HELUCHAIN® MULTISPEED® PWR 521-C-PUR UL/CSA

for increased mechanical stress, oil resistant



TECHNICAL DATA

PUR drag chain cable acc. to UL-Std. 758 (AWM) Style 21223, 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 -30°C to +80°C fixed -40°C to +80°C
Nominal voltage	AC U_0/U 600/1000 V UL (AWM) AC 1000 V
Test voltage core/core	3000 V
Test voltage core/screen	3000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 7.5x Outer-Ø fixed 5x 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
- G = with protective conductor GN-YE
- cores stranded into one layer with an optimally matched short lay length
- Ripcord
- Inner sheath: TPE, extruded filler
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PUR
- Sheath colour: black (RAL 9005)
- 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 restistant to alternate bending strength
- halogen-free
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- 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 high 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 PUR drag chain cables are suitable for frequent lifting and bending stress in machine and tool construction. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

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

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001814	4 G 10	8	19.7	453.9	672.0
11001815	5 G 10	8	22.0	587.9	844.0
11001816	4 G 16	6	23.2	721.9	998.0
11001817	5 G 16	6	25.9	893.5	1231.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001818	4 G 25	4	29.1	1099.7	1538.0
11001819	5 G 25	4	32.4	1357.2	1890.0
11001820	4 G 35	2	32.7	1504.1	2064.0
11001821	5 G 35	2	36.5	1904.0	2571.0

22.04.2026 / We reserve the right to make technical changes; the imprint in the image is purely exemplary