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| 1023290 | DATA SHEET |  |
| valid from: 17.04.2026 | ÖLFLEX® SERVO 7DSL | |

Application

ÖLFLEX® SERVO 7DSL - the one cable solution for power and feedback circuits - are flexible and screened servo cables with an outer sheath of PVC suitable for Europe and North-America. All of the motor's feedback signals are transmitted by just one control pair of the servo cable. An optionally additional control pair can be used to connect the electro-magnetic break. They are designed for fixed installation subject to medium mechanical load conditions. They are among others designed for use in dry, damp and wet areas. Continuous movements, compulsory guidance respectively usage on cable drums or pulleys or under a strain of more than 15 N/mm² are not allowed. Outdoor use: Only if protected by a cable conduit and by considering the indicated temperature range.

Application range: Connecting cable between servo controller and motor

Design

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| Design | according to UL AWM 758, Style 2570, CSA C22.2 No. 210-15 |
| Certification | UL AWM: Style 2570 (80°C, 1000 V) (File No. E63634) cRU AWM I/II A/B, (80°C, 1000 V) (File No. E63634) |
| Conductor | fine wire strands of bare copper acc. to IEC 60228 resp. EN IEC 60228, Class 5 Signal pair: Bare copper conductor (7-wires) |
| Insulation | Polyolefine (based on PP) |
| Core identification code | Power conductors: Black with white imprint U/L1/C/L+; V/L2; W/L3/D/L- and GN/YE Control pair: Black with white numbers 5, 6 Signal pair: White; Blue |
| Cable assembly | Power conductors Control pair (optionally) - Polyester tape wrapping - Braid of tinned copper wires - Polyester tape wrapping Signal pair - Textile fleece tape - Tinned copper braiding - Aluminium metallized textile tape - Double polyester tape wrapping Stranding: - Soft fleece tape - Braid of tinned copper wires |
| Outer sheath | PVC, Colour: orange, similar RAL 2003 |

Electrical properties at 20 °C


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| Characteristic impedance | Signal pair: 100-120 Ω (10 MHz) |
| Transfer impedance | max. 250 mΩ/m (at 30 MHz) |
| Nominal voltage | IEC/VDE: Power and control cores: 0,6/1 kV; Signal pair: max. 300 V UL/CSA: Power and control cores: 1 kV; Signal pair: 300 V |
| Test voltage | Power and control cores: 4 kV Signal pair: 1 kV |

Mechanical and thermal properties

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| Minimum bending radius | occasional flexing: 15 x outer diameter fixed installation: 5 x outer diameter |
| Temperature range | occasional flexing (VDE): -5 °C up to +70 °C max. conductor temp. occasional flexing (UL/CSA): -5 °C up to +80 °C max. conductor temp. fixed installation (VDE): -40 °C up to +70 °C max. conductor temp. fixed installation(UL/CSA): up to +80 °C max. conductor temp. |
| Flammability | flame retardant in acc. with IEC 60332-1-2 resp. EN 60332-1-2 UL: Vertical flame test VW-1 acc. to UL 1581 § 1080 CSA: FT1 acc. to CSA C22.2 No. 2556, § 9.3 |

Tests acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395, UL 1581

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General requirements

These cables conform to the EU-Directive 2014/35/EU (Low Voltage Directive).

A part of these cables (see www.lappkabel.com/cpr) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).

Environmental information

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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