DATA SHEET



ÖLFLEX® VFD 1XL & Signal

UDB701710EN Date: March 15, 2020

1. APPLICATION

ÖLFLEX® VFD 1XL & Signal is a reduced diameter shielded motor cable with is a robust oil-resistant shielded motor cable for VFD drives, with a pair for brake or temperature sensor functions. This robust cable provides exceptional oil and crush resistance required for industrial tray applications. The enhanced electrical properties of XLPE plus insulation provide problem-free performance where precision control is critical. The UL TC-ER allows for installation without conduit, providing material and labor cost savings.

Applications:

VFD drive and motor applications, web presses, HVAC, conveyors, any on/off, slow down/speed up applications utilizing VFD drives and motors.

Underwriters Laboratories

For Tray use in Exposed Run applications as per Article 336 of the National Electrical Code or as Power and Control Cable in Servomotors and VFD drives.

Canadian Standards

Control Instrumentation Cable applications and as Appliance Wiring Material for use in internal or external wiring of electrical and electronic equipment.

2. CABLE DESCRIPTION

- Tinned copper fine wire
- XLPE Plus insulation
- Black color coded conductors with white identification
- Green/Yellow ground wire
- One Signal Pair individually shielded
- Overall Foil and TC Braid Shield
- Black UV, oil and flame resistant Specially Formulated Thermoplastic Elastomer (TPE)

3. TECHNICAL DATA

Conductor Stranding 16 AWG (1,32 mm²) to 2 AWG (33,7 mm²): Class K

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

and with CSA standard C22.2 No. 230

Insulation Specially formulated Cross Linked Polyethylene (XLPE) Plus

Signal Pair 18 or 14 AWG TC conductors, individually foil shielded with TC Drain wire

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

Signal Pair: Black conductors with white numbers

Shield Tri-laminated Foil and Tinned Copper Braid Shield (85% coverage)

Tinned Copper Drain wire

Outer Sheath Specially Formulated Thermoplastic Elastomer (TPE)

Nominal Voltage UL TC: 600V

UL Flexible Motor Supply 1000V UL/CSA AWM: 1000V

Test Voltage 3000V: 16 AWG to 10 AWG

3500V: 8 AWG to 4 AWG

4000V: 2 AWG

Engineer: D. Kocheta
Approval: J. Gavilanes

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Min Bend radius For installation: 7.5 x OD

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

For stationary use: -40°C to $+105^{\circ}\text{C}$ For flexible use: -25°C to $+105^{\circ}\text{C}$

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

90°C Wet or Dry, Sunlight resistant, Direct Burial

Approvals UL Type TC (Tray Cable) - ER (Exposed Run) per UL 1277

UL Flexible Motor Supply Cable per UL 2277

UL AWM 22022 (Appliance Wiring Material) per UL 758 c(UL) CIC FT4 per CSA C22.2 No. 239 (14 AWG and smaller)

cRU AWM II A/B FT4 per CSA C22.2 No. 210

Additional NEC Article 310, 336, Article 501

NFPA 79

RoHS II directive 2011/65/EU

Meets XHHW-2 performance requirements

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