



ÖLFLEX® CHAIN TM

Highly flexible control cable with TC-ER, MTW, WTTC or CIC/TC listing acc. (UL) or c(UL) for North America



Info

- Core Line Performance - Medium to increased travel lengths or acceleration
- The normative multi-talent according NEC and NFPA 79
- Problem-free use in cable trays, industrial machines or wind turbines

Benefits

- Multi-standard certification offers universal application range, reduces part varieties and saves costs
- TC-ER and MTW listings enable open wiring on cable trays as well as the usage for industrial machines with only one cable
- Resistant to contact with many mineral oil-based lubricants and other chemical media
- Ideal for export-oriented machinery and equipment manufacturers thanks to high normative acceptance by the North American NEC (National Electrical Code)
- Under consideration of the temperature range also suitable for flexible outdoor use

Application range

- In power chains or moving machine parts
- Static open wiring on and between cable tray an industrial machine acc. NEC
- Industrial machinery and machine tools
- Wind turbine engineering
- Linear robots, automated handling equipment

Product features

- High oil-resistance, according to UL OIL RES I and UL OIL RES II
- Flame-retardant according to CSA FT4 UL Vertical-Tray Flame Test
- Sunlight Resistant; Direct Burial
- Water-resistant, UL 75°C WET rating

Norm references / Approvals

- Certifications USA (UL) & UL AWM: TC-ER Tray Cable-Exposed Run MTW Machine Tool Wire WTTC Wind Turbine Tray Cable PLTC-ER Power Limited Tray Cable ITC Instrumentation Tray Cable DP-1 Data Processing Cable AWM Style 20886
- Certifications Canada c(UL) & CSA AWM: CIC/TC Control Instrumentation Cable/ Tray Cable FT4, AWM I/II A/B FT4
- Class 1 Division 2 per NEC Article 501
- For use in power chains: Please comply with assembly guideline Appendix T3

Product Make-up

- Extra-fine wire strand made of bare copper
- Core insulation: PVC with nylon skin
- Cores twisted in layers in short lay lengths
- Non-woven wrapping
- Outer jacket: Specially formulated thermoplastic polymer
- Sheath colour: black (similar RAL 9005)

Technical data

- Core identification code**
Black with white numbers
- Conductor stranding**
Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6
- Torsion movement in WTG**
TW-0 & TW-2, refer to Appendix T0
- Minimum bending radius**
Flexing: up from 7.5 x outer diameter
Fixed installation: 4 x outer diameter
- Nominal voltage**
UL/CSA: 600 V (TC, MTW, CIC), 1000 V (WTTC, AWM)
IEC: U₀/U 300/500 V
- Bending cycles & operation parameters**
See Selection Table A2-1 in the appendix of our online catalogue
- Test voltage**
2000 V
- Protective conductor**
G = with GN-YE protective conductor
- Temperature range**
Fixed installation:
-40°C (-25°C UL TC) to +90°C (UL TC, MTW, according AWM +105°C)
Flexing:
-25°C to +90°C (according UL MTW)

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Weight (kg/km)
ÖLFLEX® CHAIN TM			
8718030	3 G 1.0	7.8	66
8718040	4 G 1.0	8.6	82
8718050	5 G 1.0	9.3	95
8718070	7 G 1.0	10.7	125
8718120	12 G 1.0	12.3	210
8718180	18 G 1.0	15.4	308
8718250	25 G 1.0	17.8	414
8716030	3 G 1.5	8.6	92
8716040	4 G 1.5	9.5	112

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Weight (kg/km)
8716050	5 G 1.5	10.3	134
8716070	7 G 1.5	12	180
8716120	12 G 1.5	14.7	311
8716180	18 G 1.5	17.2	443
8716250	25 G 1.5	20	621
8714040	4 G 2.5	10.6	180
8714070	7 G 2.5	14.5	286
8712040	4 G 4.0	12.4	295
8710040	4 G 6.0	15.2	397

Unless specified otherwise, the shown product values are nominal values at room temperature. Detailed values (e.g. tolerances) are available upon request.
 Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
 Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
 Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum
 Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
 Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- SILVYN® CHAIN cable protection and guiding systems