

MULTIFLEX 512®-PUR UL/CSA

Cable for drag chains, 80°C, 600 V, halogen-free, meter marking



Technical data

- Drag chain cables for extreme mechanical stress, acc. to UL Style 20939
- **Temperature range**
flexing -30°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage**
UL/CSA 600 V
- **Test voltage**
3000 V
- **Minimum bending radius**
flexing 5x cable Ø
fixed installation 3x cable Ø
- **Alternating bending test**
tested with approx. **10 million bending cycles**

Cable structure

- Bare copper conductor, extra fine wire acc. to DIN VDE 0295 cl.6, col. 4 / IEC 60228 cl.6
- Core insulation of special PP
- Core identification to DIN VDE 0293 black cores with continuous white numbering
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal selected lay length
- Fleece wrapping over each layer (from 4 mm² without fleece wrapping)
- Outer sheath of special **full-polyurethane** TMPU, to DIN VDE 0207-363-10-2 / DIN EN 50363-10-2
- Sheath colour: grey (RAL 7001)
- With meter marking

Properties

- Very good oil resistant
- Guaranteed permanent application in multi-shift operation under extreme high bending stress
- Adhesion-low
- High resistance to mechanical strain
- High property of alternating bending strength
- Long life durabilities through low friction-resistance by using the PP insulation
- High tensile strength-, abrasion- and impact resistant at low temperature
- Resistant to weather, ozone, UV-radiation, solvents, acids, alkalis, hydraulic liquidity, hydrolysis
- Outdoor application
- 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

Note

- G = with GN-YE conductor
x = without GN-YE conductor
- The conductor is metrically constructed (mm²). The AWG designation is approximate and purely informative.
- Screened analogue type:
MULTIFLEX 512® -C-PUR UL/CSA

Selected cross-sections with improved properties will soon be available ex stock:

- Certified as „mud resistant“ acc. to NEK TS 606
- Permissible operating temperature at the conductor: 90°C
- Nominal Voltage UL (AWM) AC 1000 V
- Outer sheath acc. to. UL 758 (AWM) 21209

Application

These UL/CSA cables for drag chains are used for permanent flexible applications in machineries, machine tools, robot technics, for movable automated machinery parts and multi-shift operation. Those cables are developed according to the newest state of technology improvement. These high flexible control cables with sliding abilities guaranteed an optimum service life durabilities and also very economic by using the PP-core insulation and the PUR-outer sheath. The PUR material is adhesion-low and cut-resistant. For applications which go beyond standard solutions (for example for composting appliances or high shelf conveyors with extremely high processing speeds etc.) we recommend for our especially developed enquiry sheet for energy guiding systems. Further technical details see selection table for drag chain cables, see chapter "Technical Information". For use in cable drag chains please note installation instruction.

CE = Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No.cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
21559	2 x 0,5	20	5,9	9,6	38,0
21560	3 G 0,5	20	6,2	14,4	46,0
21561	4 G 0,5	20	6,7	19,0	59,0
21562	5 G 0,5	20	7,2	24,0	68,0
21563	7 G 0,5	20	8,3	33,6	88,0
21564	12 G 0,5	20	9,7	58,0	131,0
21565	18 G 0,5	20	11,2	86,0	197,0
21566	20 G 0,5	20	11,8	96,0	260,0
21567	25 G 0,5	20	13,6	120,0	282,0
21568	30 G 0,5	20	13,9	144,0	315,0
21569	36 G 0,5	20	15,1	172,0	374,0

Part no.	No.cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
21570	2 x 0,75	19	6,6	14,4	47,0
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

Continuation ▶

MULTIFLEX 512®-PUR UL/CSA

Cable for drag chains, 80°C, 600 V, halogen-free, meter marking



Part no.	No. cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
21581	2 x 1	18	6,9	19,2	55,0
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

Part no.	No. cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
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	230,0	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

Dimensions and specifications may be changed without prior notice. (RN05)