

MULTIFLEX 512[®]-C-PUR special cable for drag chains, halogen-free, screened, EMC-preferred type, meter marking



HELUKABEL MULTIFLEX 512-C-PUR 12G1 QMM / 22598 300/500 V 001041830 CE



Technical data

- Special drag chain cables for extreme mechanical stress in accordance to DIN VDE 0285-525-2-21 / DIN EN 50525-2-21
- **Temperature range**
flexing -30°C to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage**
3000 V
- **Insulation resistance**
min. 100 MOhm x km
- **Minimum bending radius**
flexing 7,5x cable ø
fixed installation 4x cable ø
- **Test of alternating bending cycles**
approx. **10 million**
- **Radiation resistance**
up to 50x10⁶ cJ/kg (up to 50 Mrad)
- **Coupling resistance**
max. 250 Ohm/km

Cable structure

- Bare copper, extra fine wire conductors, bunch stranded to DIN VDE 0295 cl.6, col. 4, BS 6360 cl.6 and IEC 60228 cl.6
- Core insulation special PP
- Core identification 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
- Special core wrapping over each layers and an additional fleece over outer layer
- **TPE-inner sheath**, halogen-free
- Wrapping with special tapes
- Tinned copper braided screening , approx. 85% coverage
- Special core wrapping of fleece (up to 4 mm² without core wrapping over the outer layer
- 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 a matte surface
- with meter marking

Properties

- Very good oil resistant
- Guaranteed permanent application in multi-shift operation under extreme high bending stress
- Adhesion-low
- High resistant 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 and UV-radiation, solvents, acids and alkalis, hydraulic liquidity and hydrolysis
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- G = with green-yellow conductor
x = without green-yellow conductor (OZ)
- Please note the cleanroom qualification when ordering.
For more information see introduction
- unscreened analogue type:
MULTIFLEX 512[®]-PUR

Application

The special screened cables for drag chains are mainly applied for impulse transmission to prevent external interference effects and 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 which is adhesive-free and cut-resistant.

EMC = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22571	2 x 0,5	8,3	30,0	90,0	20
22572	3 G 0,5	8,5	38,0	105,0	20
22573	4 G 0,5	9,0	50,0	124,0	20
22574	5 G 0,5	9,7	65,0	132,0	20
22575	7 G 0,5	11,1	70,0	175,0	20
22576	12 G 0,5	12,7	100,0	250,0	20

Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22577	18 G 0,5	14,7	157,0	325,0	20
22578	20 G 0,5	15,4	167,0	350,0	20
22579	25 G 0,5	17,1	240,0	450,0	20
22580	30 G 0,5	17,9	273,0	510,0	20
22581	36 G 0,5	19,2	306,0	580,0	20

Continuation ▶

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Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22582	2 x 0,75	8,8	39,0	110,0	19
22583	3 G 0,75	9,3	49,0	120,0	19
22584	4 G 0,75	9,7	60,0	148,0	19
22585	5 G 0,75	10,5	70,0	160,0	19
22586	7 G 0,75	11,9	95,0	205,0	19
22587	12 G 0,75	14,2	140,0	308,0	19
22588	18 G 0,75	16,3	220,0	420,0	19
22589	20 G 0,75	16,9	249,0	450,0	19
22590	25 G 0,75	19,2	313,0	579,0	19
22591	30 G 0,75	19,7	470,0	630,0	19
22592	36 G 0,75	21,2	500,0	745,0	19
22593	2 x 1	9,7	50,0	120,0	18
22594	3 G 1	10,0	60,0	135,0	18
22595	4 G 1	10,8	73,0	173,0	18
22596	5 G 1	11,7	81,0	187,0	18
22597	7 G 1	13,4	114,0	240,0	18
22598	12 G 1	16,0	186,0	360,0	18
22599	18 G 1	18,5	254,0	498,0	18
22600	20 G 1	19,4	322,0	568,0	18
22601	25 G 1	21,7	377,0	670,0	18
22602	30 G 1	22,5	429,0	774,0	18
22603	36 G 1	24,3	516,0	895,0	18
22884	41 G 1	26,1	610,0	1032,0	18
22885	50 G 1	28,4	690,0	1160,0	18
22886	65 G 1	32,2	852,0	1660,0	18
22604	2 x 1,5	10,2	64,0	145,0	16
22605	3 G 1,5	11,0	84,0	168,0	16
22606	4 G 1,5	11,6	99,0	217,0	16
22607	5 G 1,5	12,6	129,0	235,0	16
22608	7 G 1,5	14,5	148,0	325,0	16

Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22609	12 G 1,5	17,4	279,0	481,0	16
22610	18 G 1,5	19,9	393,0	675,0	16
22611	25 G 1,5	23,7	584,0	927,0	16
22612	30 G 1,5	24,6	607,0	1025,0	16
22613	36 G 1,5	26,4	702,0	1210,0	16
22887	42 G 1,5	28,4	829,0	1441,0	16
22888	50 G 1,5	31,2	1025,0	1709,0	16
22889	61 G 1,5	34,2	1190,0	2025,0	16
22614	2 x 2,5	11,9	104,0	198,0	14
22615	3 G 2,5	12,6	140,0	284,0	14
22616	4 G 2,5	13,6	164,0	378,0	14
22617	5 G 2,5	14,7	190,0	423,0	14
22618	7 G 2,5	17,4	236,0	486,0	14
22619	12 G 2,5	20,9	390,0	756,0	14
22620	18 G 2,5	24,2	607,0	1127,0	14
22621	20 G 2,5	25,6	661,0	1210,0	14
22622	25 G 2,5	29,1	796,0	1530,0	14
22623	4 G 4	16,8	222,0	448,0	12
22624	5 G 4	18,4	328,0	533,0	12
22625	7 G 4	21,6	360,0	678,0	12
22626	4 G 6	18,1	305,0	636,0	10
22627	5 G 6	19,6	441,0	772,0	10
22628	7 G 6	23,2	505,0	1028,0	10
22629	4 G 10	22,5	485,0	1052,0	8
22630	5 G 10	24,7	610,0	1096,0	8
22631	7 G 10	29,3	820,0	1530,0	8
22632	4 G 16	25,7	840,0	1386,0	6
22633	5 G 16	28,2	1050,0	1759,0	6
22634	7 G 16	33,6	1510,0	2087,0	6

Dimensions and specifications may be changed without prior notice. (RC02)