

# ÖLFLEX® VFD 2XL with Signal

Flexible VFD cable with a control pair; 600V/1000V/2000V; UL & c(UL) TC-ER approval

LAPP KABEL STUÏGART ÖLFLEX® VFD 2XL with Signal



ÖLFLEX® VFD 2XL with Signal is a robust oil- and UV-resistant shielded motor cable for VFD drives, with a pair for brake or temperature sensor. The XLPE (plus) insulation with enhanced electrical properties can withstand twice the dielectric voltage test, provides extended performance, and is suitable for 2kV applications.

## Recommended applications

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

## Approvals



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

## Construction

**Conductors:** finely stranded tinned copper

**Insulation:** XLPE (plus)

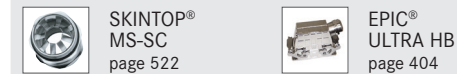
**Shielding:** barrier tape; triple layer foil tape (100% coverage); tinned copper braid (85% coverage)

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

## Application Advantage

- One cable for applications up to 2kV
- Low capacitance design
- Industrial grade phthalate-free jacket designed for harsh environments
- UL TC-ER & c(UL) CIC/TC approved
- Reduces space and weight in tray
- No conduit required due to TC-ER rating

## Complete the installation



## Technical data

|  |                             |  |  |                    |   |
|--|-----------------------------|--|--|--------------------|---|
|  | <b>Minimum bend radius:</b> | 7.5 x cable diameter   |  | <b>Color code:</b> | black with white numbers, plus green/yellow ground and one black pair with white numbers  |
|  | <b>Temperature range:</b>   | -25°C to +90°C<br>- for stationary use: -40°C to +105°C<br>- for flexible use: -25°C to +105°C       |  | <b>Approvals:</b>  | UL: TC-ER per UL 1277<br>Attributes: UL Oil Res I/II<br>90°C wet or dry<br>-40°C cold bend; -25°C cold impact<br>sunlight resistant<br>direct burial<br>NFPA 79<br>NEC: Class 1 Division 2 per NEC Article 501<br>Canada: c(UL) CIC/TC FT4<br>cRU AWM I/II A/B FT4<br>Additional: CE (50V - 1kV) & RoHS |
|  | <b>Nominal voltage:</b>     | - UL TC: 600V/2000V<br>- UL Flexible Motor Supply: 1000V<br>- c(UL) CIC/TC: 600V<br>- cRU AWM: 1000V |  |                    |   |
|  | <b>Test voltage:</b>        | 6000V  |  |                    |   |
|  | <b>Conductor stranding:</b> | - 16 - 6 AWG: Class 5 fine wire<br>- 4 - 2 AWG: Class K fine wire                                    |  |                    |   |

| 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 |
|------------------------------------|-----------------------------------|------------------------------|-----------------------|------------------------|--------------------------|-----------------------------------|
| <b>16 AWG (1.5 mm<sup>2</sup>)</b> |                                   |                              |                       |                        |                          |                                   |
| 700710                             | 4 + (18 AWG)                      | 0.652                        | 16.6                  | 91                     | 200                      | 53112250 53112677                 |
| <b>14 AWG (2.5 mm<sup>2</sup>)</b> |                                   |                              |                       |                        |                          |                                   |
| 700711                             | 4 + (18 AWG)                      | 0.687                        | 17.4                  | 132                    | 252                      | 53112250 53112677                 |
| <b>12 AWG (4 mm<sup>2</sup>)</b>   |                                   |                              |                       |                        |                          |                                   |
| 700712                             | 4 + (18 AWG)                      | 0.752                        | 19.1                  | 160                    | 294                      | 53112260 53112677                 |
| <b>10 AWG (6 mm<sup>2</sup>)</b>   |                                   |                              |                       |                        |                          |                                   |
| 700713                             | 4 + (18 AWG)                      | 0.798                        | 20.3                  | 215                    | 354                      | 53112260 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 |
|------------------------------------|-----------------------------------|------------------------------|-----------------------|------------------------|--------------------------|-----------------------------------|
| <b>8 AWG (10 mm<sup>2</sup>)</b>   |                                   |                              |                       |                        |                          |                                   |
| 700714                             | 4 + (14 AWG)                      | 0.986                        | 25.0                  | 334                    | 690                      | 53112270 53112678                 |
| <b>6 AWG (16 mm<sup>2</sup>)</b>   |                                   |                              |                       |                        |                          |                                   |
| 700715                             | 4 + (14 AWG)                      | 1.112                        | 28.2                  | 504                    | 905                      | 53112270 53112679                 |
| <b>4 AWG (21 mm<sup>2</sup>)</b>   |                                   |                              |                       |                        |                          |                                   |
| 700716                             | 4 + (14 AWG)                      | 1.259                        | 32.0                  | 667                    | 1125                     | — 53112679                        |
| <b>2 AWG (33.7 mm<sup>2</sup>)</b> |                                   |                              |                       |                        |                          |                                   |
| 700717                             | 4 + (14 AWG)                      | 1.403                        | 35.6                  | 1027                   | 1580                     | — 53112680                        |

( ) = 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.