

MULTISPEED® 500-C-PVC UL/CSA oil resistant, high

flexible, safety against high bending in drag chain systems, low torsion, screened, EMC-preferred type, meter marking

**Technical data**

- Special drag chain cables for high mechanical stress in accordance to DIN VDE 0285-525-2-51/DIN EN 50525-2-51 and UL-Std.758 AWM Style 21179
- **Temperature range**
flexing -5°C to +80°C
fixed installation -30°C to +80°C
- **Nominal voltage**
VDE 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
- **Coupling resistance**
max. 250 Ohm x km
- **Radiation resistance**
up to 80x10⁶ 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 to DIN VDE 0293 black cores with continuous white numbering
- GN-YE conductor, 3 cores and above
- Stranding:
<7 cores: with optimal lay length, construction due to a filling element, in a stranded position
≥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 gusset-filling extruded, grey (RAL 7001)
- Braid of tinned copper wires, minimum coverage 85% max. with optimal braiding pitch
- Outer sheath of special PVC especially fatigue resistant
- sheath colour black (RAL 9005)
- with meter marking

Properties

- 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), UL VW-1, CSA FT1
- Low adhesion
- Ozon and UV resistant
- High property of alternating bending strength
- longer service life due to low friction resistance
- Better chemical resistance
- Oil resistance to DIN VDE 0473-811-404/DIN EN 60811-404
- Higher stability
- Higher economical solution
- Reduced Ø, therefore less moving masses

Note

- G = with green-yellow conductor
x = without green-yellow conductor (OZ)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type:
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Application

For permanently use on long distances, and high or low speeds. 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 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 ²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
24335	2 x 0,5	20	6,6	30,0	88,0
24336	3 G 0,5	20	6,9	36,0	101,0
24337	4 G 0,5	20	7,3	42,0	116,0
24338	5 G 0,5	20	7,8	48,0	146,0
24339	7 G 0,5	20	11,3	64,0	181,0
24340	9 G 0,5	20	11,4	80,0	219,0
24341	12 G 0,5	20	12,6	105,0	271,0
24342	18 G 0,5	20	15,0	137,0	374,0
24343	25 G 0,5	20	17,1	210,0	542,0
24344	2 x 0,75	19	6,8	40,0	96,0
24345	3 G 0,75	19	7,4	48,0	111,0
24346	4 G 0,75	19	8,0	55,0	140,0
24347	5 G 0,75	19	8,5	66,0	161,0
24348	7 G 0,75	19	12,9	85,0	227,0
24349	12 G 0,75	19	14,4	135,0	317,0
24350	18 G 0,75	19	17,5	190,0	486,0
24351	25 G 0,75	19	19,9	275,0	651,0

Part no.	No. cores x cross-sec. mm ²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
24352	3 G 1	18	7,7	59,0	131,0
24353	4 G 1	18	8,3	70,0	164,0
24354	5 G 1	18	9,1	84,0	198,0
24355	7 G 1	18	14,0	106,0	252,0
24356	12 G 1	18	15,0	174,0	410,0
24357	18 G 1	18	18,7	240,0	550,0
24358	25 G 1	18	21,2	332,0	756,0
24359	3 G 1,5	16	8,6	75,0	166,0
24360	4 G 1,5	16	9,4	90,0	199,0
24361	5 G 1,5	16	10,4	108,0	229,0
24362	7 G 1,5	16	16,0	157,0	304,0
24363	12 G 1,5	16	17,6	240,0	502,0
24364	18 G 1,5	16	21,3	355,0	709,0
24365	25 G 1,5	16	24,8	448,0	939,0
24366	4 G 2,5	14	11,3	134,0	270,0
24367	5 G 2,5	14	12,3	175,0	335,0

Dimensions and specifications may be changed without prior notice. (RN05)