

# SUPER-PAAR-TRONIC 340-C-PUR cable for drag chains, halogen-free, EMC-preferred type, meter marking



HELUKABEL SUPER-PAAR-TRONIC 340-C-PUR 8x2x0,5 QMM E 170315 AWM STYLE 20233 20 AWG 16C VW-1 AWM I/II A/B 80°C 300V FT1/49854 001070044



## Technical data

- Special drag chain cable, stranded in pairs
- **Temperature range**  
flexing -20 °C to +80 °C  
fixed -40 °C to +80 °C
- **Nominal voltage** 300 V
- **Test voltage**  
core/core 1500 V  
core/screen 1000 V
- **Insulation resistance**  
min. 100 MOhm x km
- **Mutual capacitance**  
core/core approx. 60 nF/km
- **Minimum bending radius**  
for permanent bending  
at 0,25 mm<sup>2</sup>  
flexing 7,5x cable ø  
fixed 4x cable ø  
at 0,5-1,0 mm<sup>2</sup>  
flexing 10x cable ø  
fixed 5x cable ø
- **Coupling resistance**  
max. 250 Ohm/km
- **Radiation resistance**  
up to 100x10<sup>6</sup> cJ/kg (up to 100 Mrad)

## Cable structure

- Bare copper conductor, fine or extra fine wire to DIN VDE 0295 cl. 6, col. 4, BS 6360 cl. 6 and IEC 60228 cl. 6
- **Polyolefin** core insulation
- Colour coded to DIN 47100
- Cores stranded in pairs, pairs stranded torsion-free in layers with optimal lay-length
- Core wrapping between the layers of stranding
- Braided screen of tinned Cu wires, coverage approx. 85%
- Core wrapping with fleece
- **Full polyurethane** outer sheath TMPU acc. to DIN VDE 0281 Part 10, Annex A and acc. to UL std. 1581 Tab. 50227 80 °C
- Sheath colour grey (RAL 7001)
- with meter marking, change-over in 2011

## Properties

- Flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Oil resistance according to IEC 60092-350
- Halogen free
- Weather, ozone and UV-resistant
- Chemical resistance to solvents, acids, alkalis and hydraulic fluids
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Advantages

- Very high resistance to mechanical stresses
- Very good alternating bending strength
- High tear, abrasion and impact resistance, even at low temperatures

## Application

Stranded in pairs, these fully-screened special drag chain cables can also be used where external, high-frequency interference influences pulse transfer. They are used for permanently flexible stresses in machine and tool building, in robot technology, on constantly moving machine components and for extended use in multi-shift operations.

Developed to state-of-the-art technology, these highly-flexible data cable, with a cut resistant and low-adhesion PUR outer sheath guaranteeing optimal service life and extremely good cost efficiency. This two-approvals single-core cable is preferred for use in export-oriented mechanical engineering, in machine tools, production lines and systems engineering. Guaranteed extended use in multi-shift operations with extremely high bending stresses.

**EMC** = Electromagnetic compatibility

To optimise the EMC characteristics we recommend a large area of contact of the copper braiding around the entire circumference on both ends.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part no.	No.pairs x no.cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km
49830	1 x 2 x 0,25	24	4,8	14,0	26,0
49831	2 x 2 x 0,25	24	6,7	32,0	61,0
49832	3 x 2 x 0,25	24	7,1	38,4	70,0
49833	4 x 2 x 0,25	24	7,6	43,2	82,0
49834	5 x 2 x 0,25	24	8,3	51,5	99,0
49835	6 x 2 x 0,25	24	9,0	71,8	126,0
49836	8 x 2 x 0,25	24	10,5	74,4	147,0
49837	10 x 2 x 0,25	24	11,9	90,0	179,0
49838	14 x 2 x 0,25	24	12,7	111,2	210,0
49839	1 x 2 x 0,34	22	5,1	20,0	35,0
49840	2 x 2 x 0,34	22	7,2	41,0	80,0
49841	3 x 2 x 0,34	22	7,6	52,2	100,0
49842	4 x 2 x 0,34	22	8,3	59,1	118,0
49843	5 x 2 x 0,34	22	9,0	67,0	134,0
49844	6 x 2 x 0,34	22	9,9	86,4	162,0
49845	8 x 2 x 0,34	22	11,9	107,5	214,0
49846	10 x 2 x 0,34	22	13,9	131,0	270,0
49847	14 x 2 x 0,34	22	14,1	150,0	304,0
49848	1 x 2 x 0,5	20	5,8	22,5	47,0
49849	2 x 2 x 0,5	20	8,4	53,0	100,0
49850	3 x 2 x 0,5	20	9,0	72,8	131,0
49851	4 x 2 x 0,5	20	10,0	75,6	149,0
49852	5 x 2 x 0,5	20	11,0	85,7	169,0

Part no.	No.pairs x no.cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km
49853	6 x 2 x 0,5	20	11,8	103,0	181,0
49854	8 x 2 x 0,5	20	14,2	148,4	274,0
49855	10 x 2 x 0,5	20	16,5	180,0	332,0
49856	14 x 2 x 0,5	20	16,9	218,3	390,0
49857	1 x 2 x 0,75	19	6,2	35,2	56,0
49858	2 x 2 x 0,75	19	9,2	61,4	102,0
49859	3 x 2 x 0,75	19	9,8	87,1	144,0
49860	4 x 2 x 0,75	19	11,2	95,2	160,0
49861	5 x 2 x 0,75	19	12,2	115,0	193,0
49862	6 x 2 x 0,75	19	13,2	137,1	216,0
49863	8 x 2 x 0,75	19	15,6	184,4	327,0
49864	10 x 2 x 0,75	19	18,4	259,8	451,0
49865	14 x 2 x 0,75	19	18,9	318,4	521,0
49866	1 x 2 x 1	18	6,7	42,0	64,0
49867	2 x 2 x 1	18	10,0	73,0	120,0
49868	3 x 2 x 1	18	10,8	93,6	160,0
49869	4 x 2 x 1	18	11,7	117,8	184,0
49870	5 x 2 x 1	18	13,2	139,0	217,0

Dimensions and specifications may be changed without prior notice. (RN05)