

MULTIFLEX 512®-PUR special cable for drag chains,

halogen-free, meter marking



C

Technical data

- Special drag chain cables for high mechanical stress, adapted to DIN VDE 0282 part 1 and part 10
- **Temperature range**
flexing -40°C to +80°C
fixed installation -50°C to +80°C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage**
3000 V
- **Insulation resistance**
min. 100 MΩm x km
- **Minimum bending radius**
flexing 5x cable Ø
fixed installation 3x cable Ø
- **Alternating bending cycles**
approx. **10 million**
- **Radiation resistance**
up to 50x10⁶ cJ/kg (up to 50 Mrad)

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
- Special core insulation, modified TPE
- Black cores with continuous white numbering
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal selected lay-length
- Special core wrapping over each layer (up to 4 mm² without core wrapping over the outer layer)
- Special **full-polyurethane** outer jacket TPU, to DIN VDE 0282 part 10
- Colour grey (RAL 7001) outer surface mat
- with meter marking, change-over in 2009

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 TPE insulation
- High tensile strength-, abrasion- and impact resistant at low temperature
- Resistant to Weather, Ozone and UV-radiation, Solvents, acids and alkalis, Hydraulic liquidity
- PUR-jacket flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- G = with green-yellow earth core;
x = without green-yellow earth core (OZ).
- Cleanroom qualification tested with analog type. Please note "cleanroom qualified" when ordering.
- **screened analogue type:**
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Application

The special 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 TPE-core insulation and the PUR-outer jacket. 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.

Before installation in cable trays please read the instructions. Further technical details see selection table for drag chain cables, see lead text.

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

Part No.	No. cores x cross-sec. mm ²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part No.	No. cores x cross-sec. mm ²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22501	2 x 0,5	5,5	9,6	38,0	20	22512	2 x 0,75	6,2	14,4	47,0	18
22502	3 G 0,5	5,8	14,4	46,0	20	22513	3 G 0,75	6,5	21,6	58,0	18
22503	4 G 0,5	6,4	19,0	59,0	20	22514	4 G 0,75	7,0	29,0	69,0	18
22504	5 G 0,5	7,0	24,0	68,0	20	22515	5 G 0,75	7,8	36,0	85,0	18
22505	7 G 0,5	8,1	33,6	88,0	20	22516	7 G 0,75	9,0	50,0	118,0	18
22506	12 G 0,5	9,9	58,0	131,0	20	22517	12 G 0,75	11,0	86,0	183,0	18
22507	18 G 0,5	11,5	86,0	197,0	20	22518	18 G 0,75	13,0	130,0	270,0	18
22508	20 G 0,5	12,0	96,0	260,0	20	22519	20 G 0,75	13,5	144,0	290,0	18
22509	25 G 0,5	13,7	120,0	282,0	20	22520	25 G 0,75	15,4	180,0	374,0	18
22510	30 G 0,5	14,3	144,0	315,0	20	22521	30 G 0,75	16,2	216,0	420,0	18
22511	36 G 0,5	15,3	172,0	374,0	20	22522	36 G 0,75	17,6	259,0	498,0	18

Dimensions and specifications may be changed without prior notice. (IRC02)

Continuation ►

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Part No.	No. cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22523	2 x 1	6,9	19,2	55,0	17
22524	3 G 1	7,4	29,0	70,0	17
22525	4 G 1	8,0	38,0	86,0	17
22526	5 G 1	8,7	48,0	102,0	17
22527	7 G 1	10,2	67,0	143,0	17
22528	12 G 1	12,6	115,0	225,0	17
22529	18 G 1	14,8	173,0	334,0	17
22530	20 G 1	15,8	192,0	370,0	17
22531	25 G 1	18,1	240,0	460,0	17
22532	30 G 1	18,5	288,0	530,0	17
22533	36 G 1	20,1	346,0	625,0	17
22878	41 G 1	22,0	410,0	779,0	17
22879	50 G 1	24,0	498,0	953,0	17
22880	65 G 1	27,2	650,0	1205,0	17
22534	2 x 1,5	7,6	29,0	70,0	16
22535	3 G 1,5	8,1	43,0	90,0	16
22536	4 G 1,5	8,7	58,0	106,0	16
22537	5 G 1,5	9,7	72,0	145,0	16
22538	7 G 1,5	11,3	101,0	205,0	16
22539	12 G 1,5	13,8	173,0	320,0	16
22540	18 G 1,5	16,3	259,0	465,0	16
22541	20 G 1,5	17,3	288,0	510,0	16
22542	25 G 1,5	19,8	360,0	650,0	16
22543	30 G 1,5	20,3	432,0	750,0	16
22544	36 G 1,5	22,2	518,0	880,0	16
22881	42 G 1,5	24,0	628,0	1209,0	16
22882	50 G 1,5	26,2	749,0	1449,0	16
22883	61 G 1,5	28,9	912,0	1712,0	16

Part No.	No. cores x cross-sec. mm²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
22545	2 x 2,5	9,2	48,0	115,0	14
22546	3 G 2,5	9,7	72,0	162,0	14
22547	4 G 2,5	10,5	96,0	196,0	14
22548	5 G 2,5	11,6	120,0	230,0	14
22549	7 G 2,5	13,8	168,0	312,0	14
22550	12 G 2,5	16,9	288,0	532,0	14
22551	18 G 2,5	20,0	432,0	762,0	14
22552	20 G 2,5	21,2	480,0	858,0	14
22553	25 G 2,5	24,4	600,0	998,0	14
22554	4 G 4	13,2	154,0	283,0	12
22555	5 G 4	14,6	192,0	349,0	12
22556	7 G 4	17,6	269,0	498,0	12
22557	4 G 6	14,4	230,0	432,0	10
22558	5 G 6	15,9	288,0	529,0	10
22559	7 G 6	19,2	403,0	782,0	10
22560	4 G 10	18,4	384,0	685,0	8
22561	5 G 10	20,7	480,0	817,0	8
22562	7 G 10	24,7	672,0	1023,0	8
22563	4 G 16	21,3	614,0	1042,0	6
22564	5 G 16	23,8	768,0	1292,0	6
22565	7 G 16	28,6	1075,0	1709,0	6

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To be able to provide information on the service life and in line with our certification to DIN EN ISO 9001:2000, we document the realistic testing of our cables suitable for use in drag chains.