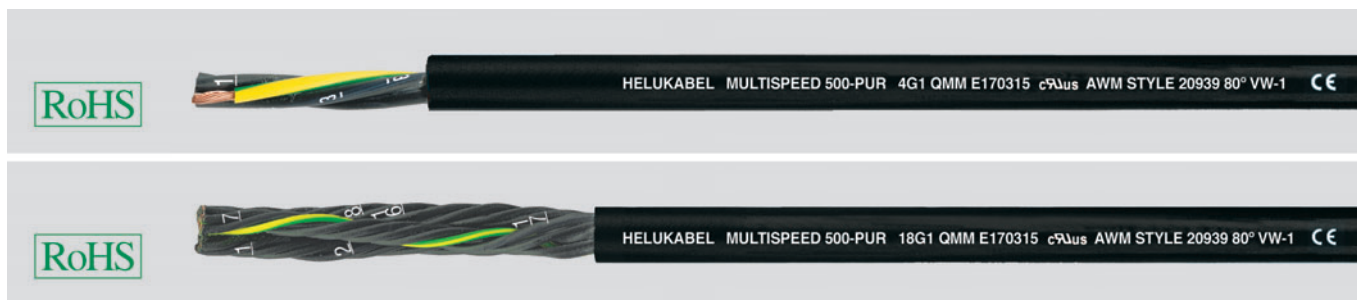


MULTISPEED® 500-PUR UL/CSA safety against high bending in drag chain systems, low torsion, halogen-free, meter marking



Technical data

- Special drag chain cables for high mechanical stress in adapted to DIN VDE 0281 part 13, DIN VDE 0282 part 10 and E DIN VDE 0245 and UL-Std. 758 AWM Style 20233 and 20939
- **Temperature range**
flexing -30 °C to +80 °C
fixed installation -50 °C to +80 °C
- **Nominal voltage**
VDE U₀/U 300/500 V
UL 600 V
- **Test voltage** 3000 V
- **Insulation resistance**
min. 100 MOhm x km
- **Minimum bending radius**
flexing 7,5x cable Ø
fixed installation 4x cable Ø
- **Radiation resistance**
up to 100x10⁶ cJ/kg (up to 100 Mrad)

Cable structure

- Bare copper, fine wire conductors, Unilay with short pitch length
- Special TPE core insulation
- Black cores with continuous white numbering
- Green-yellow earth core (3 cores and above)
- Stranding:
<7 cores: cores stranded in a layer with optimal lay-length around a filler as per construction
≥7 cores: cores stranded with optimal lay-length to bunch-construction with low torsion strength, optimal selected short lay-length around a filler
- Special-PUR outer sheath, especially resistant against fatigue strength, extruded as filler with pressure
- Sheath colour black (RAL 9005)
- with meter marking, change-over in 2011

Properties

- PUR-jacket 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), VW-1, FT1
- low adhesion
- halogen-free
- Higher economical solution
- Reduced Ø, results low weight of moving materials
- Halogen-free
- High resistant to mechanical strain
- Long life durability due to low friction-resistance
- High tensile strength, abrasion- and impact resistance at low temperature
- Tear resistance
- High stability
- Oil resistance
- Better chemical resistance
- UV and ozone resistance
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- G = with green-yellow earth core;
x = without green-yellow earth core (OZ).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- **screened analogue type:**
MULTISPEED® 500-C-PUR UL/CSA,
see page N 94

Application

UL/CSA approved HELUKABEL® MULTISPEED 500-PUR are installed there, where the extreme requirements for the cables are necessary. The selected materials and lay-up technique permit these high flexible cables for permanent application in drag chains for long distances, high an slow speed of movements. These cables are installed in dry, moist and wet rooms and in open air with free movement without tensile stress or forced movements. These robust and abrasion resistant special control cables are installed there, where the problems appear for the application in permanent stresses e.g. in energy drag chains, industry robotics, production lines, automatic control systems and permanent movable machinery parts for multi-shift operation. These cables are installed everywhere, where high requirements for the flexibility, abrasion, oxygen and chemical resistance are necessary.

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.

