# 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 CE 20233 20 AWG 16C VW-1 AWM I/I A/B 80°C 300V FT1/49854 001070044



## **Technical data**

- Special drag chain cable, stranded in pairs
  Temperature range flexing -30°C to +80°C
- fixed installation -40°C to +80°C • Nominal voltage 300 V
- Nominal Voltage 50
  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, extra fine wire to DIN VDE 0295 cl.6, col. 4, BS 6360 cl.6 and IEC 60228 cl.6
- Core insulation of PP
- Core identification to DIN 47100
- Cores stranded in pairs, pairs stranded torsion-free in layers with optimal lay-length
- Wrapping over the outer layerBraided screen of tinned Cu wires,
- coverage approx. 85%
- Core wrapping with fleece
  Outer sheath of full polyurethane compound type TMPU to DIN VDE 0207-363-10-2 / DIN EN 50363-10-2 and acc. to UL-Std. 1581 tab.50.227
- Sheath colour grey (RAL 7001)
- with meter marking

### **Properties**

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers
- Tests
- PUR outer sheath, flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2/IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Oil resistance acc. to DIN VDE 0473-811-404/ DIN EN 60811-404
- Halogen free
- Weather, ozone and UV-resistant
- Chemical resistance to solvents, acids,
- alkalis and hydraulic fluids

## Advantages

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

#### Note

• AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

# 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 which go beyond standard solutions we recommend for our especially developed enquiry sheet for energy guiding systems. Before installation in cable trays please read the instructions. Further technical details see selection table for drag chain cables, see lead text.

**EMC** = Electromagnetic compatibility

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

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

Part no.	No.pairs x no.cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	Part no.	No.pairs x no.cores x cross-sec. mm <sup>2</sup>	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	
49830	1 x 2 x 0,25	24	4,8	14,0	26,0	49853	6 x 2 x 0,5	20	11,8	103,0	181,0	
49831	2 x 2 x 0,25	24	6,7	32,0	61,0	49854	8 x 2 x 0,5	20	14,2	148,4	274,0	
49832	3 x 2 x 0,25	24	7,1	38,4	70,0	49855	10 x 2 x 0,5	20	16,5	180,0	332,0	
49833	4 x 2 x 0,25	24	7,6	43,2	82,0	49856	14 x 2 x 0,5	20	16,9	218,3	390,0	
49834	5 x 2 x 0,25	24	8,3	51,5	99,0	49857	1 x 2 x 0,75	19	6,2	35,2	56,0	
49835	6 x 2 x 0,25	24	9,0	71,8	126,0	49858	2 x 2 x 0,75	19	9,2	61,4	102,0	
49836	8 x 2 x 0,25	24	10,5	74,4	147,0	49859	3 x 2 x 0,75	19	9,8	87,1	144,0	
49837	10 x 2 x 0,25	24	11,9	90,0	179,0	49860	4 x 2 x 0,75	19	11,2	95,2	160,0	
49838	14 x 2 x 0,25	24	12,7	111,2	210,0	49861	5 x 2 x 0,75	19	12,2	115,0	193,0	
49839	1 x 2 x 0,34	22	5,1	20,0	35,0	49862	6 x 2 x 0,75	19	13,2	137,1	216,0	
49840	2 x 2 x 0,34	22	7,2	41,0	80,0	49863	8 x 2 x 0,75	19	15,6	184,4	327,0	
49841	3 x 2 x 0,34	22	7,6	52,2	100,0	49864	10 x 2 x 0,75	19	18,4	259,8	451,0	
49842	4 x 2 x 0,34	22	8,3	59,1	118,0	49865	14 x 2 x 0,75	19	18,9	318,4	521,0	
49843	5 x 2 x 0,34	22	9,0	67,0	134,0	49866	1 x 2 x 1	18	6,7	42,0	64,0	
49844	6 x 2 x 0,34	22	9,9	86,4	162,0	49867	2 x 2 x 1	18	10,0	73,0	120,0	
49845	8 x 2 x 0,34	22	11,9	107,5	214,0	49868	3 x 2 x 1	18	10,8	93,6	160,0	
49846	10 x 2 x 0,34	22	13,9	131,0	270,0	49869	4 x 2 x 1	18	11,7	117,8	184,0	
49847	14 x 2 x 0,34	22	14,1	150,0	304,0	49870	5 x 2 x 1	18	13,2	139,0	217,0	
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							