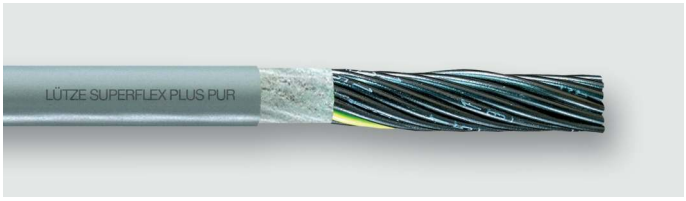
Technical data sheet

PUR control cables · C-track compatible · unshielded

LÜTZE SUPERFLEX® PLUS N PUR 300 V
For highest requirements



Identification

Type	SU+N PUR 18G0,5 300V
Part No.	113438

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	18G0.5
Number of conductors	18
Cross-section, metric	0.5 mm²
Cross-section AWG	AWG 19
Jacket material	PUR
Jacket color	grey similar to RAL 7001

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Outer Ø	9.3 mm
Outer Ø	0.366 inch
Weight	13.8 kg/100 m
Weight	91 Lbs/Mft
Cu Index	8.8 kg/100 m
Cu Index	59 Lbs/Mft

Construction Element 1

Element construction	18G0.5
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/s²
Torsion cycles	≥ 1 Mio
Torsion	± 60°/m
Speed of torsion	60 °/s

Acceleration of torsion	30 °/s²

Technical Data Element 1

Element construction	18G0.5
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