

MULTISPEED® 500-PVC UL/CSA high flexible, safety against high bending in drag chain systems, low torsion



Technical data

- Special drag chain cables for high mechanical stress in adapted to DIN VDE 0281 part 13 and E DIN VDE 0245 and UL-Std. 758 AWM Style 21179
- **Temperature range**
flexing -5°C to +80°C
fixed installation -30°C to +80°C
- **Nominal voltage**
U₀/U 300/500 V
UL 600 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
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable construction

- Bare 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-PVC outer sheath, especially resistant against fatigue strength, extruded as filler with pressure
- Sheath colour pine green (RAL 6028)

Properties

- PVC self-extinguishing and 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) VW1, FT1
- Low-adhesion
- High property of alternating bending strength
- Long life durabilities due to low friction-resistance
- Better chemical resistance
- Oil resistance
- High stability
- 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).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

Application

UL/CSA approved HELUKABEL® MULTISPEED 500-PVC are installed there, where the extreme requirements for the cables are necessary. Designed for the export-orientated machinery manufacturer, specifically for USA and Canada. The selected materials and lay-up technique permit these high flexible cables for permanent application in drag chains for long distances, high and slow speed of movements. These high flexible PVC control cables are suitable for shift- and bending stresses in machines and machine tool constructions. These are installed in dry and moist rooms with free movement without tensile stress or forced movements. 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 73/23/EEC and 93/68/EEC.

Part No.	No. cores x cross-sec. mm ²	AWG-no.	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km
24295	2 x 0,5	20	4,7	9,6	40,0
24296	3 G 0,5	20	4,9	14,4	45,0
24297	4 G 0,5	20	5,3	19,0	57,0
24298	5 G 0,5	20	5,8	24,0	66,0
24299	7 G 0,5	20	8,3	33,6	81,0
24300	12 G 0,5	20	9,8	58,0	133,0
24301	18 G 0,5	20	11,9	86,0	194,0
24302	25 G 0,5	20	13,5	120,0	274,0
24303	4 G 0,75	19	6,1	29,0	63,0
24304	5 G 0,75	19	6,8	36,0	79,0
24305	7 G 0,75	19	9,8	50,0	107,0
24306	12 G 0,75	19	11,3	86,0	169,0
24307	18 G 0,75	19	14,1	130,0	247,0
24308	25 G 0,75	19	15,7	180,0	366,0
24309	36 G 0,75	19	13,1	259,0	540,0
24310	42 G 0,75	19	21,3	302,0	630,0
24311	3 G 1	18	5,9	29,0	69,0
24312	4 G 1	18	6,4	38,4	86,0

Part No.	No. cores x cross-sec. mm ²	AWG-no.	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km
24313	5 G 1	18	7,0	48,0	101,0
24314	7 G 1	18	10,7	67,0	140,0
24315	12 G 1	18	12,1	115,0	227,0
24316	18 G 1	18	14,9	173,0	351,0
24317	25 G 1	18	16,9	240,0	489,0
24318	3 G 1,5	16	6,7	43,0	88,0
24319	4 G 1,5	16	7,3	58,0	110,0
24320	5 G 1,5	16	8,1	72,0	130,0
24321	7 G 1,5	16	12,5	101,0	182,0
24322	12 G 1,5	16	14,3	173,0	319,0
24323	18 G 1,5	16	17,5	259,0	420,0
24324	25 G 1,5	16	19,8	360,0	604,0
24325	4 G 2,5	14	8,9	96,0	172,0
24326	5 G 2,5	14	9,9	120,0	219,0
24327	7 G 2,5	14	15,2	168,0	303,0
24328	12 G 2,5	14	17,6	288,0	504,0
24329	18 G 2,5	14	21,5	432,0	754,0
24330	25 G 2,5	14	24,1	600,0	940,0

Dimensions and specifications may be changed without prior notice.