MULTIFLEX 512®-PUR UL/CSA

for extreme mechanical stress

TECHNICAL DATA

PUR drag chain cable acc. to UL-Std. 758 (AWM) Style 21209, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range	flexible -30°C to +90°C fixed -40°C to +90°C
Permissible operating temperature of the conductor	+90°C
Nominal voltage	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: 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, in the outer layer, x = without protective conductor
- Cores stranded in layers with optimally matched lay lengths
- Fleece wrapping over each stranding layer, from 4 mm² without 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), UL-Std. 758 (AWM) Style 21209
- Sheath colour: grey (RAL 7001)
- 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, drilling fluids, drilling mud
- highly abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- for outdoor use
- suitable for use in drag chains
- 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
- drilling mud resistant acc. to NEK TS 606
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- Alternate bending test: tested on approx. 10 million cycles
- Certifications: DNV GL

APPLICATION

Industrial application: UL/CSA approved drag chain cable for use in machine and tool manufacturing, in robotics and in other constantly moving machine parts; for permanently flexible applications moving freely without tensile stress and without movement control in dry, damp and wet rooms as well as outdoors. A slippery PP core insulation, cut-resistance and a low-adhesion PUR outer sheath guarantee an optimum durability and excellent cost-efficiency.
Oil and gas sector: for use as control and instrumentation cables on drilling platforms and ships, in land drilling as well as in chemical and petrochemical plants; resistant to drilling mud according to NEK TS 606 and thus ideal for high-performance applications such as pumping stations, compressors, generators and emergency power supply systems.

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 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.
21559	2 x 0.5	20	5.9	10.8	38.0
21560	3 G 0.5	20	6.2	16.1	46.0
21561	4 G 0.5	20	6.7	21.5	59.0
21562	5 G 0.5	20	7.2	27.0	68.0
21563	7 G 0.5	20	8.3	37.6	88.0
21564	12 G 0.5	20	9.7	64.5	131.0
21565	18 G 0.5	20	11.2	97.0	197.0
21566	20 G 0.5	20	11.8	107.5	260.0
21567	25 G 0.5	20	13.6	134.5	282.0
21568	30 G 0.5	20	13.9	161.3	315.0
21569	36 G 0.5	20	15.1	193.5	374.0
21570	2 x 0.75	19	6.6	14.4	47.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21571	3 G 0.75	19	7.0	21.6	58.0
21572	4 G 0.75	19	7.5	29.0	69.0
21573	5 G 0.75	19	8.1	36.0	85.0
21574	7 G 0.75	19	9.4	50.0	118.0
21575	12 G 0.75	19	11.2	86.0	183.0
21576	18 G 0.75	19	13.0	130.0	270.0
21577	20 G 0.75	19	13.8	144.0	290.0
21523	21 G 0.75	19	14.7	151.0	302.0
21578	25 G 0.75	19	16.3	180.0	374.0
21579	30 G 0.75	19	16.5	216.0	420.0
21580	36 G 0.75	19	18.0	259.0	498.0
21581	2 x 1	18	6.9	19.2	55.0

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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21582	3 G 1	18	7.3	29.0	70.0
21583	4 G 1	18	7.9	38.0	86.0
21584	5 G 1	18	8.5	48.0	102.0
21585	7 G 1	18	10.0	67.0	143.0
21586	12 G 1	18	11.8	115.0	225.0
21587	18 G 1	18	13.9	173.0	334.0
21588	20 G 1	18	14.9	192.0	370.0
21589	25 G 1	18	17.2	240.0	460.0
21590	30 G 1	18	17.7	288.0	530.0
21591	36 G 1	18	19.2	346.0	625.0
21592	41 G 1	18	20.9	410.0	779.0
21593	50 G 1	18	22.8	498.0	953.0
21594	65 G 1	18	26.0	650.0	1205.0
21595	2 x 1.5	16	7.7	29.0	70.0
21596	3 G 1.5	16	8.2	43.0	90.0
21597	4 G 1.5	16	8.9	58.0	106.0
21598	5 G 1.5	16	9.6	72.0	145.0
21599	7 G 1.5	16	11.3	101.0	205.0
21600	12 G 1.5	16	13.7	173.0	320.0
21601	18 G 1.5	16	16.4	259.0	465.0
21602	20 G 1.5	16	17.2	288.0	510.0
21603	25 G 1.5	16	20.2	360.0	650.0
21604	30 G 1.5	16	20.7	432.0	750.0
21605	36 G 1.5	16	22.5	518.0	880.0
21606	42 G 1.5	16	24.4	628.0	1209.0
21607	50 G 1.5	16	26.8	749.0	1449.0
21608	61 G 1.5	16	29.6	912.0	1712.0
21609	2 x 2.5	14	8.5	48.0	115.0
21610	3 G 2.5	14	9.0	72.0	162.0
21611	4 G 2.5	14	9.8	96.0	196.0
21612	5 G 2.5	14	10.7	120.0	230.0
21613	7 G 2.5	14	12.7	168.0	312.0
21614	12 G 2.5	14	15.5	288.0	532.0
21615	18 G 2.5	14	18.6	432.0	762.0
21616	20 G 2.5	14	19.8	480.0	858.0
21617	25 G 2.5	14	23.1	600.0	998.0
21618	4 G 4	12	11.2	154.0	283.0
21619	5 G 4	12	12.3	192.0	349.0
21620	7 G 4	12	15.0	269.0	498.0
11017371	3 G 6	10	11.6	173.0	350.0
21621	4 G 6	10	12.7	230.0	432.0
21622	5 G 6	10	14.1	288.0	529.0
21623	7 G 6	10	17.2	403.0	782.0
21624	4 G 10	8	16.7	384.0	685.0
21625	5 G 10	8	18.6	480.0	817.0
21626	7 G 10	8	22.8	672.0	1023.0
11017372	3 G 16	6	17.6	461.0	792.0
21627	4 G 16	6	19.6	614.0	1042.0
21628	5 G 16	6	21.9	768.0	1292.0
21629	7 G 16	6	26.8	1075.0	1709.0