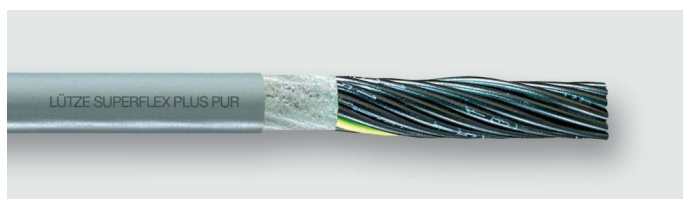


Technical data sheet

PUR control cables · C-track compatible · unshielded

LÜTZE SUPERFLEX® PLUS N PUR 300 V

For highest requirements



Identification

Type SU+N PUR 12G0,5 300V
Part No. [113446](#)

Product version

Datasheet version 00

Use/Application/Properties

- Application
- Machine and device construction, transport and conveyor technology, heating and climate technology
 - In areas with high concentrations of people or material assets
 - As a monitoring, measurement and control cable for industrial applications
 - Especially for harsh environments
 - For installation in energy chains with constant linear movement
- Properties
- 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

Description SUPERFLEX® PLUS N PUR 300V
Number of conductors/cross-section 12G0.5
Number of conductors 12
Cross-section, metric 0.5 mm²
Cross-section AWG AWG 21
Jacket material PUR
Jacket color grey similar to RAL 7001

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SYSTEMATIC TECHNOLOGY

Technical data sheet

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Outer Ø	8 mm
Outer Ø	0.315 inch
Weight	9.7 kg/100 m
Weight	65 Lbs/Mft
Cu Index	5.9 kg/100 m
Cu Index	40 Lbs/Mft

Construction Element 1

Element construction	12G0.5
Conductor	CU-wire bare
Conductor category	IEC 60228, Class 6 Superfinely stranded DIN VDE 0295 Class 6
Conductor marking	black · with white number print · green/yellow
Conductor marking standard	DIN EN 50334
Conductor insulation	Special TPE

Overall construction

Overall stranding	conductors layered construction layer pitch optimised conductors twisted without mechanical stress
Overall wrapping	Non-woven material
Jacket characteristics	Flame-retardant self-extinguishing Oil resistant grease-resistant petrol-resistant (alcohol-free) kerosene-resistant Silicone-free Halogen free

Technical data

Rated voltage U_0/U	300/500 V
Rated voltage UL	300 V
Test voltage type	AC 3000 V
Temperature according to UL	80 °C
Temperature range moving	-25 °C ... +80 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×cable OD
Minimum bending radius fixed	4×cable OD
Bending cycles	≥10 Mio
Travel distance	≤20 m
Speed	≤5 m/s
Acceleration	≤10 m/s ²
Torsion cycles	≥ 1 Mio
Torsion	± 60°/m
Speed of torsion	60 °/s

Technical data sheet

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Acceleration of torsion 30 °/s²

Technical Data Element 1

Element construction 12G0.5
Insulation resistance at 20 °C ≥1000 MΩ×km
Operating capacitance wire-wire approx.71 pF/m
Operating capacitance wire-shield approx.103 pF/m

Approvals/Standards

Approvals cURus
UL style AWM 20233
Conformity CE
RoHS
REACH
Burning behavior according to IEC 60332-1
DIN EN 60332-1-2
VDE 0482 322-1-2
UL 1581 part VW-1 Flame Test
UL FT1
Oil resistant according to Oil Res II
Halogen free according to DIN EN 60754-1
IEC 60754-1
UV-resistant according to DIN EN ISO 4892-2-A

General

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