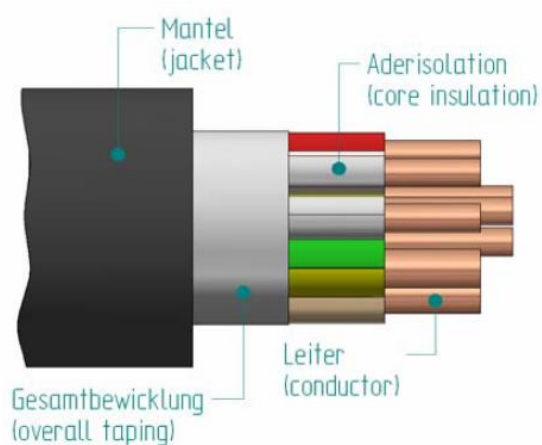
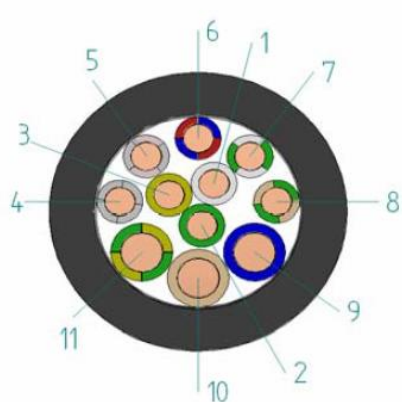
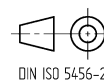


01. Drawing



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, shielded, 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: VDE 0295, EN 60228, IEC 60228, HD 383  
 Wire material: Cu-ETP1 bare acc. DIN EN 13602  
 Wire size: 8 x 0,50 mm<sup>2</sup>  
 3 x 1,0 mm<sup>2</sup>  
 Litz construction: 8x ca. 64 x Ø0,10mm  
 3x ca. 128 x Ø0,10mm

03.02. Core insulation: no adhesion between the cores  
 Wire isolation: PP  
 Core-diameter: 8x ca. Ø1,45 ± 0,05mm  
 3x ca. Ø1,95 ± 0,05mm  
 Number of wires: 11 (8+3)  
 Correlation Core number-Core color: 1 white/WH; 2 green/GN; 3 yellow/YE; 4 grey/GY;  
 5 grey-pink/GYPK; 6 red-blue/RDBU; 7 white-green/WHGN;  
 8 brown-green/BNGN; 9 blue/BU; 10 brown/BN; 11 green-yello

03.09. shielding: no

03.13. Outer jacket:

Jacket material: PUR  
 Jacket-diameter: Ø 9,30 ±0,20 mm  
 Jacket color: black matt similarly RAL 9005

Surface free from lubricant and grease.

Color: yellow  
 Printing: \* 256 / \*\* PUR E\*\*\* cURus AWM STYLE \*\*\*\* AWM I/II A/B  
 80°C 300V FT2 + SUITABLE FOR USE WITHIN  
 EQUIPMENT ONLY

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

**04. Characteristics:**

04.01 Temperature range: (Lifetime > 20.000 h)  
 in stationary position: - 50 °C to +80 °C  
 flexible: - 25 °C to +80 °C  
 Ambient temperature in the drag chain movement: - 25 °C to +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. 39,0 Ω/km @ 0,50mm<sup>2</sup>  
 max. 19,5 Ω/km @ 1,0mm<sup>2</sup>  
 Insulation resistance: > 1000 MΩxkm  
 Inductance per length unit : - mH/km @ - MHz  
 Operating capacity per length unit : nom. - nF/km @ - Hz  
 Core/Core : max. - nF/km  
 Core/Shield : max. - nF/km

Bending radius in stationary position: > 5 x D  
 Bending radius in flexible stress: > 10 x D  
 Angle of torsion max.: ± - °/m  
 Bending cycles at torsion: > - Mio.

04.04 Drag chain characteristics: yes  
 Bending cycles \*: > 2 Mio.  
 permissible acceleration: max. 5 m/s<sup>2</sup>  
 permissible horizontal traverse path: at 5 m/s<sup>2</sup> ► 5 m  
 permissible vertical traverse path: at 5 m/s<sup>2</sup> ► 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

**06. Halogen-free:**

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

**08. Other characteristics:**

Exclusion of dangerous materials acc.: 2000/53/EG, 2002/95/EG, 2003/11/EG  
 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  
 Cold

**09. Approvals:**

**UL/CSA**

Jacket: cURus in acc. with AWM Style 20549 (80 °C / 300 V) or  
 cURus in acc. with AWM Style 21198 (80 °C / 300 V)  
 Core: cURus in acc. with AWM Style 10493 (80 °C / 300 V)

## product overview

Article-No.	Type
193-256-001	STL 256
934-636-345	STL 256/100 M PUR
934-636-438	STL 256/500 M PUR