

ÖLFLEX® VFD with Signal

Flexible VFD cable with a control pair; 600V/1000V; UL & c(UL) TC-ER approval

LAPP KABEL STUTTGART ÖLFLEX® VFD with Signal



ÖLFLEX® VFD with Signal is an extremely oil- and UV-resistant shielded motor power cable for VFD drives, with an additional pair for brake or temperature sensor. It is designed with LAPP Surge Guard insulation, which includes a semiconductive layer made to withstand nonlinear power distortions associated with VFD drives and to disperse increases in voltage. It is resistant to a wide range of disinfecting solutions used in the food, beverage, chemical and related industries.

Recommended applications

VFD drive and motor connections with temperature sensors or brake mechanisms; web presses; HVAC; on/off, slow down/speed up applications

Approvals



Cable attributes page 648

OIL	OR-03	FLAME	FR-03
MOTION	FL-01	MECH.	MP-03

Construction

Conductors: finely stranded tinned copper

Insulation: LAPP Surge Guard insulation system

Shielding: barrier tape; triple layer foil tape (100% coverage); tinned copper braid (85% coverage)

Jacket: specially formulated thermoplastic polymer; black

Application advantage

- LAPP Surge Guard insulation system
- UL TC-ER & c(UL) CIC TC approved
- Double-shielded for extra protection
- Contains pair for brake or temperature sensor
- Resistant to a wide range of disinfecting solutions used in the food, beverage, chemical and related industries, according to ECOLAB® PM 40-1 test procedure

Complete the installation



SKINTOP®
MS-SC
page 522



EPIC®
ULTRA HB
page 404

Technical data

Minimum bend radius: 7.5 x cable diameter

Temperature range:
 - UL/CSA TC: -25°C to +90°C
 - for stationary use: -40°C to +105°C
 - for flexible use: -25°C to +105°C

Nominal voltage:
 - UL/CSA TC: 600V
 - UL WTTC: 1000V
 - UL Flexible Motor Supply: 1000V
 - UL/CSA AWM: 1000V

Test voltage: 2000V

Peak voltage: 7500V

Conductor stranding:
 - 16-6 AWG: Class 5 fine wire
 - 4 AWG: Class K fine wire

Color code: black with white numbers, plus green/yellow ground and one black pair with white numbers

Approvals:
 UL: TC-ER per UL 1277
 MTW per UL 1063
 WTTC per UL 2277
 AWM 20886
 Attributes: UL Oil Res I/II
 75°C wet; 90°C dry
 -40°C cold bend; -25°C cold impact
 sunlight resistant
 NFPA 79
 NEC: Class 1 Division 2 per NEC Article 501
 Canada: c(UL) CIC/TC FT4
 CSA AWM I/II A/B 1000V FT4
 Additional: MSHA P-07-KA050011-MSHA
 CE & RoHS

Part number	Number of conductors incl. ground	Nominal outer diameter in mm	Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread	SKINTOP® MS-M BRUSH metric thread
16 AWG (1.5 mm²)						
7416048	4 + (18 AWG)	0.519	13.2	88	180	53112240 53112676
14 AWG (2.5 mm²)						
7414048	4 + (18 AWG)	0.573	14.6	118	216	53112250 53112676
7414044	4 + (14 AWG)	0.600	15.2	141	254	53112250 53112676
12 AWG (4 mm²)						
7412048	4 + (18 AWG)	0.632	16.1	162	286	53112250 53112677
7412044	4 + (14 AWG)	0.662	16.8	187	326	53112250 53112677

Part number	Number of conductors incl. ground	Nominal outer diameter in mm	Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread	SKINTOP® MS-M BRUSH metric thread
10 AWG (6 mm²)						
7410044	4 + (14 AWG)	0.745	18.9	260	406	53112260 53112677
8 AWG (10 mm²)						
7408044	4 + (14 AWG)	0.896	22.8	375	617	53112260 53112678
6 AWG (16 mm²)						
7406044	4 + (14 AWG)	1.026	26.1	472	848	53112270 53112678
4 AWG (21 mm²)						
7404044	4 + (14 AWG)	1.324	33.6	643	1251	— 53112679

() = shielded pair

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Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section.

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.