MULTIFLEX 512®-C-PUR

for high mechanical stress, EMC-preferred type



TECHNICAL DATA

PUR drag chain cable in alignment with DIN VDE 0285-525-2-21 / DIN EN 50525-2-21

Temperature range	flexible -30°C to +80°C fixed -40°C to +80°C
Nominal voltage	AC U_0/U 300/500 V
Test voltage core/core	3000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 7.5x Outer-Ø fixed 4x 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
- Inner sheath: TPE
- Fleece wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- 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)
- 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
- 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

- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- 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 and approvals: EAC

APPLICATION

These specially screened drag chain cables offer application possibilities in areas where external high-frequency influences disturb pulse transmissions. They are used for permanently flexible applications in machine and tool construction, in robotics and on permanently moving machine parts for continuous use in multi-shift operations. With free movement, without tensile stress and without forced motion control capabilities, these cables have proven their reliable performance in drag chain applications. This highly flexible cable with gliding PP core insulation and cut-resistant low adhesive PUR outer sheath, guarantees an optimum service life and very high economic efficiency. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- please note "cleanroom qualification" in your order
- 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.
22571	2 x 0.5	20	8.3	30.0	90.0
22572	3 G 0.5	20	8.6	38.0	105.0
22573	4 G 0.5	20	9.1	50.0	124.0
22574	5 G 0.5	20	9.8	65.0	132.0
22575	7 G 0.5	20	11.3	70.0	175.0
22576	12 G 0.5	20	12.9	100.0	250.0
22577	18 G 0.5	20	14.8	157.0	325.0
22578	20 G 0.5	20	15.6	167.0	350.0
22579	25 G 0.5	20	17.6	240.0	450.0
22580	30 G 0.5	20	18.3	273.0	510.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
22581	36 G 0.5	20	19.5	306.0	580.0
22582	2 x 0.75	19	9.1	39.0	110.0
22583	3 G 0.75	19	9.7	49.0	120.0
22584	4 G 0.75	19	10.2	60.0	148.0
22585	5 G 0.75	19	11.1	70.0	160.0
22586	7 G 0.75	19	12.6	95.0	205.0
22587	12 G 0.75	19	15.0	140.0	308.0
22588	18 G 0.75	19	17.4	220.0	420.0
22589	20 G 0.75	19	18.1	249.0	450.0
22590	25 G 0.75	19	20.8	313.0	579.0

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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.
22591	30 G 0.75	19	21.0	470.0	630.0
22592	36 G 0.75	19	22.7	500.0	745.0
22593	2 x 1	18	9.9	50.0	120.0
22594	3 G 1	18	10.3	60.0	135.0
22595	4 G 1	18	11.1	73.0	173.0
22596	5 G 1	18	11.8	84.0	187.0
22597	7 G 1	18	13.7	114.0	240.0
22598	12 G 1	18	16.2	186.0	360.0
22599	18 G 1	18	18.8	254.0	498.0
22600	20 G 1	18	19.8	322.0	568.0
22601	25 G 1	18	22.5	377.0	670.0
22602	30 G 1	18	22.9	429.0	774.0
22603	36 G 1	18	24.7	516.0	895.0
22884	41 G 1	18	26.6	610.0	1032.0
22885	50 G 1	18	28.8	690.0	1160.0
22886	65 G 1	18	32.5	852.0	1660.0
22604	2 x 1.5	16	10.3	64.0	145.0
22605	3 G 1.5	16	11.2	84.0	168.0
22606	4 G 1.5	16	11.9	99.0	217.0
22607	5 G 1.5	16	12.8	129.0	235.0
22608	7 G 1.5	16	14.9	148.0	325.0
22609	12 G 1.5	16	17.9	279.0	481.0
22610	18 G 1.5	16	20.6	393.0	675.0
22611	25 G 1.5	16	24.8	584.0	927.0
22612	30 G 1.5	16	25.3	607.0	1025.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
22613	36 G 1.5	16	27.3	702.0	1210.0
22887	42 G 1.5	16	29.4	829.0	1441.0
22888	50 G 1.5	16	32.0	1025.0	1709.0
22889	61 G 1.5	16	35.0	1190.0	2025.0
22614	2 x 2.5	14	11.9	104.0	198.0
22615	3 G 2.5	14	12.7	140.0	284.0
22616	4 G 2.5	14	13.5	164.0	378.0
22617	5 G 2.5	14	14.7	190.0	423.0
22618	7 G 2.5	14	17.7	236.0	486.0
22619	12 G 2.5	14	21.2	390.0	756.0
22620	18 G 2.5	14	24.6	607.0	1127.0
22621	20 G 2.5	14	26.0	661.0	1210.0
22622	25 G 2.5	14	29.8	796.0	1530.0
22623	4 G 4	12	16.7	222.0	448.0
22624	5 G 4	12	18.5	328.0	533.0
22625	7 G 4	12	21.8	360.0	678.0
22626	4 G 6	10	18.7	305.0	636.0
22627	5 G 6	10	20.4	441.0	772.0
22628	7 G 6	10	24.3	505.0	1028.0
22629	4 G 10	8	23.0	485.0	1052.0
22630	5 G 10	8	25.2	610.0	1096.0
22631	7 G 10	8	30.2	820.0	1530.0
22632	4 G 16	6	26.5	840.0	1386.0
22633	5 G 16	6	29.1	1050.0	1759.0
22634	7 G 16	6	34.9	1510.0	2087.0

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