## MULTISPEED® 500-C-PUR UL/CSA



















HELUKABEL® MULTISPEED® 500-C-PUR UL/CSA 5G1 QMM E170315 (\$\frac{\text{PAL}}{200} \text{ AWM STYLE 20939 80°C VW-1 (€



HELUKABEL® MULTISPEED® 500-C-PUR UL/CSA 18G1 QMM E170315 : 7NL a AWM STYLE 20939 80°C VW-1 C€

#### **TECHNICAL DATA**

PUR drag chain cable acc. to UL-Std. 758 (AWM) Style 20939, CSA-Std. C22.2 No. 210 - AWM I/II A/B

flexible -30°C to +80°C Temperature range fixed -40°C to +80°C VDE AC U<sub>0</sub>/U 300/500 V Nominal voltage UL (AWM) AC 600 V

Test voltage core/core 3000 V

Coupling resistance at 30 MHz, approx. 250 Ohm/

Minimum bending radius flexible 7.5x Outer-Ø fixed 4x Outer-Ø

#### CABLE STRUCTURE

- Copper wire bare, finely stranded, unilay with short lay lengths
- Core insulation: Special-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 36 core(s): cores stranded into bundles with optimally matched, short lay lengths; bundles stranded together around a tensile core
- · Inner sheath: TPE, extruded filler, black
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Fleece wrapping
- Outer sheath: Special grade of full polyurethane acc. to DIN VDE 0207-363-10-2 / DIN EN 50363-10-2 (compound type TMPU)
- Sheath colour: black (RAL 9004)
- · Length marking: in metres

#### PROPERTIES

- resistant to: oil, UV radiation, ozone, oxygen, weathering effects, hydrolysis, microbes, coolants, hydraulic fluids, acids, alkalis, greases, seawater and wastewater
- largely resistant to: chemicals
- · highly abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- · for outdoor use

- · suitable for use in drag chains
- 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

- 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
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- certifications and approvals: EAC

#### 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 toward the needs of the industry, materials and stranding techniques permit uninterrupted use as highly flexible drag chain cables with long travelling distance capabilities at high or low speeds. For installation in dry, damp and wet rooms, as well as outdoors. This special, robust and abrasion-resistant drag chain cable is used where highest demands on flexibility and load capacity are made, e.g. in cable carrier systems, industrial robots, production lines, automation systems and on permanently moving machine parts for continuous use in multi-shift operation. These copper screened cables are ideally suited for interference-free data signal transmission in measurement and control technology. 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 (mm<sup>2</sup>) 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 further application parameters, please refer to the selection tables
  - 3) 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-weight kg/km	Weight kg/km, approx.
24410	2 x 0.5	20	6.6	30.0	90.0
24411	3 G 0.5	20	6.9	36.0	104.0
24412	4 G 0.5	20	7.3	42.0	118.0
24413	5 G 0.5	20	7.8	48.0	148.0
24414	7 G 0.5	20	11.3	64.0	184.0
24415	9 G 0.5	20	11.4	80.0	219.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
24416	12 G 0.5	20	12.6	105.0	276.0
24417	18 G 0.5	20	15.0	137.0	378.0
24418	25 G 0.5	20	17.5	210.0	547.0
24419	2 x 0.75	19	6.8	40.0	100.0
24420	3 G 0.75	19	7.4	48.0	117.0
24421	4 G 0.75	19	8.0	55.0	143.0

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### for extreme mechanical stress, EMC-preferred type

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.	Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
24422	5 G 0.75	19	8.5	66.0	167.0	25307	2 x 1.5	16	7.0	63.5	99.0
24423	7 G 0.75	19	12.9	85.0	229.0	24435	3 G 1.5	16	8.6	75.0	170.0
24424	12 G 0.75	19	14.4	135.0	319.0	24436	4 G 1.5	16	9.4	90.0	204.0
24425	18 G 0.75	19	17.5	190.0	492.0	24437	5 G 1.5	16	10.4	108.0	236.0
24426	25 G 0.75	19	19.9	275.0	659.0	24438	7 G 1.5	16	16.0	157.0	309.0
24427	2 x 1	18	7.1	50.0	120.0	24439	12 G 1.5	16	17.6	240.0	509.0
24428	3 G 1	18	7.7	59.0	140.0	24440	18 G 1.5	16	21.3	355.0	718.0
24429	4 G 1	18	8.3	70.0	167.0	24441	25 G 1.5	16	24.8	448.0	944.0
24430	5 G 1	18	9.1	84.0	201.0	24334	36 G 1.5	16	30.3	592.0	1070.0
24431	7 G 1	18	14.0	106.0	256.0	25308	2 x 2.5	14	8.5	90.8	238.0
24432	12 G 1	18	15.0	174.0	417.0	25309	3 G 2.5	14	8.7	114.8	261.0
24433	18 G 1	18	18.7	240.0	557.0	24442	4 G 2.5	14	11.3	134.0	280.0
24434	25 G 1	18	21.4	332.0	766.0	24443	5 G 2.5	14	12.3	175.0	346.0
24333	36 G 1	18	26.1	436.0	840.0	24444	7 G 2.5	14	19.9	229.0	410.0

