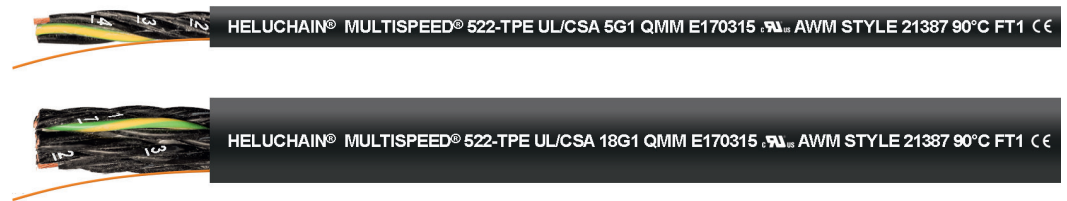


HELUCHAIN® MULTISPEED® 522-TPE UL/CSA

for extreme mechanical stress, oil resistant



TECHNICAL DATA

TPE drag chain cable acc. to UL-Std. 758 (AWM) Style 21387, CSA-Std. C22.2 No. 210 - AWM I/II A/B, in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

| | |
|------------------------|---|
| Temperature range | flexible -40°C to +90°C fixed -40°C to +90°C |
| Nominal voltage | AC U ₀ /U 600/1000 V UL (AWM) AC 1000 V |
| Test voltage core/core | 3000 V |
| Minimum bending radius | flexible 5x Outer-Ø fixed 3x Outer-Ø |

CABLE STRUCTURE

- Copper wire bare, extra finely stranded acc. to DIN VDE 0295 Class 6 / IEC 60228 Class 6
- Core insulation: PP
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores, G = with protective conductor GN-YE, x = without protective conductor
- Stranding:
 - 2 - 5 core(s): cores stranded into one layer with an optimally matched short lay length
 - 7 - 42 core(s): cores stranded into bundles/pairs with optimally matched, short lay lengths; bundles/pairs stranded together around a tensile core
- Ripcord
- Outer sheath: TPE, extruded filler
- Sheath colour: black (RAL 9004)
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, ozone
- low adhesion

- longer service life due to low frictional resistance of the PP-insulated cores
- for outdoor use
- suitable for use in drag chains
- Drag chain parameters
 - Acceleration (max.): 50 m/s²
 - Velocity (max.), gliding: 5 m/s
 - Traverse path (max.): 450 m
- highly resistant to alternate bending strength
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, UL-VW-1, CSA FT1
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404

APPLICATION

This UL/CSA approved cable is used when extreme demands are placed on the cable. Designed for export-oriented mechanical engineers, specifically in the USA and Canada. Gearing to the needs of the industry, materials and stranding techniques permit continuous use as highly flexible drag chain cables with long travelling distance capabilities at high or low speeds. For installation in dry and damp rooms, as well as outdoors. With free movement, without tensile stress and without forced motion control capabilities, these highly flexible TPE drag chain cables are suitable for frequent lifting and bending stress in machine and tool construction.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- for use in energy supply systems:
 - the assembly instructions must be observed
 - for special applications, we recommend contacting us and using our data entry form for energy supply systems

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|------------------|-----------------------|
| 11001824 | 2 x 0.5 | 21 | 5.5 | 9.6 | 37.0 |
| 11001825 | 3 G 0.5 | 21 | 5.7 | 14.4 | 42.0 |
| 11001826 | 4 G 0.5 | 21 | 6.1 | 19.2 | 49.0 |
| 11001827 | 5 G 0.5 | 21 | 6.6 | 24.0 | 59.0 |
| 11001828 | 7 G 0.5 | 21 | 8.8 | 33.6 | 91.0 |
| 11001829 | 12 G 0.5 | 21 | 10.2 | 57.6 | 133.0 |
| 11001830 | 16 G 0.5 | 21 | 11.3 | 76.8 | 167.0 |
| 11001831 | 18 G 0.5 | 21 | 12.1 | 86.4 | 184.0 |
| 11001832 | 20 G 0.5 | 21 | 12.4 | 96.0 | 199.0 |
| 11001833 | 25 G 0.5 | 21 | 13.6 | 120.0 | 244.0 |
| 11001834 | 36 G 0.5 | 21 | 16.9 | 172.8 | 355.0 |
| 11001835 | 42 G 0.5 | 21 | 18.6 | 201.6 | 419.0 |
| 11001836 | 2 x 0.75 | 19 | 5.9 | 14.4 | 45.0 |
| 11001837 | 3 G 0.75 | 19 | 6.2 | 21.6 | 53.0 |

