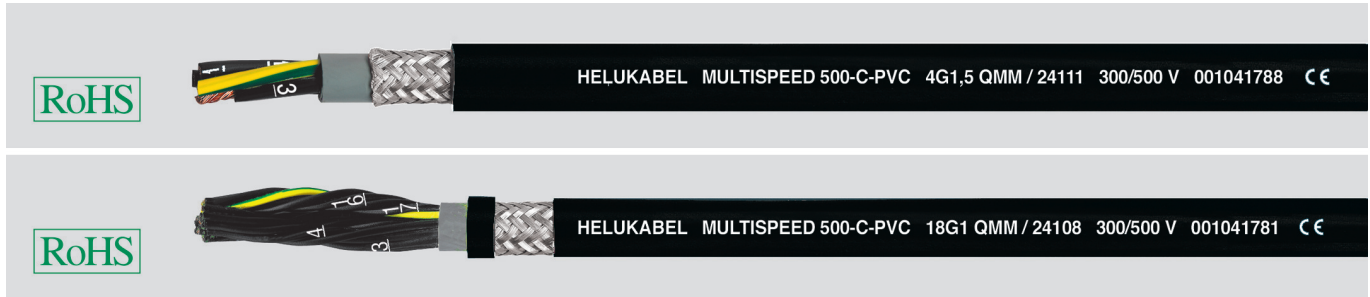


# MULTISPEED® 500-C-PVC high flexible, safety against high bending in drag chain systems, oil resistant, low torsion, screened, EMC-preferred type, meter marking



## Technical data

- Special drag chain cables for high mechanical stress adapted to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51
- **Temperature range**  
flexing -15°C to +80°C  
fixed installation -30°C to +80°C
- **Nominal voltage** U<sub>0</sub>/U 300/500 V
- **Test voltage** 3000 V
- **Insulation resistance**  
min. 100 MΩ x km
- **Minimum bending radius**  
flexing 7,5x cable Ø  
fixed installation 4x cable Ø
- **Coupling resistance**  
max. 250 Ω x km
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

## Cable structure

- Bare copper, fine wire conductors, Unilay with short pitch length
- Core insulation of special PP
- Core identification black cores with continuous white numbering
- GN-YE conductor, 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 inner sheath YM2 extruded as filler with pressure grey (RAL 7001)
- Tinned copper braidet screen, coverage 85% max., with optimal bunch
- Fleece separator, ensure good dismantling ability
- Outer sheath of special PVC especially resistant against fatigue strength
- Sheath colour black (RAL 9005)
- with meter marking

## Properties

- Low adhesion
- ozon- and uv- resistant
- High property of alternating bending strength
- Long life durability due to low friction-resistance
- Better chemical 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

## Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2/IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Oil resistance to DIN VDE 0473-811-404 / DIN EN 60811-404

## Note

- G = with green-yellow conductor  
x = without green-yellow conductor (OZ)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- unscreened analogue type:  
**MULTISPEED® 500-PVC**

## Application

HELUKABEL® MULTISPEED 500-C-PVC are installed there, where the extreme requirements for the cables are necessary. The selected materials and lay-up technique permit these high flexible cables for permanent application in drag chains for long distances, high and low 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, moist rooms and in open air with free movement without tensile stress or forced movements. These screened cables are particularly suitable for the interference-free transmission in instrumentation and control engineering applications. 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.

**EMC** = Electromagnetic compatibility

To optimize 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/EC.

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
24086	2 x 0,5	6,2	30,0	88,0	20
24087	3 G 0,5	6,7	36,0	101,0	20
24088	4 G 0,5	7,2	42,0	116,0	20
24089	5 G 0,5	7,6	48,0	146,0	20
24090	7 G 0,5	11,4	64,0	181,0	20
24091	9 G 0,5	11,4	80,0	219,0	20
24092	12 G 0,5	12,4	105,0	271,0	20
24093	18 G 0,5	14,7	137,0	374,0	20
24094	25 G 0,5	17,1	210,0	542,0	20
24095	2 x 0,75	6,8	40,0	96,0	19
24096	3 G 0,75	7,3	48,0	111,0	19
24097	4 G 0,75	7,8	55,0	140,0	19
24098	5 G 0,75	8,3	66,0	161,0	19
24099	7 G 0,75	12,7	85,0	227,0	19
24100	12 G 0,75	13,7	135,0	317,0	19
24101	18 G 0,75	17,1	190,0	486,0	19
24102	25 G 0,75	19,5	275,0	651,0	19

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
24103	3 G 1	7,6	59,0	131,0	18
24104	4 G 1	8,1	70,0	164,0	18
24105	5 G 1	8,9	84,0	198,0	18
24106	7 G 1	13,6	106,0	252,0	18
24107	12 G 1	14,6	174,0	410,0	18
24108	18 G 1	18,4	240,0	550,0	18
24109	25 G 1	21,0	332,0	756,0	17
24110	3 G 1,5	8,4	75,0	166,0	16
24111	4 G 1,5	9,1	90,0	199,0	16
24112	5 G 1,5	10,2	108,0	229,0	16
24113	7 G 1,5	15,7	157,0	304,0	16
24114	12 G 1,5	17,4	240,0	502,0	16
24115	18 G 1,5	21,3	355,0	709,0	16
24116	25 G 1,5	24,3	448,0	939,0	16
24117	4 G 2,5	11,2	134,0	270,0	14
24118	5 G 2,5	12,2	175,0	335,0	14

Dimensions and specifications may be changed without prior notice. (RC01)