sensor, speed sensor</li> <li>• Due to Full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants</li> <li>• Especially for industrial environments in mechanical and system engineering</li> </ul>   |
| Properties  | <ul style="list-style-type: none"> <li>• High active and passive interference resistance (EMC)</li> <li>• Braided shield optimised for continuous flexible use</li> <li>• Very good alternating bending strength</li> <li>• Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant</li> <li>• Hydrolysis-resistant, microbe-resistant, and rot-resistant</li> <li>• Weatherproof, ozone and UV resistant (normal lighting conditions)</li> <li>• Good ruggedness and salt water resistance</li> <li>• Excellent coolant and lubricant resistance</li> <li>• Resistant to most oils, greases, alcohol-free benzines and kerosene</li> <li>• Silicone free</li> <li>• RoHS compliant</li> </ul> |

15.03.2019 – Subject to technical modification

Part-No. 110941

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#### Construction

|                                    |  |
|------------------------------------|--|
| Description                        | SUPERFLEX <sup>®</sup> PLUS (C) PUR FEEDBACK |
| Number of conductors/cross-section | (2×1.0+4×2×0.25)                             |
| Jacket material                    | PUR  |
| Jacket color                       | orange RAL 2003                              |
| Outer Ø                            | 8.9 mm                                       |
| Outer Ø                            | 0.35 inches                                  |
| Surface                            | adhesion-free<br>matt                        |
| Weight                             | 12 kg/100 m                                  |
| Weight                             | 81 Lbs/Mft                                   |
| Cu-Index                           | 6.4 kg/100 m                                 |
| Cu-Index                           | 43 Lbs/Mft                                   |

#### Element 1

|                      |   |
|----------------------|---|
| Element construction | 2×1.0   |
| Conductor            | CU-wire bare  |
| Conductor category   | IEC 60228, Class 6<br>Superfinely stranded DIN VDE 0295<br>class 6    |
| Conductor marking    | white<br>brown  |
| Conductor insulation | Special TPE   |
| Stranding            | conductors twisted without mechanical stress<br>layer pitch optimised |

#### Element 2

|                      |  |
|----------------------|--|
| Element construction | 4×2×0.25   |
| Conductor            | CU-wire bare   |
| Conductor category   | IEC 60228, Class 6<br>Superfinely stranded DIN VDE 0295<br>class 6 |
| Conductor marking    | brown<br>green<br>grey<br>pink<br>red<br>black<br>blue<br>violet   |
| Conductor insulation | Special TPE  |

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|                             |  |
|-----------------------------|--|
| Stranding                   | conductors stranded in pairs<br>layer pitch optimised<br>conductors twisted without mechanical stress  |
| <b>overall construction</b> |  |
| Overall stranding           | layered construction around core<br>elements stranded together<br>layer pitch optimised<br>conductors twisted without mechanical stress        |
| Overall wrapping            | Fleece taping  |
| Overall shield              | Braid shield<br>Tinned copper wires<br>optical cover approx. 85%   |
| Jacket characteristics      | Flame-retardant<br>Oil resistant<br>grease-resistant<br>petrol-resistant (alcohol-free)<br>kerosene-resistant<br>Silicone-free<br>Halogen free |

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#### Technical data

|                               |                     |
|-------------------------------|---------------------|
| Rated voltage                 | 300 V               |
| Test voltage type             | AC 2000 V           |
| Temperature range moving      | -25 °C ... +80 °C   |
| Temperature range fixed       | -40 °C ... +80 °C   |
| Minimum bending radius moving | 7.5×D               |
| Minimum bending radius fixed  | 5×D                 |
| Travel distance               | ≤15 m               |
| Speed                         | 300 m/s             |
| Acceleration                  | 50 m/s <sup>2</sup> |

#### Element 1

|                                   |           |
|-----------------------------------|-----------|
| Element construction              | 2×1.0     |
| Insulation resistance at 20 °C    | 200 MΩ×km |
| Operating capacitance wire-wire   | 75 pF/m   |
| Operating capacitance wire-shield | 135 pF/m  |

#### Element 2

|                                |           |
|--------------------------------|-----------|
| Element construction           | 4×2×0.25  |
| Insulation resistance at 20 °C | 200 MΩ×km |

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|                                   |          |
|-----------------------------------|----------|
| Operating capacitance wire-wire   | 57 pF/m  |
| Operating capacitance wire-shield | 103 pF/m |

#### Approvals/Standards

|                               |   |
|-------------------------------|---|
| Approvals                     | cURus   |
| UL style                      | AWM 20233   |
| Conformity                    | CE<br>RoHS<br>REACH   |
| Burning behavior according to | IEC 60332-1<br>DIN EN 60332-1-2<br>VDE 0482 322-1-2<br>UL 1581 Part 1080 VW-1<br>UL FT1 |
| Halogen free according to     | DIN EN 60754-1<br>IEC 60754-1   |

#### General

|      |   |
|------|---|
| Note | CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU<br>* Indramat article designations are registered trademarks |
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#### Logo



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