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|------------------|-----------------------|
| 11001838 | 4 G 0.75 | 19 | 6.6 | 28.8 | 62.0 |
| 11001839 | 5 G 0.75 | 19 | 7.2 | 36.0 | 75.0 |
| 11001840 | 7 G 0.75 | 19 | 9.6 | 50.4 | 119.0 |
| 11001841 | 12 G 0.75 | 19 | 11.1 | 86.4 | 172.0 |
| 11001842 | 16 G 0.75 | 19 | 12.4 | 115.2 | 216.0 |
| 11001843 | 18 G 0.75 | 19 | 13.3 | 129.6 | 240.0 |
| 11001844 | 20 G 0.75 | 19 | 13.7 | 144.0 | 269.0 |
| 11001845 | 25 G 0.75 | 19 | 15.1 | 180.0 | 325.0 |
| 11001846 | 36 G 0.75 | 19 | 19.2 | 259.2 | 484.0 |
| 11001847 | 42 G 0.75 | 19 | 20.8 | 302.4 | 564.0 |
| 11001848 | 2 x 1 | 18 | 6.3 | 19.2 | 53.0 |
| 11001849 | 3 G 1 | 18 | 6.6 | 28.8 | 63.0 |
| 11001850 | 4 G 1 | 18 | 7.1 | 38.4 | 77.0 |
| 11001851 | 5 G 1 | 18 | 7.7 | 48.0 | 92.0 |

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| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|------------------|-----------------------|
| 11001852 | 7 G 1 | 18 | 10.4 | 67.2 | 143.0 |
| 11001853 | 12 G 1 | 18 | 12.2 | 115.2 | 211.0 |
| 11001854 | 16 G 1 | 18 | 13.6 | 153.6 | 276.0 |
| 11001855 | 18 G 1 | 18 | 14.8 | 172.8 | 311.0 |
| 11001856 | 20 G 1 | 18 | 15.2 | 192.0 | 339.0 |
| 11001857 | 25 G 1 | 18 | 17.0 | 240.0 | 419.0 |
| 11001858 | 36 G 1 | 18 | 21.4 | 345.6 | 625.0 |
| 11001859 | 42 G 1 | 18 | 23.5 | 403.2 | 742.0 |
| 11001860 | 2 x 1.5 | 16 | 6.9 | 28.8 | 67.0 |
| 11001861 | 3 G 1.5 | 16 | 7.3 | 43.2 | 82.0 |
| 11001862 | 4 G 1.5 | 16 | 7.9 | 57.6 | 101.0 |
| 11001863 | 5 G 1.5 | 16 | 8.6 | 72.0 | 122.0 |
| 11001864 | 7 G 1.5 | 16 | 11.7 | 100.8 | 191.0 |
| 11001865 | 12 G 1.5 | 16 | 13.7 | 172.8 | 291.0 |
| 11001866 | 16 G 1.5 | 16 | 15.6 | 230.4 | 386.0 |
| 11001867 | 18 G 1.5 | 16 | 17.0 | 259.2 | 422.0 |
| 11001868 | 20 G 1.5 | 16 | 17.6 | 288.0 | 472.0 |
| 11001869 | 25 G 1.5 | 16 | 19.7 | 360.0 | 589.0 |

| Part no. | No. cores x cross-sec. mm ² | AWG, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|--|--------------|---------------------|------------------|-----------------------|
| 11001870 | 36 G 1.5 | 16 | 24.7 | 518.4 | 878.0 |
| 11001871 | 42 G 1.5 | 16 | 27.1 | 604.8 | 1025.0 |
| 11001872 | 2 x 2.5 | 14 | 7.9 | 48.0 | 96.0 |
| 11001873 | 3 G 2.5 | 14 | 8.4 | 72.0 | 119.0 |
| 11001874 | 4 G 2.5 | 14 | 9.1 | 96.0 | 148.0 |
| 11001875 | 5 G 2.5 | 14 | 10.0 | 120.0 | 180.0 |
| 11001876 | 7 G 2.5 | 14 | 13.8 | 168.0 | 297.0 |
| 11001877 | 12 G 2.5 | 14 | 16.7 | 288.0 | 442.0 |
| 11001878 | 16 G 2.5 | 14 | 18.9 | 384.0 | 584.0 |
| 11001879 | 18 G 2.5 | 14 | 20.6 | 432.0 | 655.0 |
| 11001880 | 20 G 2.5 | 14 | 21.2 | 480.0 | 726.0 |
| 11001881 | 25 G 2.5 | 14 | 23.8 | 600.0 | 901.0 |
| 11001882 | 3 G 4 | 12 | 9.7 | 115.2 | 174.0 |
| 11001883 | 4 G 4 | 12 | 10.6 | 153.6 | 219.0 |
| 11001884 | 5 G 4 | 12 | 11.6 | 192.0 | 266.0 |
| 11001885 | 3 G 6 | 10 | 11.0 | 172.8 | 240.0 |
| 11001886 | 4 G 6 | 10 | 12.1 | 230.4 | 306.0 |
| 11001887 | 5 G 6 | 10 | 13.3 | 288.0 | 375.0 |