

ÖLFLEX® SERVO FD 7TCE

Highly flexible, low capacitive servo motor cable with TC-ER (UL) or c(UL)-Listing for North America

ÖLFLEX® SERVO FD 7TCE - screened, low capacitive servo motor cable for highly flexible installation with UL TC-ER listing.

Info

Core Line Performance - Medium to increased travel lengths or acceleration

Wide application range (NFPA 70/NEC)/ compliance with NFPA 79 for industrial machinery

Low-capacitance design



Flame-retardant



Mechanical resistance



Oil-resistant



Power chain



Interference signals



UV-resistant

Benefits

Multi-standard certification offers universal application range, reduces part varieties and saves costs

TC-ER and Flexible Motor Supply Cable listings enable open wiring on cable trays as well as the static or highly flexible usage for industrial machines with the same cable

Cost-saving, easy installation due to omission of closed raceways (suitable for open wiring)

Low capacitance design enables longer cable connection between frequency converter and motor

Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media

Ideal for export-oriented machinery and equipment manufacturers thanks to high normative acceptance by the North American

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Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02_03.16

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NEC (National Electrical Code)

Application range

Connecting cable between servo controller and motor
In power chains or moving machine parts
Static open wiring on and between cable tray an industrial machine acc. NEC
Industrial machinery and machine tools
Linear robots, automated handling equipment
Assembly lines, production lines, in all kinds of machines

Product features

Oil-resistant according to UL OIL RES I & II
Flame-retardant according to CSA FT4
UL Vertical-Tray Flame Test
-40°C Cold Bend; -25°C Cold Impact; 90°C Wet or Dry
Sunlight Resistant
Direct Burial (according US standard)
Low capacitance

Norm references / Approvals

UL TC-ER (exposed run) per UL 1277
Flexible Motor Supply Cable per UL 2277
Class 1 Division 2 per NEC Article 501
c(UL) CIC FT4 (18AWG - 14AWG);
cRU AWM I/II A/B FT4
For use in power chains: Please comply with assembly guideline Appendix T3

Product Make-up

Extra-fine wire strand made of bare copper
Core insulation: EPR compound
Individual design depending on the item: power cores without or with one or two individually screened control core pairs twisted together in short lay lengths
Non-woven wrapping
Tinned-copper braiding
Outer sheath: Specially formulated thermoplastic elastomer (TPE), orange

Technical Data

| | |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification ETIM 5: | ETIM 5.0 Class-ID: EC000057 ETIM 5.0 Class-Description: Low voltage power cable |
| Core identification code: | Power cores: black with marking U/L1/C/L+; V/L2; W/L3/D /L-; GN/YE protective conductor Optional designs with one pair of control cores: black; white Two pairs of control cores: black with white numbers: 5, 6, 7, 8 |
| Certifications: | USA: UL TC-ER, Flexible Motor SupplyCanada: c(UL) CIC/TC FT4, cRU AWM I/II A/B FT4 |
| Conductor stranding: | Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6 |
| Minimum bending radius: | Flexing: up from 7.5 x outer diameter Fixed installation: 5 x outer diameter |
| Nominal voltage: | UL TC: 600V |

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| | |
|----------------------------------------|-------------------------------------------------------------------------------------------------|
| | UL Flexible Motor Supply: 1000V c(UL) CIC/TC: 600V cRU AWM: 1000V IEC U0/U: 600/1000 V |
| Test voltage: | Core/Core: 4 kV Core/Screen: 2 kV |
| Protective conductor: | G = with GN-YE protective conductor |
| Temperature range: | Flexing: -5°C to +90°C Fixed installation: -40°C to +90°C |
| Bending cycles & operation parameters: | See Selection Table A2-1 in the appendix of our online catalogue |

Note

Unless specified otherwise, the shown product values are nominal values at room temperature. Detailed values (e.g. tolerances) are available upon request.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

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| Article number | Number of cores and mm ² per conductor | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|----------------|---------------------------------------------------|---------------------|----------------------|----------------|
| 700750 | 4 G 1.5 | 10.2 | 90.782 | 174 |
| 700751 | 4 G 2.5 | 11.4 | 141.382 | 230 |
| 700752 | 4 G 4.0 | 13.1 | 200.911 | 319 |
| 700753 | 4 G 6.0 | 15.0 | 282.763 | 431 |
| 700754 | 4 G 1,5 + (2 x 1,5) | 12.7 | 144.358 | 259 |
| 700755 | 4 G 2,5 + (2 x 1,5) | 13.8 | 199.423 | 356 |
| 700756 | 4 G 4 + (2 x 1,5) | 16.1 | 273.834 | 447 |
| 700757 | 4 G 6 + (2 x 1,5) | 17.1 | 345.269 | 537 |
| 700758 | 4 G 1 + 2 x (2 x 1,0) | 13.3 | 151.799 | 280 |
| 700759 | 4 G 1,5 + 2 x (2 x 1,0) | 14.8 | 190.493 | 355 |
| 700760 | 4 G 2,5 + 2 x (2 x 1,0) | 15.9 | 277.699 | 410 |
| 700761 | 4 G 4 + (2 x 1,0) + (2 x 1,5) | 17.9 | 318.481 | 525 |
| 700762 | 4 G 6 + (2 x 1,0) + (2 x 1,5) | 18.8 | 389.916 | 613 |

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