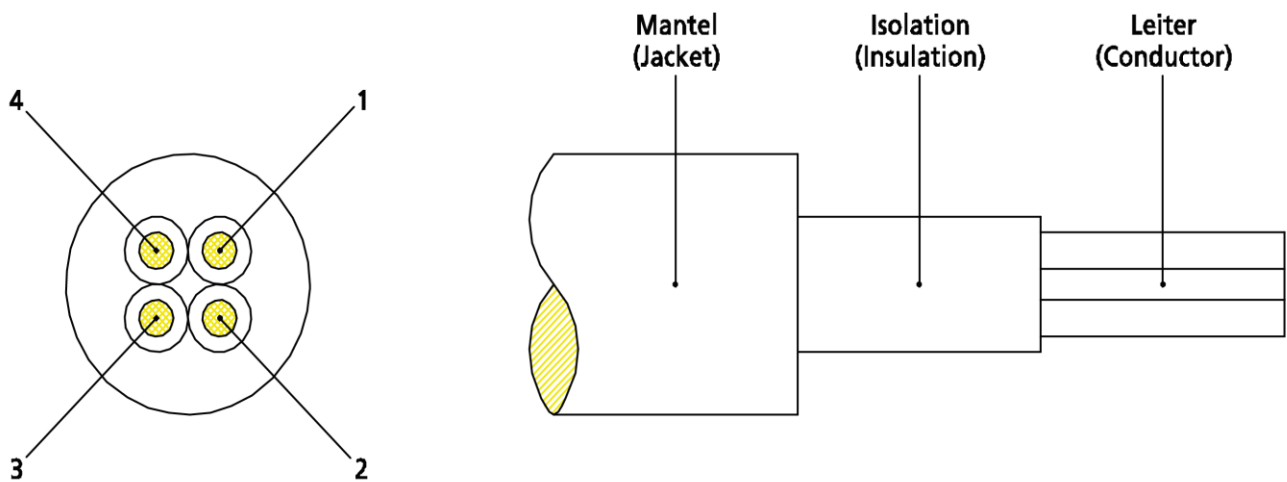
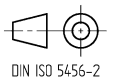


01. Drawing



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, HD 383

Wire material: Cu-ETP1 bare acc. DIN EN 13602
 Wire size: 0,14 mm²
 Litz construction: approx. 18 x Ø 0,10 mm

03.02. Core insulation:

No adhesion between the cores

Wire isolation: PP
 Core-diameter: Ø 0,95 ± 0,05 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 3,50 ± 0,20 mm
 Jacket color: black matt similarly RAL 9005

Surface free from lubricant and grease.

Color: yellow
 Printing: * 329 / ** PUR E*** cURus AWM STYLE **** AWM I/II A/B
 80°C 300V FT2 + SUITABLE FOR USE WITHIN
 EQUIPMENT ONLY

- * = Producer identification
- ** = Production-year and -week
- *** = UL-Producer number
- **** = UL-Style-Number
- ***** = PROD Lot N°

04. Characteristics:

04.01 Temperature range: (Lifetime > 20.000 h)
 in stationary position: - 50 °C - + 90 °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. 138,0 Ω/km
 Insulation resistance: > 1000 MΩxkm

Bending radius in stationary position: > 5 x D
 Bending radius in flexible stress: > 10 x D

04.04 Drag chain characteristics: yes
 Bending cycles *: > 2 Mio.
 permissible acceleration: max. 5 m/s²
 permissible horizontal traverse path: at 5 m/s² ► 5 m
 permissible vertical traverse path: at 5 m/s² ► 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: IEC 60332-2 , VDE 0482-265-2-2 , EN 50265-2-2, CSA-FT2

06. Halogen-free:

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

07. Resistances:

others: 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

08. Other characteristics:

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

09. Approvals:

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
193-329-001	STL 329
934-636-232	STL 329/100 M PUR
934-636-428	STL 329/500 M PUR

Version: 5

Description of changes:

Changed: Litz construction: ca. 18 x Ø 0,10 mm in approx. 18 x Ø 0,10 mm

Changed: wire stranding: ca. Ø 0,50 mm in approx. Ø 0,50 mm

Changed: wire length of lay: ca. 14,0 mm in approx. 14,0 mm

Changed: Nominal insulation thickness: ca. 0,20 mm in approx. 0,20 mm

Changed: Core stranding: ca. Ø 2,30 mm in approx. Ø 2,30 mm

Changed: Core length of lay: ca. 45,0 mm in approx. 45,0 mm

Changed: Nominal thickness: ca. 0,60 mm in approx. 0,60 mm

Changed: Marking: 300mm ±5% in 300 mm ±5%

Changed: Printing: * 329 / ** PUR E*** cURus AWM STYLE **** AWM I/II A/B

80°C 300V FT-2 + SUITABLE FOR USE WITHIN

EQUIPMENT ONLY in * 329 / ** PUR E*** cURus AWM STYLE **** AWM I/II A/B

80°C 300V FT2 + SUITABLE FOR USE WITHIN

EQUIPMENT ONLY

Changed: (Notiz) * = Producer identification

** = WWYY Production-year and -week

*** = UL-Producer number

**** = Style-Number in * = Producer identification

** = Production-year and -week

*** = UL-Producer number

**** = UL-Style-Number

***** = PROD Lot N°

Changed: in stationary position: - 50 °C to + 80 °C in - 50 °C - + 90 °C (UL: + 80 °C)

Changed: flexible: - 25 °C to + 80 °C in - 25 °C - + 90 °C (UL: + 80 °C)

Changed: Ambient temperature in the drag chain movement: - 25 °C bis/to + 60 °C in - 25 °C - + 60 °C

Deleted: Attenuation: ≤ - dB/km @ - MHz

Deleted: Inductance per length unit : - mH/km @ - MHz

Deleted: Impedance (ZL): - Ω ±10%

Add: others: 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

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

good microbes and hydrolysis resistance

mainly plasticizer diffusion free

good chemical and oil resistance

Exclusion of PVC and Silicone

Coldness Flexibility in 2000/53/EG, 2011/65/EU, 2003/11/EG, 1907/2006/EG