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

| Part no. | No. cores x cross-sec. mm ² | AWG-No. | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km |
|----------|--|---------|--------------------|---------------------|------------------------|
| 24370 | 2 x 0,5 | 20 | 4,8 | 9,6 | 41,0 |
| 24371 | 3 G 0,5 | 20 | 5,1 | 14,4 | 48,0 |
| 24372 | 4 G 0,5 | 20 | 5,5 | 19,0 | 62,0 |
| 24373 | 5 G 0,5 | 20 | 6,0 | 24,0 | 70,0 |
| 24374 | 7 G 0,5 | 20 | 9,1 | 33,6 | 88,0 |
| 24375 | 12 G 0,5 | 20 | 10,0 | 58,0 | 131,0 |
| 24376 | 18 G 0,5 | 20 | 12,2 | 86,0 | 204,0 |
| 24377 | 25 G 0,5 | 20 | 14,3 | 120,0 | 266,0 |

| Part no. | No. cores x cross-sec. mm ² | AWG-No. | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km |
|----------|--|---------|--------------------|---------------------|------------------------|
| 24378 | 3 G 0,75 | 19 | 5,2 | 21,6 | 51,0 |
| 24379 | 4 G 0,75 | 19 | 6,1 | 29,0 | 68,0 |
| 24380 | 5 G 0,75 | 19 | 6,6 | 36,0 | 73,0 |
| 24381 | 7 G 0,75 | 19 | 10,5 | 50,0 | 92,0 |
| 24382 | 12 G 0,75 | 19 | 11,4 | 86,0 | 170,0 |
| 24383 | 18 G 0,75 | 19 | 14,2 | 130,0 | 257,0 |
| 24384 | 25 G 0,75 | 19 | 16,3 | 180,0 | 280,0 |
| 24385 | 36 G 0,75 | 19 | 20,1 | 260,0 | 411,0 |
| 24386 | 42 G 0,75 | 19 | 22,2 | 302,0 | 608,0 |

Continuation ►

MULTISPEED® 500-PUR UL/CSA safety against high bending in drag chain systems, low torsion, halogen-free, meter marking



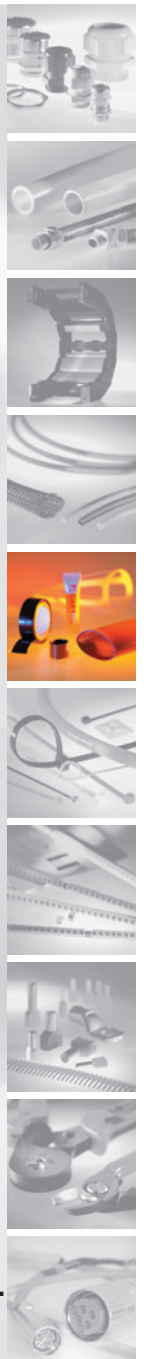
| Part no. | No. cores x cross-sec. mm² | AWG-No. | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km |
|----------|----------------------------|---------|--------------------|---------------------|------------------------|
| 24387 | 3 G 1 | 18 | 5,9 | 29,0 | 59,0 |
| 24388 | 4 G 1 | 18 | 6,4 | 38,0 | 71,0 |
| 24389 | 5 G 1 | 18 | 7,0 | 48,0 | 84,0 |
| 24390 | 7 G 1 | 18 | 11,2 | 67,0 | 111,0 |
| 24391 | 12 G 1 | 18 | 12,3 | 115,0 | 200,0 |
| 24392 | 18 G 1 | 18 | 15,1 | 173,0 | 286,0 |
| 24393 | 25 G 1 | 18 | 17,6 | 240,0 | 370,0 |
| 24331 | 36 G 1 | 18 | 21,6 | 346,0 | 485,0 |
| 24394 | 3 G 1,5 | 16 | 6,7 | 43,0 | 81,0 |
| 24395 | 4 G 1,5 | 16 | 7,3 | 58,0 | 102,0 |
| 24396 | 5 G 1,5 | 16 | 8,0 | 72,0 | 121,0 |
| 24397 | 7 G 1,5 | 16 | 13,2 | 101,0 | 164,0 |
| 24398 | 12 G 1,5 | 16 | 14,4 | 173,0 | 293,0 |
| 24399 | 18 G 1,5 | 16 | 17,7 | 259,0 | 450,0 |
| 24400 | 25 G 1,5 | 16 | 20,5 | 360,0 | 631,0 |
| 24332 | 36 G 1,5 | 16 | 25,6 | 518,0 | 779,0 |

| Part no. | No. cores x cross-sec. mm² | AWG-No. | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km |
|----------|----------------------------|---------|--------------------|---------------------|------------------------|
| 24401 | 4 G 2,5 | 14 | 8,9 | 86,0 | 173,0 |
| 24402 | 5 G 2,5 | 14 | 9,8 | 120,0 | 220,0 |
| 24403 | 7 G 2,5 | 14 | 16,1 | 168,0 | 290,0 |
| 24404 | 12 G 2,5 | 14 | 17,8 | 288,0 | 504,0 |
| 24405 | 18 G 2,5 | 14 | 21,8 | 432,0 | 719,0 |
| 24406 | 25 G 2,5 | 14 | 24,4 | 600,0 | 940,0 |

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

Terminations and straight-through joints

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Low voltage
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N

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