

1023290	DATA SHEET	
valid from: 12.04.2019	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

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, FT1 (File No. E63634)
Conductor	fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 5 Signal pair: Tinned 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
Stranding	Power conductors Control pair (optionally)- Polyester tape wrapping - Braid of tinned copper wires - Polyester tape wrapping Signal pair - Textile fleece tape - Stranded tinned drain wire + 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

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

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. VDE 0482-332-1-2 UL: Vertical flame test VW-1 CSA: FT1
Oil resistance	acc. to EN 50290-2-22 resp. VDE 0819-102, TM54
Tests	acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395, UL 1581
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

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