MULTIFLEX 512®-PUR special cable for drag chains,

halogen-free, meter marking









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 M0hm 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-vellow earth core in the outer laver (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 TMPU, to DIN VDE 0282 part 10
- Colour grey (RAL 7001) outer surface mat
- with meter marking, change-over in 2011

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 strenath
- 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 and Hydrolysis
- PUR-jacket flame retardant according to VDE 0482-332-1-2. DIN EN 60332-1-2/ 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-vellow earth core (OZ).
- Cleanroom qualification tested with analog type. Please note "cleanroom qualified" when ordering.
- screened analogue type:

MULTIFLEX 512®-C-PUR see page C 19

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

Part no.	No.cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg/km	AWG-No.
22501	2 x 0,5	5,5	9,6	38,0	20
22502	3 G 0,5	5,8	14,4	46,0	20
22503	4 G 0,5	6,4	19,0	59,0	20
22504	5 G 0,5	7,0	24,0	68,0	20
22505	7 G 0,5	8,1	33,6	88,0	20
22506	12 G 0,5	9,9	58,0	131,0	20
22507	18 G 0,5	11,5	86,0	197,0	20
22508	20 G 0,5	12,0	96,0	260,0	20
22509	25 G 0,5	13,7	120,0	282,0	20
22510	30 G 0,5	14,3	144,0	315,0	20
22511	36 G 0,5	15,3	172,0	374,0	20

Part no.	No.cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg/km	Weight approx. kg/km	AWG-No.
22512	2 x 0,75	6,2	14,4	47,0	18
22513	3 G 0,75	6,5	21,6	58,0	18
22514	4 G 0,75	7,0	29,0	69,0	18
22515	5 G 0,75	7,8	36,0	85,0	18
22516	7 G 0,75	9,0	50,0	118,0	18
22517	12 G 0,75	11,0	86,0	183,0	18
22518	18 G 0,75	13,0	130,0	270,0	18
22519	20 G 0,75	13,5	144,0	290,0	18
22520	25 G 0,75	15,4	180,0	374,0	18
22521	30 G 0,75	16,2	216,0	420,0	18
22522	36 G 0,75	17,6	259,0	498,0	18

Continuation >



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Part no.	No.cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. 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. mm ²	Outer Ø approx. mm	kg / km	Weight approx. 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

Dimensions and specifications may be changed without prior notice. (RCO2)

	12 PUR/C.PUR					-	
Art. Nr	Aderzahl x Nennquerschnitt mm	Außendurch- messer mm	geschirmt	Mindest- biegeradius	FA-Nr.	Sylvenzari	0
22516	7G0,5	8,10	nein	5xd			
22519	20G,75	13,50	nein	5xd	3327	1.966712	
22507	1900,5	11.50	nein	5id	2879	1.36712	
22527	7G1	10,20	nein	5id	3782	1,366712	
22518	18G70,5	12.90	nein	Sid	3444		
22550	1202,5	16.90	nein	5id			
		28,60	nein	5xd	2273	1,907.00	
22565	7G16	19.20	nein	5rd	4421	13030	
22559	706	17,00	ja	7,5xd	4356	176376	
	25G0,5	1/,00		7.5xd	2917	178376	
22579	230,5	16,30	13		4056		

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.

