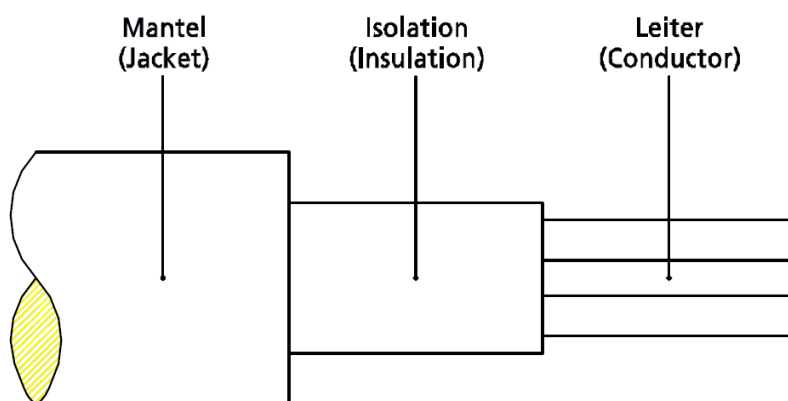
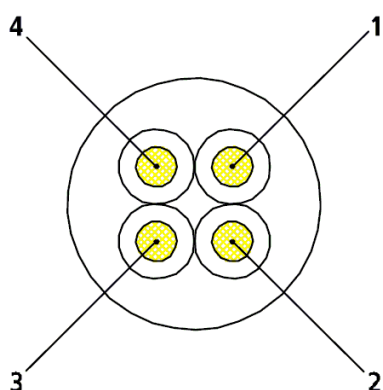
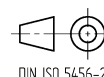


01. Drawing



The information/details in this datasheet merely contain general descriptions or performance factors which, when applied in an actual situation, do not always correspond with the described form, and may be amended by way of the further development of products. The desired performance factors shall only be binding if these are expressly agreed on conclusion of the contract.



02. Application:

Description: as a flexible, flame-retardant and halogen-free control line in the industrial mechanical- and plant engineering, for high requirements, particularly for the employment in cable carriers (Drag chains) and moved machine parts

03. Line construction:

03.01 Litz construction: Bunched conductor in acc. with VDE 0295, EN 60228, IEC 60228
 Wire material: Cu-ETP1 bare in acc. with DIN EN 13602
 Wire size: 0,34 mm²
 Litz construction: ca. 42 x Ø 0,10 mm

03.02. Core insulation: No adhesion between the cores
 Wire isolation: PP
 Core-diameter: Ø 1,30 ± 0,10 mm
 Number of wires: 4
 Correlation Core number-Core color: 1 brown/BN; 2 white/WH; 3 blue/BU; 4 black/BK

03.09. shielding: no

03.13. Outer jacket:
 Jacket material: PUR
 Jacket-diameter: Ø 4,70 ±0,15mm
 Jacket color: black matt similarly RAL 9005

Surface free from lubricant and grease.

Color: yellow
 Printing: * 225 / ** PUR E*** cURus AWM STYLE 20549 AWM I/II A/B
 80°C 300V FT2 + SUITABLE FOR USE WITHIN
 EQUIPMENT ONLY 8021321

- * = Producer identification
- ** = Production-year and -week
- *** = UL-Producer number
- **** = UL-Style-Number

04. Characteristics:

04.01 Temperature range: (Lifetime > 20.000 h)
 in stationary position: - 50 °C - + 90 °C (UL: + 80 °C)
 3000 h: - 50 °C - + 105 °C (UL: + 80 °C)
 flexible: - 25 °C - + 90 °C (UL: + 80 °C)
 Ambient temperature in the drag chain movement: - 25 °C - + 60 °C

04.02 Electrical characteristics: at 20 °C
 nominal voltage: ≤ 300 V
 test voltage core/core, (50 Hz, 1 min.): ≥ 2000 V eff.
 conductor resistance: max. 57,0 Ω/km
 Insulation resistance: > 1000 MΩxkm

Bending radius in stationary position:	> 5 x D
Bending radius in flexible stress:	> 10 x D
Bending radius drag chain	> 10 x D
Angle of torsion max.:	± 360°
Lenght of torsion:	1 m
Bending cycles at torsion:	> 5 Mio

04.04 Drag chain characteristics:	yes
Bending cycles *:	> 5 Mio
permissible acceleration:	max. 5 m/s ²
permissible horizontal traverse path:	at 5 m/s ² ► 5 m
permissible vertical traverse path:	at 5 m/s ² ► 2 m
permissible traverse speed at 5 m hor. trav. path:	max. 200 m/min

* depending on horizontal travel length and acceleration.

05. Burning behavior:

flame retardent acc. to:	DIN EN 60332-2-2, VDE 0482-332-2-2, IEC 60332-2-2, CSA FT2
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06. Halogen-free:

Tests acc. to:	DIN EN 50267-2-1, IEC 60754-1, VDE 0482-267-2-1
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07. Resistances:

Oil rest. tests acc. with:	good
others:	good microbes and hydrolysis resistance good chemical resistance

08. Other characteristics:

Exclusion of dangerous materials acc.:	EU-Directives: 1907/2006/EG, Reach 2011/65/EU, RoHS2 2015/863/EU, RoHS3
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further legal requirements:	EU-Directive: 2014/35/EU, LVD
others:	mainly plasticizer diffusion free Exclusion of PVC and Silicone free of lacquer wetting disturbing substances Coldness Flexibility

09. Appovals:

UL/CSA

Jacket:	cURus in acc. with AWM Style 20549 (80 °c / 300 V)
Core:	cURus in acc. with AWM Style 10493 (80 °c / 300 V)

product overview

Article-No.	Type
000-108-199	STL 225/25 M
000-109-570	STL 225/100 M PUR
000-109-571	STL 225/500 M PUR
193-225-001	STL 225, 4x0,34mm ² , PP/PUR, schwarz

Version: 32

Description of changes:

Add: with protective earth green/yellow GNYE no

Changed: in stationary position: - 50 °C - + 90 °C (UL: + 80 °C) in - 50 °C - + 90 °C (UL: + 80 °C)
3000 h: - 50 °C - + 105 °C (UL: + 80 °C)

Changed: Oil rest. tests acc. with: - in good

Add: others: good microbes and hydrolysis resistance

good chemical resistance

Changed: Exclusion of dangerous materials acc.: 2000/53/EG,2011/65/EU,2003/11/EG,1907/2006/EG in EU-Directives:

1907/2006/EG, Reach

2011/65/EU, RoHS2

2015/863/EU, RoHS3

Deleted: (Notiz), Datenblatt good microbes and hydrolysis resistance

mainly plasticizer diffusion free

good chemical and oil resistance

Exclusion of PVC and Silicone

free of lacquer wetting disturbing substances

Coldness Flexibility

Add: further legal requirements: EU-Directive:

2014/35/EU, LVD

Add: others: mainly plasticizer diffusion free

Exclusion of PVC and Silicone

free of lacquer wetting disturbing substances

Coldness Flexibility