

Technical data sheet

PUR control cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS 3100 (C) PUR

For highest requirements



Identification

Type SU+ 3100 (C) PUR 7G1,0
Part No. [113090](#)

Product version

Datasheet version 02

Use/Application/Properties

- | | |
|-------------|--|
| Application | <ul style="list-style-type: none">• Machine and device construction, transport and conveyor technology, heating and climate technology• In areas with high concentrations of people or material assets, where corrosive gases need to be avoided in the event of fire• As a monitoring, measurement and control cable for industrial applications• Especially for harsh environments• For installation in energy chains with constant linear movement |
| Properties | <ul style="list-style-type: none">• Reduced friction due to very smooth conductor insulation (HGI) for high mechanical loads• Low capacitance, very good electrical properties• Flame-retardant, self-extinguishing• Very good alternating bending strength• Low adhesion, abrasion-resistant, nick-resistant, tear-resistant• Hydrolysis-resistant, microbe-resistant, and rot-resistant• Weathering, ozone and UV resistant (normal lighting conditions)• industrial- and salt water resistant• Excellent coolant and lubricant resistance• Largely resistant to oils, greases, alcohol-free benzines and kerosene• Silicone free• Halogen free |

Construction

Number of conductors/cross-section	(7G1,0)
Number of conductors	7
Cross-section, metric	1 mm ²
Jacket material	PUR
Jacket color	grey similar to RAL 7001
Outer Ø	10.2 mm

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SYSTEMATIC TECHNOLOGY

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Cu Index 10.4 kg/100 m

Construction Element 1

Element construction	(7G1,0)
Conductor	CU-wire bare
Conductor category	DIN EN 60228, class 6 IEC 60228, Class 6 DIN EN 13602
Conductor marking	black · with white number print · green/yellow
Conductor insulation	TPE
Cabling	conductors layered construction conductors twisted without mechanical stress layer pitch optimised

Overall construction

Overall stranding	conductors layered construction conductors twisted without mechanical stress layer pitch optimised
Overall wrapping	Fleece taping
Inner jacket	TPE
Overall shield	Braid shield tinned copper wires optical cover approx. 85 %

Technical data

Rated voltage U_0/U	300/500V
Rated voltage UL	300 V
Test voltage type	3000 V
Temperature range moving	-25 °C ... +90 °C
Temperature range fixed	-40 °C ... +90 °C
Minimum bending radius moving	7.5×cable OD
Minimum bending radius fixed	5×cable OD
Bending cycles	≥10 Mio
Speed	5 m/s
Acceleration	10 m/s ²
Torsion cycles	≥ 1 Mio
Torsion	± 30°/m
Speed of torsion	60 °/s
Acceleration of torsion	30 °/s ²

Technical Data Element 1

Element construction	(7G1,0)
Insulation resistance at 20 °C	100 MΩ×km
Conductor resistance	19.5 Ω/km
Operating capacitance wire-wire	78 pF/m
Operating capacitance wire-shield	117 pF/m

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Approvals/Standards

Approvals	cURus
UL style	AWM 21209
Conformity	CE RoHS REACH
Burning behavior according to	VDE 0482-332-1-2 DIN EN 60332-1-2 IEC 60332-1 UL 1581 Part VW-1 Flame Test CSA FT 1
Halogen free according to	IEC 60754-1 DIN EN 60754-1

General

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