

MULTISPEED® 500-C-TPE safety against high bending in drag chain systems, low torsion, halogen-free, EMC-preferred type, meter marking



C

Technical data

- Special drag chain cables for high mechanical stress in adapted to DIN VDE 0281 part 13 and E DIN VDE 0245
- **Temperature range**
flexing -30°C to +105°C
fixed installation -50°C to +105°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
- **Coupling resistance**
max. 250 Ωm x km
- **Radiation resistance**
up to 100x10⁶ cJ/kg (up to 100 Mrad)

Cable structure

- Tinned copper, fine wire conductors, Unilay with short pitch length
- Special TPE core insulation
- Black cores with continuous white numbering
- Green-yellow earth core (3 cores and above)
- Stranding:
 - <7 cores: cores stranded in a layer with optimal lay-length around a filler as per construction
 - ≥7 cores: cores stranded with optimal lay-length to bunch-construction with low torsion strength, optimal selected short lay-length around a filler
- Special-TPE inner sheath, extruded as filler with pressure, natural colour
- Screen of Cu braid tinned, coverage 85% max., with optimal pitch
- Fleece separator, ensure good dismantling ability
- Special-TPE-0 outer sheath, extruded as filler with pressure
- Sheath colour ocean blue (RAL 5020)
- with meter marking, change-over in 2009
- **TPE:** The selected tinned copper wire conductor and tinned copper wire braid permit the installation in aggressive environments as well as hydrogen sulfide, ammonia and sulfur dioxide.

Properties

- **Microbe-resistance - TPE**
- High property of alternating bending strength
- High resistant to mechanical strain
- Long life durability due to low friction-resistance
- High tensile strength, abrasion- and impact resistance at low temperature
- High continuous bending loads
- Low adhesion
- Abrasion resistance
- Tear resistance
- High stability and oil resistance
- Better chemical resistance
- UV and ozone resistance
- Higher economical solution
- Reduced Ø, results low weight of moving materials
- 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).
- Please note the cleanroom qualification when ordering.
- **unscreened analogue type:**
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Application

For permanent application in drag chains for long distances, high and low speed of movements. These cables are installed in dry, moist and wet rooms and in open air with free movement without tensile stress or forced movements. These robust and abrasion resistant special control cables are installed there, where the problems appear for the application in permanent stresses e.g. in energy drag chains. These cables are installed everywhere, where high requirements for the flexibility, abrasion, oxygen and chemical resistance are necessary.

EMC = Electromagnetic compatibility

To optimise 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/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.
24236	2 x 0,5	6,5	30,0	85,0	20	24255	4 G 1	8,1	70,0	160,0	17
24237	3 G 0,5	6,7	36,0	99,0	20	24256	5 G 1	8,9	84,0	195,0	17
24238	4 G 0,5	7,2	42,0	107,0	20	24257	7 G 1	13,6	106,0	247,0	17
24239	5 G 0,5	7,6	48,0	140,0	20	24258	12 G 1	14,8	174,0	411,0	17
24240	7 G 0,5	11,4	64,0	176,0	20	24259	18 G 1	17,8	240,0	547,0	17
24241	10 G 0,5	11,4	80,0	204,0	20	24260	25 G 1	20,5	332,0	754,0	17
24242	12 G 0,5	12,3	105,0	261,0	20						
24243	18 G 0,5	14,6	137,0	360,0	20	24261	3 G 1,5	8,4	75,0	160,0	16
24244	25 G 0,5	16,8	320,0	530,0	20	24262	4 G 1,5	9,2	90,0	194,0	16
						24263	5 G 1,5	10,2	108,0	220,0	16
24245	2 x 0,75	7,0	40,0	97,0	18	24264	7 G 1,5	15,8	157,0	294,0	16
24246	3 G 0,75	7,3	48,0	110,0	18	24265	12 G 1,5	17,3	240,0	490,0	16
24247	4 G 0,75	7,8	55,0	139,0	18	24266	18 G 1,5	21,3	355,0	704,0	16
24248	5 G 0,75	8,3	66,0	160,0	18	24267	25 G 1,5	23,3	448,0	930,0	16
24249	7 G 0,75	12,7	85,0	219,0	18						
24250	12 G 0,75	13,6	135,0	307,0	18	24268	4 G 2,5	11,2	134,0	260,0	14
24251	18 G 0,75	17,3	190,0	490,0	18	24269	5 G 2,5	12,2	175,0	330,0	14
24252	25 G 0,75	19,0	275,0	640,0	18	24270	7 G 2,5	19,5	229,0	406,0	14
						24271	12 G 2,5	21,5	390,0	990,0	14
24253	2 x 1	7,3	50,0	115,0	17						
24254	3 G 1	7,6	59,0	131,0	17	24272	4 G 4	13,6	194,0	355,0	12

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

