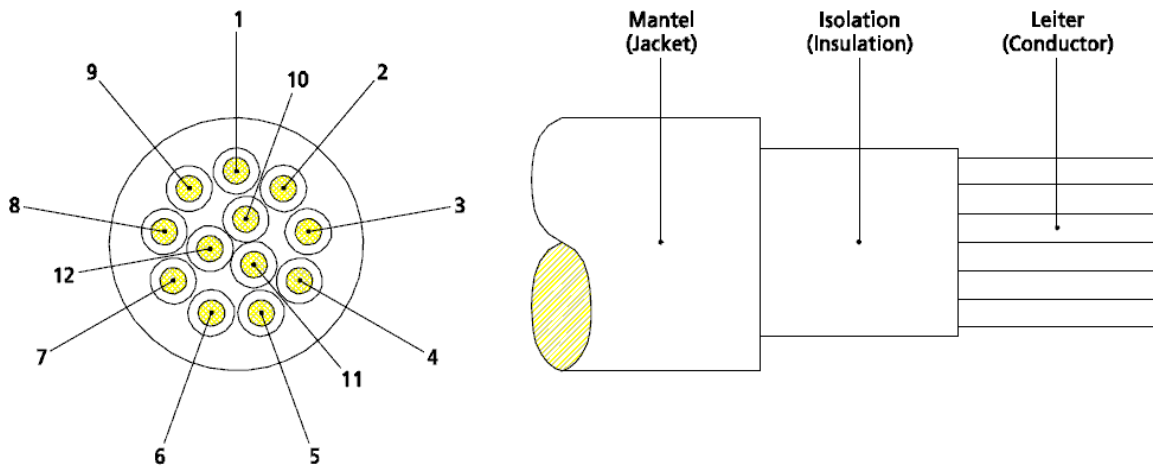
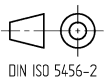


01. Drawing



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:

Wire material: Cu-ETP1 bare in acc. with DIN EN 13602  
 Wire size: 0,25 mm<sup>2</sup>  
 Litz construction: ca. 32 x Ø 0,10 mm = 0,25 mm<sup>2</sup>

03.02. Core insulation:

Wire isolation: PP  
 Core-diameter: Ø 1,20 ± 0,05 mm  
 Number of wires: 12  
 Correlation Core number-Core color: 1 brown/BN; 2 blue/BU; 3 white/WH; 4 green/GN; 5 pink/PK; 6 yellow/YE; 7 black/BK; 8 grey/GY; 9 red/RD; 10 violet/VT; 11 grey-pink/GY-PK; 12 red-blue/RD-BU

03.09. shielding:

no  
 Diameter: (ca. Ø - mm)

03.10. Overall shield:

Diameter: (ca. Ø - mm)

03.13. Outer jacket:

Jacket material: PUR  
 Jacket-diameter: Ø 6,40 ± 0,20 mm  
 Jacket color: black matt similarly RAL 9005

Surface free from lubricant and grease.

Color: yellow  
 Printing: \* 346 / \*\* PUR E\*\*\*cURus AWM STYLE 20549 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. 79,0 Ω/km |
| Insulation resistance:                   | > 1000 MΩxkm   |
| Inductance per length unit :             | mH/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: IEC 60332-2-2, VDE 0482-332-2-2, DIN EN 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, 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  
 free of lacquer wetting disturbing substances  
 Coldness Flexibility

**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              |
|-------------|-------------------|
| 000-109-585 | STL 346/100 M PUR |
| 000-109-586 | STL 346/500 M PUR |
| 193-346-001 | STL 346           |

Version: 8

Description of changes:

Changed DE: flame retardent acc. to: IEC 60332-2-2, VDE 0482-265-2-2, DIN EN 60332-2-2, CSA-FT2 in IEC 60332-2-2, VDE 0482-332-2-2, DIN EN 60332-2-2, CSA-FT2

Changed EN: flame retardent acc. to: IEC 60332-2-2, VDE 0482-265-2-2, DIN EN 60332-2-2, CSA-FT2 in IEC 60332-2-2, VDE 0482-332-2-2, DIN EN 60332-2-2, CSA-FT2