

# ÖLFLEX® VFD 1XL

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



ÖLFLEX® VFD 1XL is a robust oil- and UV-resistant shielded motor cable for VFD drives. Enhanced electrical properties of XLPE insulation provide problem-free performance where precision control is critical. The new leaner design enables reduced cable diameters and increases flexibility. UL TC-ER rating allows for installation without conduit.

## Recommended applications

VFD drive and motor connections; pumps; compressors; conveyors; elevators; extruders; presses; HVAC; on/off, slow down/speed up applications.

## Approvals



Cable attributes		page 648	
OIL	OR-03	FLAME	FR-03
MOTION	CF-01*	MECH.	MP-03

## Construction

**Conductors:** tinned copper fine wire

**Insulation:** XLPE (plus)

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

**Jacket:** specially formulated thermoplastic elastomer (TPE); black

## Application advantage

- Low capacitance design
- UL TC-ER & c(UL) CIC/TC approved
- Industrial grade phthalate-free jacket design for harsh environments
- Reduces space and weight in tray
- No conduit required due to TC-ER rating
- 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-M BRUSH page 524		EPIC® ULTRA HB page 404
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## Technical data

<b>Minimum bend radius:</b>		<b>Color code:</b>	black with white numbers, plus green/yellow ground
for continuous flexing:	15 x OD		
for installation:	7.5 x OD		
<b>Temperature range:</b>		<b>Approvals:</b>	UL: TC-ER per UL 1277 Flexible Motor Supply Cable per UL 2277 AWM 22022 per UL 758
- UL/CSA:	-25°C to +90°C	Attributes:	UL Oil Res I/II 90°C wet or dry -40°C cold bend; -25°C cold impact sunlight resistant direct burial NFPA 79
- for stationary use:	-40°C to +90°C	NEC:	Class 1 Division 2 per NEC Article 501
- for flexible use:	-25°C to +90°C	Canada:	c(UL) CIC FT4 cRU AWM II A/B FT4
<b>Nominal voltage:</b>		Additional:	RoHS II Meets XHHW-2 performance requirements per UL 44
- UL TC:	600V		
- UL Flexible Motor Supply:	1000V		
- UL/CSA AWM:	1000V		
<b>Test voltage:</b>		*UL Verified ID A522492:	Continuous Flex Test Method Verified
- 16 AWG - 10 AWG:	3000V		
- 8 AWG - 4 AWG:	3500V		
- 2 AWG:	4000V		
<b>Conductor stranding:</b>			
- 16 AWG - 2 AWG	Class K		

Part number	Number of conductors incl. ground	Nominal outer diameter in mm	Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC metric thread	SKINTOP® MS-M BRUSH metric thread	
<b>16 AWG (1.3 mm<sup>2</sup>)</b>							
701700	4 + drain	0.374	9.5	57.5	108	53112630	53112676
<b>14 AWG (2.1 mm<sup>2</sup>)</b>							
701701	4 + drain	0.410	10.4	81.8	137	53112630	53112676
<b>12 AWG (3.3 mm<sup>2</sup>)</b>							
701702	4 + drain	0.464	11.8	121.7	188	53112640	53112676
<b>10 AWG (5.3 mm<sup>2</sup>)</b>							
701703	4 + drain	0.504	12.8	184.1	268	53112640	53112676

Part number	Number of conductors incl. ground	Nominal outer diameter in mm	Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC metric thread	SKINTOP® MS-M BRUSH metric thread	
<b>8 AWG (8.5 mm<sup>2</sup>)</b>							
701704	4 + drain	0.706	17.9	301.9	448	53112650	53112677
<b>6 AWG (13.5 mm<sup>2</sup>)</b>							
701705	4 + drain	0.915	23.2	440.7	687	53110660	53112678
<b>4 AWG (21.0 mm<sup>2</sup>)</b>							
701706	4 + drain	1.051	26.7	633.5	969	53112660	53112678
<b>2 AWG (33.7 mm<sup>2</sup>)</b>							
701707	4 + drain	1.223	31.1	995.5	1410	53112670	53112679