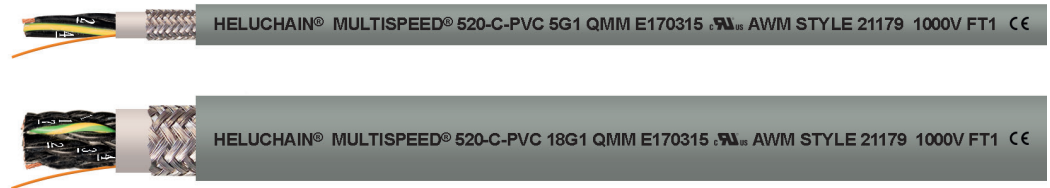


HELUCHAIN® MULTISPEED® 520-C-PVC UL/CSA

for high mechanical stress, oil resistant



TECHNICAL DATA

PVC drag chain cable acc. to UL-Std. 758 (AWM) Style 21179, 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 -5°C to +80°C fixed -30°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 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
- Ripcord
- Inner sheath: TPE, extruded filler
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PVC
- 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.): 100 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 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 PVC 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. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001602	2 x 0.5	21	7.2	28.5	73.0
11001603	3 G 0.5	21	7.4	33.1	78.0
11001604	4 G 0.5	21	7.8	40.8	89.0
11001605	5 G 0.5	21	8.3	48.0	103.0
11001606	7 G 0.5	21	10.8	73.6	160.0
11001607	12 G 0.5	21	12.4	103.4	216.0
11001608	16 G 0.5	21	13.5	128.0	258.0
11001609	18 G 0.5	21	14.5	138.0	285.0
11001610	20 G 0.5	21	14.8	149.0	302.0
11001611	25 G 0.5	21	16.4	182.6	367.0
11001612	36 G 0.5	21	19.9	250.4	522.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001613	42 G 0.5	21	22.0	309.5	637.0
11001614	2 x 0.75	19	7.6	36.2	85.0
11001615	3 G 0.75	19	7.9	43.4	93.0
11001616	4 G 0.75	19	8.3	52.8	106.0
11001617	5 G 0.75	19	8.9	62.7	123.0
11001618	7 G 0.75	19	11.6	90.8	186.0
11001619	12 G 0.75	19	13.3	137.8	261.0
11001620	16 G 0.75	19	14.8	172.4	323.0
11001621	18 G 0.75	19	16.1	187.2	358.0
11001622	20 G 0.75	19	16.5	206.8	386.0
11001623	25 G 0.75	19	18.1	248.8	465.0

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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001624	36 G 0.75	19	22.4	366.7	690.0
11001625	42 G 0.75	19	24.4	425.1	818.0
11001626	2 x 1	18	8.0	41.2	94.0
11001627	3 G 1	18	8.3	53.5	107.0
11001628	4 G 1	18	8.8	62.8	122.0
11001629	5 G 1	18	9.7	81.9	152.0
11001630	7 G 1	18	12.6	113.5	225.0
11001631	12 G 1	18	14.6	167.0	315.0
11001632	16 G 1	18	16.4	217.0	398.0
11001633	18 G 1	18	17.6	236.3	438.0
11001634	20 G 1	18	18.0	260.0	472.0
11001635	25 G 1	18	20.0	314.9	584.0
11001636	36 G 1	18	24.8	472.3	872.0
11001637	42 G 1	18	27.3	541.0	1035.0
11001638	2 x 1.5	16	8.6	53.4	112.0
11001639	3 G 1.5	16	9.0	68.1	129.0
11001640	4 G 1.5	16	9.9	92.0	163.0
11001641	5 G 1.5	16	10.6	111.5	190.0
11001642	7 G 1.5	16	13.9	152.9	282.0
11001643	12 G 1.5	16	16.5	235.6	414.0
11001644	16 G 1.5	16	18.6	299.7	527.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11001645	18 G 1.5	16	20.0	337.0	587.0
11001646	20 G 1.5	16	20.4	366.7	634.0
11001647	25 G 1.5	16	23.1	483.1	823.0
11001648	36 G 1.5	16	28.5	656.9	1185.0
11001649	42 G 1.5	16	31.3	758.4	1383.0
11001650	2 x 2.5	14	9.9	82.4	156.0
11001651	3 G 2.5	14	10.4	106.8	182.0
11001652	4 G 2.5	14	11.1	135.9	219.0
11001653	5 G 2.5	14	12.0	165.5	259.0
11001654	7 G 2.5	14	16.6	230.4	403.0
11001655	12 G 2.5	14	19.7	363.7	607.0
11001656	16 G 2.5	14	22.5	491.7	809.0
11001657	18 G 2.5	14	24.2	554.9	904.0
11001658	20 G 2.5	14	24.6	602.2	968.0
11001659	25 G 2.5	14	27.6	737.8	1197.0
11001660	3 G 4	12	11.7	155.8	247.0
11001661	4 G 4	12	12.8	199.6	306.0
11001662	5 G 4	12	13.8	243.9	362.0
11001663	3 G 6	10	13.2	224.0	332.0
11001664	4 G 6	10	14.5	282.0	411.0
11001665	5 G 6	10	16.1	345.6	494.0