HELUCHAIN® MULTISPEED® 521-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
Minimum bending radius	flexible 6.8x Outer-Ø fixed 4x 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
- Outer sheath: PUR, extruded filler
- Sheath colour: grey (RAL 7001)
- 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.

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.
11001676	2 x 0.5	21	5.5	9.6	38.0
11001677	3 G 0.5	21	5.7	14.4	43.0
11001678	4 G 0.5	21	6.1	19.2	51.0
11001679	5 G 0.5	21	6.6	24.0	61.0
11001680	7 G 0.5	21	8.8	33.6	94.0
11001681	12 G 0.5	21	10.2	57.6	137.0
11001682	16 G 0.5	21	11.3	76.8	172.0
11001683	18 G 0.5	21	12.1	86.4	190.0
11001684	20 G 0.5	21	12.4	96.0	205.0
11001685	25 G 0.5	21	13.6	120.0	251.0
11001686	36 G 0.5	21	16.9	172.8	366.0
11001687	42 G 0.5	21	18.6	201.6	432.0
11001688	2 x 0.75	19	5.9	14.4	46.0
11001689	3 G 0.75	19	6.2	21.6	54.0
11001690	4 G 0.75	19	6.6	28.8	64.0
11001691	5 G 0.75	19	7.2	36.0	77.0
11001692	7 G 0.75	19	9.6	50.4	123.0
11001693	12 G 0.75	19	11.1	86.4	177.0
11001694	16 G 0.75	19	12.4	115.2	223.0
11001695	18 G 0.75	19	13.3	129.6	248.0
11001696	20 G 0.75	19	13.7	144.0	278.0
11001697	25 G 0.75	19	15.1	180.0	335.0
11001698	36 G 0.75	19	19.2	259.2	499.0
11001699	42 G 0.75	19	20.8	302.4	582.0
11001700	2 x 1	18	6.3	19.2	55.0
11001701	3 G 1	18	6.6	28.8	65.0
11001702	4 G 1	18	7.1	38.4	79.0
11001703	5 G 1	18	7.7	48.0	95.0

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11001704	7 G 1	18	10.4	67.2	148.0
11001705	12 G 1	18	12.2	115.2	217.0
11001706	16 G 1	18	13.6	153.6	285.0
11001707	18 G 1	18	14.8	172.8	321.0
11001708	20 G 1	18	15.2	192.0	350.0
11001709	25 G 1	18	17.0	240.0	432.0
11001710	36 G 1	18	21.4	345.6	645.0
11001711	42 G 1	18	23.5	403.2	766.0
11001712	2 x 1.5	16	6.9	28.8	69.0
11001713	3 G 1.5	16	7.3	43.2	85.0
11001714	4 G 1.5	16	7.9	57.6	105.0
11001715	5 G 1.5	16	8.6	72.0	126.0
11001716	7 G 1.5	16	11.7	100.8	197.0
11001717	12 G 1.5	16	13.7	172.8	301.0
11001718	16 G 1.5	16	15.6	230.4	399.0
11001719	18 G 1.5	16	17.0	259.2	435.0
11001720	20 G 1.5	16	17.6	288.0	487.0
11001721	25 G 1.5	16	19.7	360.0	607.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001722	36 G 1.5	16	24.7	518.4	906.0
11001723	42 G 1.5	16	27.1	604.8	1057.0
11001724	2 x 2.5	14	7.9	48.0	99.0
11001725	3 G 2.5	14	8.4	72.0	123.0
11001726	4 G 2.5	14	9.1	96.0	153.0
11001727	5 G 2.5	14	10.0	120.0	185.0
11001728	7 G 2.5	14	13.8	168.0	306.0
11001729	12 G 2.5	14	16.7	288.0	456.0
11001730	16 G 2.5	14	18.9	384.0	602.0
11001731	18 G 2.5	14	20.6	432.0	676.0
11001732	20 G 2.5	14	21.2	480.0	749.0
11001733	25 G 2.5	14	23.8	600.0	929.0
11001734	3 G 4	12	9.7	115.2	179.0
11001735	4 G 4	12	10.6	153.6	226.0
11001736	5 G 4	12	11.6	192.0	275.0
11001737	3 G 6	10	11.0	172.8	247.0
11001738	4 G 6	10	12.1	230.4	316.0
11001739	5 G 6	10	13.3	288.0	387.0

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