Technical data sheet

Flexible Composite VFD Cable · shielded

LUTZE DRIVEFLEX® XLPE (C) 1 TSP PVC
With one Control pair for Stationary Applications

Identification

Type	DR XLPE (C) SE I PVC (4×AWG14+(2×AWG16))
Part No.	A2171404

Product version

Datasheet version	00

Use/Application/Properties

Application

- Dual-shielded motor supply cable to connect power to 3-phase-motors, VFDs and servo drives
- Cable design for harsh industrial environments and operating conditions with high noise levels
- Thermoset XLPE offering superior overload and short-circuit temperature
- Increased wall thickness insulation type RHW-2, offering lower capacitance and higher impedance making it ideal for applications with high voltage spikes and long cable run
- Compliant with NFPA 79 requirements
- TC-ER-JP for use with cable trays without conduit, which can reduce installation costs in industrial environments
- WTTC – wind turbine tray cable rating for use in wind power generation
- Dry, damp or wet conditions

Properties

- Flexible XLPE conductors
- High insulation resistance
- Low-capacitance cable
- Effective EMC-compatible shielding thanks to 2-layer shield
- Specially formulated jacket for oil resistance and easy strip design
- Non-wicking fillers
- Ecolab certified resistance to common cleaning agents and chemicals used in food and beverage washdown procedures
- Crush impact resistant
- Gas/vapor-tight sheath per UL 1277
- Sunlight resistant
- Flame-retardant
- Direct burial
- Talc free and silicone free

Construction

Description	DRIVEFLEX® XLPE (C) 1 TSP PVC
Number of conductors/cross-section	(4AWG14+1×2×AWG16)

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Number of conductors	6
Cross-section, metric	2.5 mm²
Cross-section AWG	AWG 14
Jacket material	PVC
Jacket color	black similar to RAL 9005
Outer Ø	16.8 mm
Outer Ø	0.65 inch
Weight	39.4 kg/100 m
Weight	265 Lbs/Mft
Cu Index	117 Lbs/Mft

Construction Element 1

Element construction	AWG14/4C
Conductor construction	AWG 14 (41/30)
Conductor	AWG conductor CU-wire tin-plated
Conductor category	fine wire Class K
Conductor marking	black • with white number print • green/yellow
Conductor insulation	XLPE RHW-2
Cabling	strands braided together

Construction Element 2

Element construction	AWG16/1TSP
Conductor construction	AWG 16 (26/30)
Conductor	AWG conductor CU-wire tin-plated
Conductor category	fine wire
Conductor marking	black • with white number print
Conductor insulation	XLPE XHHW-2
Cabling	conductors twisted in pairs

Overall construction

Drain wire	CU-wire tin-plated
Overall shield	Foil shield tinned copper wires Braid shield optical cover approx. 80 %
Jacket characteristics	Oil resistant Silicone-free

Technical data	
Rated voltage U_N	600 V 90C UL TC-ER-JP 1000 V Flexible VFD servo cable 90C 1000 V WTTC 90C Cable, 1000 V 105C AWM
Temperature range fixed	-40 °C … +105 °C
Minimum bending radius fixed	6×cable OD

Technical Data Element 1	
Element construction	AWG14/4C

Technical Data Element 2	
Element construction	AWG16/1TSP

Approvals/Standards	
Approvals	UL Flexible Motor Supply Cable Flexible VFD Servo Cable TC-ER-JP WTTC UL DP-1 Meets NEC 336,392 Class I and II, Div. 2 and Class I Zone 2 per NEC 501, 502, 505 C(UL) TC and CIC FT4 UL 1277 P-07-KA130021-MSHA
UL style	AWM 20886
Conformity	CE RoHS REACH TSCA
Oil resistant according to	Oil Res II

General	
Note	CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU