

SUPERTRONIC-310-C-PVC special cable for

drag chains, EMC-preferred type



HELUKABEL SUPERTRONIC 310-C-PVC AWM STYLE 2464 22 AWG / 0,34 QMM 5 C SHIELDED 80°C 300V VW-1 CE LL 113926 CSA AWM III A/B 80°C FT1



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Technical data

- Special PVC drag chain cable approved to UL-Style 2464
- **Temperature range**
flexing -5°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage** 300 V
- **Test voltage**
core/core 1500 V
core/screen 1000 V
- **Breakdown voltage**
min. 3000 V
- **Minimum bending radius**
flexing 7,5x cable Ø
fixed installation 4x cable Ø
- **Insulation resistance**
min. 20 MΩm x km
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)
- **Coupling resistance**
max. 250 Ωm/km

Cable construction

- Bare copper conductor, fine wire
Unilay with short lay-lengths
- PVC core insulation, class 43 acc. to UL std. 1581
- Colour coded to DIN 47100
- Cores stranded in layers with optimal lay-length
- Core wrapping from fleece between the layers of stranding
- Core wrapping over the outer layer
- Braided screen of tinned Cu wires, coverage approx. 85%
- Core wrapping with fleece
- PVC outer jacket, oil resistant, TM5 acc. to DIN VDE 0281 Part 1 or class 43 acc. to UL std. 1581
- Sheath colour grey (RAL 7001)

Properties

- Low-adhesion
- PVC self-extinguishing and flame-retardant acc. to DIN VDE 0482, Part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (as per DIN VDE 0472, Part 804 Test Method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- Please observe applicable installation regulations for use in energy supply chains.

Application

A highly-flexible PVC control cable suitable for frequent and fast lifting and bending stresses in machines and tool building, robot systems and on constantly moving machine components. Long service lives guarantee reliable function and good cost efficiency. The copper screen effectively protects against internal and external interference. Designed for machines intended for export, specifically USA and Canada. For applications which go beyond standard solutions (for example for composting appliances or high shelf conveyors with extremely high processing speeds etc.) 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 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. mm² | AWG-no. | Outer ø ca. mm | Cop. weight kg / km | Weight ca. kg / km |
|----------|----------------------------|---------|----------------|---------------------|--------------------|
| 49920 | 2 x 0,14 | 26 | 4,3 | 11,3 | 33,0 |
| 49921 | 3 x 0,14 | 26 | 4,5 | 14,2 | 36,0 |
| 49922 | 4 x 0,14 | 26 | 4,7 | 15,5 | 41,0 |
| 49923 | 5 x 0,14 | 26 | 5,0 | 18,4 | 46,0 |
| 49924 | 7 x 0,14 | 26 | 5,7 | 27,9 | 70,0 |
| 49925 | 10 x 0,14 | 26 | 6,8 | 39,1 | 88,0 |
| 49926 | 12 x 0,14 | 26 | 7,4 | 42,2 | 97,0 |
| 49927 | 14 x 0,14 | 26 | 7,4 | 45,4 | 105,0 |
| 49928 | 18 x 0,14 | 26 | 7,7 | 54,2 | 116,0 |
| 49929 | 24 x 0,14 | 26 | 8,7 | 66,5 | 150,0 |
| 49930 | 25 x 0,14 | 26 | 9,1 | 68,5 | 157,0 |
| 49931 | 2 x 0,25 | 24 | 4,7 | 14,8 | 39,0 |
| 49932 | 3 x 0,25 | 24 | 4,9 | 18,9 | 45,0 |
| 49933 | 4 x 0,25 | 24 | 5,2 | 21,4 | 52,0 |
| 49934 | 5 x 0,25 | 24 | 5,6 | 31,2 | 70,0 |
| 49935 | 7 x 0,25 | 24 | 6,4 | 39,8 | 80,0 |
| 49936 | 10 x 0,25 | 24 | 7,6 | 53,9 | 114,0 |

| Part No. | No. cores x cross-sec. mm² | AWG-no. | Outer ø ca. mm | Cop. weight kg / km | Weight ca. kg / km |
|----------|----------------------------|---------|----------------|---------------------|--------------------|
| 49937 | 12 x 0,25 | 24 | 8,3 | 59,2 | 123,0 |
| 49938 | 14 x 0,25 | 24 | 8,3 | 64,3 | 138,0 |
| 49939 | 18 x 0,25 | 24 | 8,9 | 78,6 | 165,0 |
| 49940 | 24 x 0,25 | 24 | 10,1 | 89,8 | 200,0 |
| 49941 | 25 x 0,25 | 24 | 10,4 | 101,2 | 204,0 |
| 49942 | 2 x 0,34 | 22 | 4,9 | 18,2 | 44,0 |
| 49943 | 3 x 0,34 | 22 | 5,1 | 28,8 | 60,0 |
| 49944 | 4 x 0,34 | 22 | 5,5 | 35,8 | 76,0 |
| 49945 | 5 x 0,34 | 22 | 5,8 | 39,2 | 80,0 |
| 49946 | 7 x 0,34 | 22 | 6,7 | 52,8 | 104,0 |
| 49947 | 10 x 0,34 | 22 | 8,0 | 67,5 | 150,0 |
| 49948 | 12 x 0,34 | 22 | 8,1 | 76,5 | 160,0 |
| 49949 | 14 x 0,34 | 22 | 9,0 | 85,9 | 180,0 |
| 49950 | 18 x 0,34 | 22 | 9,2 | 99,9 | 211,0 |
| 49951 | 24 x 0,34 | 22 | 10,7 | 147,0 | 290,0 |
| 49952 | 25 x 0,34 | 22 | 11,2 | 155,0 | 304,0 |

Dimensions and specifications may be changed without prior notice.