

# ÖLFLEX® VFD

## Oil Resistant Flexible Motor Supply Cable for Variable Frequency Drives 1000 Volts; Bus Drop Cable



ÖLFLEX® VFD is an extremely oil-resistant, UV-resistant, shielded motor cable for VFD drives. It is designed with "Lapp Surge Guard" insulation to smooth out the stranded copper and disperse increases in voltage caused by wave reflection, harmonics, in-rush current, and spikes to prevent conductor and cable failure.

### Recommended Applications:

VFD drive and motor connections; web presses; HVAC; conveyors; any on/off applications using a VFD drive and motor





### Application Advantage:


- Industrial grade PVC jacket passes Oil Res I & II
- Inner jacket for additional mechanical protection
- Corona inception voltage is 2900 V
- Double shielded for extra protection

### ÖLFLEX® VFD Construction:

Finely stranded tinned copper conductors; specially blended "Lapp Surge Guard" insulation; inner PVC jacket; 100% shielding with foil tape and tinned copper braid (85% coverage); specially formulated orange PVC jacket.










| Cable Attributes, See Page 653   |                          |  |
|--|--------------------------|--|
|   | Oil Resistance:<br>OR-03 |   |
|  | Motion Type:<br>FL-01    |  |
|  |                          | Flame Resistance:<br>FR-02   |
|  |                          | Mechanical Properties:<br>MP-02  |

| Availability:   |   |
|---|---|
|  | Standard put-ups are 100ft, 250ft, 500ft, and 1,000ft. Bulk reels can be cut to length. |

| Complete the installation with:  |                              |  |
|--|------------------------------|--|
|   | VFD Selection Guide:<br>Page |   |
|  | SKINTOP® BRUSH:<br>Page 506  |  |
|  |                              | EPIC® Connectors:<br>Page 251  |
|  |                              | SKINTOP® MS-SCL:<br>Page 504   |

### Technical Data:

|   |                             |   |   |                    |   |
|---|-----------------------------|---|---|--------------------|---|
|  | <b>Minimum Bend Radius:</b> | 12 x cable diameter   |  | <b>Color Code:</b> | Three black conductors with white numbers, plus green/yellow ground   |
|  | <b>Temperature Range:</b>   | -25°C to +90°C<br>- for continuous flex: -5°C to +90°C<br>- for stationary use: -40°C to +105°C |  | <b>Approvals:</b>  | UL:<br>- MTW per UL 1063<br>- Bus Drop Cable (14 AWG - 2 AWG)<br>- Submersible Pump (14 AWG or larger)<br>- NFPA 79 2012<br>Attributes:<br>Canada:<br>Additional: |
|  | <b>Nominal Voltage:</b>     | 1000 V AC / 2000 V AC Peak  |   |                    | - CSA AWM II A/B FT1<br>- ICEA: T-24-380 Corona test  |
|  | <b>Test Voltage:</b>        | 7500 V  |   |                    |   |
|  | <b>Conductor Stranding:</b> | - 18 - 6 AWG: Class 5 Fine Wire<br>- 4 - 2 AWG: Class K Fine Wire                               |   |                    |   |

| Part Number                    | Number of Conductors includes ground | Conductor Diameter inches | Inner Jacket Diameter inches | Nominal Outer Diameter inches | mm   | Copper Weight lbs/mft | Approx. Weight lbs/mft | kg/km | SKINTOP® MS-SCL (PG) Page 504 | SKINTOP® MS-SC-M Brush (Metric) Page 506 |
|--------------------------------|--------------------------------------|---------------------------|------------------------------|-------------------------------|------|-----------------------|------------------------|-------|-------------------------------|--|
| 18 AWG (1.00 mm <sup>2</sup> ) |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 701804                         | 4                                    | .104                      | .324                         | .450                          | 11.4 | 53                    | 143                    | 213   | 53112340                      | 53112676                                 |
| 16 AWG (1.32 mm <sup>2</sup> ) |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 701604                         | 4                                    | .117                      | .355                         | .513                          | 13.0 | 69                    | 171                    | 255   | 53112340                      | 53112676                                 |
| 14 AWG (2.08 mm <sup>2</sup> ) |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 701404                         | 4                                    | .134                      | .396                         | .554                          | 14.1 | 98                    | 244                    | 363   | 53112350                      | 53112676                                 |
| 12 AWG (3.30 mm <sup>2</sup> ) |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 701204                         | 4                                    | .158                      | .454                         | .612                          | 15.5 | 140                   | 287                    | 427   | 53112350                      | 53112676                                 |
| 10 AWG (5.32 mm <sup>2</sup> ) |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 701004                         | 4                                    | .200                      | .556                         | .734                          | 18.6 | 208                   | 463                    | 690   | 53112360                      | 53112677                                 |
| 8 AWG (8.52 mm <sup>2</sup> )  |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 700804                         | 4                                    | .276                      | .740                         | .936                          | 23.9 | 336                   | 618                    | 920   | 53112360                      | 53112678                                 |
| 6 AWG (13.5 mm <sup>2</sup> )  |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 700604                         | 4                                    | .320                      | .845                         | 1.051                         | 26.7 | 500                   | 867                    | 1292  | -                             | 53112678                                 |
| 4 AWG (21.0 mm <sup>2</sup> )  |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 700404                         | 4                                    | .400                      | 1.040                        | 1.243                         | 31.6 | 622                   | 1214                   | 1809  | -                             | 53112679                                 |
| 2 AWG (33.7 mm <sup>2</sup> )  |                                      |                           |                              |                               |      |                       |                        |       |                               |  |
| 700204                         | 4                                    | .472                      | 1.214                        | 1.464                         | 37.2 | 991                   | 1749                   | 2606  | -                             | 53112680                                 |