MULTISPEED®-TRONIC-C-PUR safety against high

bending in drag chain systems, high flexible, halogen-free, screened, EMC-preferred type, meter marking

Technical data

- Special drag chain cables for high mechanical stress in adapted to DIN VDE 0285-525-2-51/ DIN EN 50525-2-51, DIN VDE 0285-525-2-21/ DIN EN 50525-2-21 and acc. to UL-Std.758 AWM Style 20233
- **Temperature range** flexing -30°C to +80°C fixed installation -40°C to +80°C
- **Nominal voltage** U_0/U 300/300 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/km
- **Radiation resistance** up to 100x10^6 cJ/kg (up to 100 Mrad)

Cable structure

- Bare copper, fine wire conductors, Unilay with short pitch length
- Core insulation of special PP
- Core identification to DIN 47100
- <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 extruded as filler with pressure, grey (RAL 7001)
- Screen of Cu braid bare, coverage 85% max., with optimal pitch
- Outer sheath of special-PUR
- 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

- PUR outer sheath, 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
- Halogen-free
- High property of alternating bending strength
- High tensile strength, abrasion- and impact resistance at low temperature
- Use in multi-shift operations under extremely high continuous bending loads
- Abrasion resistance
- Tear resistance
- High stability
- Oil resistance
- Better chemical resistance
- UV and ozone resistance
- Higher economical solution
- Reduced Ø, results low weight of moving materials

Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- non screened analogue type: **MULTISPEED®-TRONIC-PUR**, confer page 448

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. These cables are installed everywhere, where high requirements for the flexibility, abrasion, oxygen and chemical resistance are necessary. 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 compatibillity

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. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
24614	2 x 0,25	24	5,4	74,0	39,0
24615	3 x 0,25	24	5,6	19,0	45,0
24616	4 x 0,25	24	5,9	22,0	51,0
24617	5 x 0,25	24	6,2	26,0	68,0
24618	7 x 0,25	24	8,7	35,0	83,0
24619	12 x 0,25	24	9,4	58,0	122,0
24620	18 x 0,25	24	11,5	79,0	160,0
24621	25 x 0,25	24	13,0	99,0	210,0

Part no.	No.cores x cross-sec. mm²	AWG-No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
24622	2 x 0,34	22	5,6	18,0	45,0
24623	3 x 0,34	22	5,8	22,0	60,0
24624	4 x 0,34	22	6,1	28,0	76,0
24625	5 x 0,34	22	6,8	31,0	82,0
24626	7 x 0,34	22	9,3	51,0	110,0
24627	12 x 0,34	22	9,9	70,0	166,0
24628	18 x 0,34	22	12,3	103,0	216,0
24629	25 x 0,34	22	13,6	130,0	312,0

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