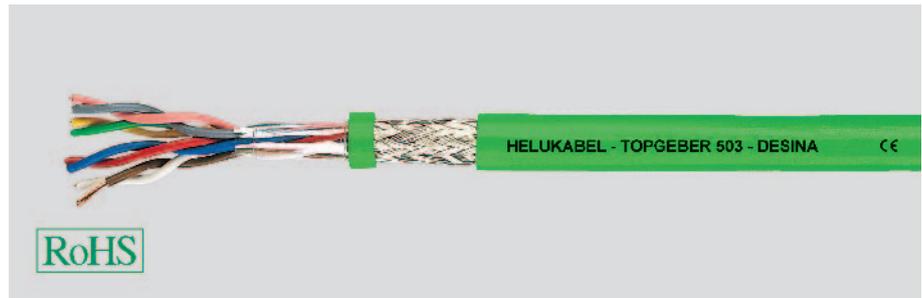
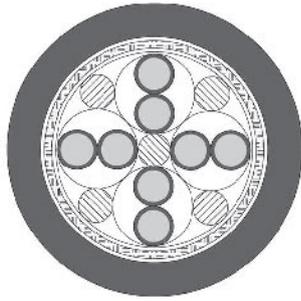


# TOPGEBER 503 PUR sheath, low capacitance (approx. 70nF/km). High flexible drag chain feedback cable, halogen-free, UL/CSA



## Technical data

- Special PVC drag chain feedback cable acc. to UL AWM style 20233 and CSA/AWM
- **Temperature range**  
flexing -20°C to +80°C  
fixed installation -40°C to 80°C
- **Nominal voltage**  
acc. to UL 300 V  
acc. to VDE  
0,14-0,34 mm<sup>2</sup>: 350 V  
0,5-1,0 mm<sup>2</sup>: 500 V
- **A.c. test voltage**, 50 Hz  
core/core 1500 V  
core/screen 1000 V
- **Mutual capacitance**  
**core PP**  
core/core approx. 70 nF/km  
core/screen approx. 110 nF/km  
**core TPE-E**  
core/core approx. 120 nF/km
- **Insulation resistance**  
min. 20 MΩ x km
- **Coupling resistance**  
max. 250 Ω/km
- **Minimum bending radius**  
approx. 7,5x cable Ø

## Cable construction

- Bare copper, ultra-fine wire conductors acc. to DIN VDE 0295 cl. 6 or IEC 60228 cl. 6
  - Core installation of special polypropylene or TPE-E
  - Colour code as per DIN 47100
  - Cores twisted in pairs
  - Fleece wrapping facilitates sliding
  - Overall screening of tinned copper braid, optimal coverage approx. 85%
  - PUR outer sheath
  - Sheath colour green (RAL 6018) acc. to DESINA® or grey upon request
- Part No. 77665**
- Construction as above, except
  - Core colours wh, bn, gn, ye, rd, og
  - Pairs screened with aluminium-coated polyester film and tinned copper braiding
  - No overall screening
- Part No. 78654**
- Construction as above, except
  - TPE-E core insulation
  - Pairs individually screened with tinned wire screen
  - PVC inner sheath over each screened element (not halogen-free)

## Properties

- PUR outer sheath: low adhesion, extremely abrasion resistant, halogen-free, resistant to UV-, oil-, hydrolysis and microbial attack
- Due to the high grade special core insulation, the PVC sheath and the highly flexible conductor, these cables are ideally suitable for use in drag chains and provide high functional reliability
- Optimum compliance with requirements for electromagnetic compatibility (EMC) by approx. 85% coverage from the braided screen
- These cables are produced to high quality specifications and conform to the DESINA®-standard
- Particularly attractive for export-oriented markets due to UL/CSA approval

## Note

- Brackets ( ) indicate screen.
- For extreme applications extending beyond standard solutions we recommend that you request our questionnaire, which has been especially designed for energy supply systems.
- Please observe applicable installation regulations for use in energy supply chains.
- Desina®: Explanation: see introduction.

## Application

Particularly suitable for **RS 422** and **RS 485 interfaces**. This low capacitance cable type is used as a measuring and signal cable for transmission rates up to 10 megabits per second. The twisted-pair stranding results in good crosstalk attenuation properties.

**EMC** = Electromagnetic compatibility

To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

**CE** = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

### Aderisolation PP

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
78363	(4 x 0,25)	5,8	23,0	45,0	24
74449	(5 x 0,25)	6,6	24,0	51,0	24
700647	(2 x 2 x 0,25)	7,3	32,0	60,0	24
74418	(3 x 2 x 0,25)	7,4	38,8	72,0	24
74419	(4 x 2 x 0,25)	8,4	43,2	89,0	24
74420	(5 x 2 x 0,25)	8,8	51,5	103,0	24
700648	(6 x 2 x 0,25)	9,2	71,8	131,0	24
700649	(8 x 2 x 0,25)	10,8	74,4	155,0	24
700650	(10 x 2 x 0,25)	12,4	90,0	186,0	24

### Aderisolation TPE-E

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
700651	(14 x 2 x 0,25)	12,6	112,0	219,0	24
77665	3 x 2 x 0,25	8,5	40,0	75,0	24
74609	(3 x 2 x 0,25)	6,8	38,4	72,0	24
75554	(3 x 2 x 0,25)	5,8	38,4	65,0	24
78654	(3 x 2 x 0,25)	8,8	61,0	90,0	24
78365	(4 x 2 x 0,25)	8,0	43,2	89,0	24
700405	(4 x 2 x 0,25)	6,0	43,2	85,0	24
78366	(5 x 2 x 0,25)	8,4	51,5	103,0	24

Dimensions and specifications may be changed without prior notice.