## **DATA SHEET**



# ÖLFLEX® CHAIN TM & TM CY

## **UDB8718030EN**

Date: January 1, 2019

#### 1. APPLICATION

ÖLFLEX® CHAIN TM & TM CY is a highly flexible multi conductor tray cable designed for continuous flex applications. The shielded version has an overall tinned copper braid that provides protection against EMI and RFI. Fine stranding, specially formulated thermoplastic polymer jacket optimizes flex life and provides excellent resistance to mineral oils, synthetic oils, and water based coolants.

#### **Applications:**

Gantry robots pick and place units, conveyor systems, machine tool and other continuous flexing applications.

#### **Underwriters Laboratories**

For Tray use in exposed run applications, Wind Turbines, Machine Tools, Appliance Wiring Material and internal or external wiring of electrical and electronic equipment.

#### Canadian Standards

For Tray use, Control Instrumentation, Appliance Wiring Material and internal or external wiring of electrical and electronic equipment applications.

#### 2. CABLE DESCRIPTION

- Bare copper super fine wire stranding
- Specially blended PVC / Nylon insulation
- Black color coded conductors with white identification
- Green/Yellow ground wire
- Overall TC Braid Shield
- Black UV, oil and flame resistant specially formulated thermoplastic polymer jacket

# 3. TECHNICAL DATA

Conductor Stranding 18 AWG (1,0 mm²) to 10 AWG (6,0 mm²): Class 6 (IEC 60228; VDE 0295)

18 AWG meets only class 6 cross section and DC conductor resistance

Design / Make-up Cable is designed in accordance with the requirements of UL Standard 1277

and with CSA standards C22.2 No. 230 & No. 239

Insulation Specially blended PVC / Nylon insulation;

Color Code Black conductors with white numbers plus green/yellow (30% stripe width)

Shield Tinned copper Braid Shield (85% coverage)

(ÖLFLEX CHAIN TM CY only)

Outer Sheath Specially formulated thermoplastic polymer jacket

Nominal Voltage UL / CSA TC: 600V

UL / CSA AWM: 1000V VDE U<sub>0</sub>/U: 600/1000V

Test Voltage 2000V

Min Bend radius For stationary use: 5 x OD

6 x OD (Shielded)

For continuous flexing: 7.5 x OD

10 x OD (Shielded)

Engineer: D. Kocheta
Approval: J. Gavilanes

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Temperature Range UL/CSA TC: -25°C to +90°C

For stationary use: -40°C to +105°C For continuous flexing: -25°C to +90°C

Cable Attributes OR-03, FR-03, CF-02, MP-03

Sunlight resistant, Direct Burial

Approvals UL MTW (Machine-Tool Wire) per UL 1063

UL AWM 20886 (Appliance Wiring Material) per UL 758 UL Type TC (Tray Cable) - ER\* (Exposed Run) per UL 1277

DP-1 (Data Processing Cable) per UL 1690

UL PLTC (Power Limited Tray Cable) -ER\* (Exposed Run) per UL 13

(18 AWG - 12 AWG)

UL ITC (Instrumentation Tray Cable) -ER\* (Exposed Run) per UL 2250

(18 AWG - 12 AWG)

UL WTTC (Wind Turbine Tray Cable) per UL 2277

c(UL) CIC/TC FT4 per CSA C22.2 No. 239 / CSA C22.2 No. 230

CSA AWM I/II A/B FT4 per CSA C22.2 No. 210
\* For –ER: Minimum 3 conductors required

Additional NEC Article 336, Article 501

NFPA 79

VDE 250-1 (meets rated voltage requirements only)

LVD 2014/35/EU (Low Voltage Directive)

RoHS directive

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