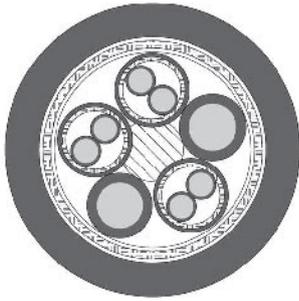


# TOPGEBER 500 PUR, high flexible drag chain feedback cable, halogen-free, EMC-preferred type



## Technical data

- Special TPE-E/PUR compound for core and sheath, adapted to DIN VDE 0281/0812 (core) and VDE 0250/0281 (sheath)
- **Temperature range**  
flexing -40°C to +80°C  
fixed installation -50°C to +90°C
- **Nominal voltage**  
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 2000 V  
core/screen 1000 V
- **Mutual capacitance** at 800 Hz  
core/core approx. 135 nF/km
- **Insulation resistance**  
min. 20 MΩm x km
- **Coupling resistance**  
max. 250 Ωm/km
- **Minimum bending radius**  
approx. 10x cable Ø

## Cable construction

- Bare copper, ultra-fine wire acc. to DIN VDE 0295 cl. 6 and/or IEC 60228 cl. 6
- TPE-E core insulation
- Core colours see below
- Fleece wrapping facilitates sliding
- Overall screening of tinned copper wire braid with tinned drain wire, coverage approx. 85%
- Polyester fleece
- PUR outer sheath
- Sheath colour see table
- **Screening:**
- **Part No. 72541**  
0,14 mm<sup>2</sup> pairs screened, 0,5 mm<sup>2</sup> cores individually screened, overall screen
- **Part Nos. 78691, 78689, 74918, 74783, 77418, 78522, 77782, 74243, 78078, 78367** all with overall screen
- **Part Nos. 700559, 74356, 71426**  
0,14 mm<sup>2</sup> pairs screened, overall screen
- **Part No. 76369**  
0,14 mm<sup>2</sup> pairs screened, 1,0 mm<sup>2</sup> cores individually screened, overall screen
- **Part Nos. 72541, 76369** with PVC shock protection (not halogen-free)

## Properties

- PUR outer sheath: low adhesion, extremely abrasion resistant, halogen-free, resistant to UV-, oil-, hydrolysis and microbial attack
- PUR outer sheath self-extinguishing and flame retardant according to DIN VDE 0472 part 804 test method B)
- Due to the high grade special core insulation, the PUR 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
- The sheath colour for feedback cables acc. to DESINA® is green (RAL 6018)
- These cables are produced to high quality specifications and conform to the DESINA® standard.

## Note

- **Colour code:**  
**Part No. 74918**, 0,5 mm<sup>2</sup> wh, bn to 0,14 starts with we, bn  
**Part Nos. 74783**, 0,5 mm<sup>2</sup> wh, bn, gn, gr to 0,14 mm<sup>2</sup> starts with we, bn  
**Part Nos. 74356, 76369, 71426**, to 1,0 mm<sup>2</sup> starts with wh, bn  
**Part Nos. 78691, 78689, 77418, 78522, 72541, 77782, 700559, 78367**, to 0,5 mm<sup>2</sup> starts with wh, bn  
**Part Nos. 74243, 78078**, to 0,5 mm<sup>2</sup> starts with wh, bu, whgn, bngn
- 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.

## Application

The incremental encoder cables or position feedback cables transmit the control pulses for positioning and operating characteristics of servomotors. These cables are used as connecting cables for tachos, brakes and pulse generators in applications subjected to heavy mechanical stresses in industrial equipment, machine tools, control and automation equipment.

**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.

Part No.	No. cores x cross-sec. mm <sup>2</sup>	for system	Core colours	Jacket colour	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
72541	(3 x 2 x 0,14 + 2 x 0,5)	Heidenhain	green, yellow, grey, pink, blue, red., white, brown, DIN 47100	Orange	8,4	73	103,0	26
700559	(3 x 2 x 0,14 + 2 x 0,5)	Heidenhain	green, yellow, grey, pink, blue, red., white, brown, DIN 47100	Green	7,8	65	105,0	26
77782	(3 x 2 x 0,14 + 2 x 0,5)	Heidenhain	green, yellow, grey, pink, blue, red., white, brown, DIN 47100	Green	7,2	48	102,0	26
76369	(3 x 2 x 0,14 + 2 x 1,0)	Heidenhain	green, yellow, grey, pink, blue, red., white, brown, DIN 47100	Green	9,2	86	125,0	26

Dimensions and specifications may be changed without prior notice.

Continuation ►