

1020060	DATA SHEET	
valid from: 01.01.2019	ÖLFLEX® SERVO 719	

Application

ÖLFLEX® SERVO 719 cables are low capacitance servo motor cables, designed for the European, North American and Canadian market, for occasional flexible use and fixed installation subject to normal mechanical load conditions.

They are among others designed for use in dry, damp and wet conditions.

Outdoor use: They may only be installed considering the indicated temperature range. At room temperature they are widely resistant against acids, caustic solutions and certain oils. They are suitable for non-continuously recurring movement without tensile load. Continuous operational movements, restricted guidance, usage of these cables in moving cable carriers or on motor drum guidance or under a strain of more than 15 N/mm² are not allowed. The data pairs are additionally screened.

Application range:

Connecting cable between servo controller and motor, plant engineering, machine tools and printing units.

Use acc. to UL: PVC sheathed cables for external interconnection or internal wiring of electronic equipment.

Use acc. to CSA: I A/B and II A/B. Cables for internal wiring or external interconnection with or without mechanical abuse.

Design

Design	according to UL AWM Style 2570 and based on DIN EN 50525-2-51 resp. VDE 0285-2-51
Certification	UL AWM 758, Style 2570 (File No. E63634) cRU AWM I A/B II A/B (File No. E63634)
Conductor	fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 5 0.34mm ² : 19x0.15
Insulation	Polypropylen- based compound
Core identification code	Power cores: 4-cores version: black cores with white alphanumeric labelling U/L1/C/L+; V/L2; W/L3/D/L-; GN/YE ground conductor 5-cores version: coloured cores acc. to VDE 0293-308 resp. HD 308 S2 with GN/YE ground conductor 7-cores version: black cores with white numbers 1-6 acc. to EN 50334 (VDE 0293-334) with GN/YE ground conductor Control cores: with 1 control pair: white; black with 2 control pairs: 0.34 mm ² : DIN 47100 (WH; BN; GN; YE) > 0.75 mm ² : black cores with white numbers 5-8 acc. to EN 50334 Control pairs with different conductor cross-sections: 1 mm ² : black cores with white numbers 5-6 1.5 mm ² : black cores with white numbers 7-8 Pair shield: with 1 control pair: Braid of tinned copper wires, coverage = 85% (nominal value) with 2 control pairs: Aluminium-laminated foil, drain wire, braid of tinned copper wires, coverage = 85% (nominal value)
Stranding	power cores (optionally with 1 resp. 2 control pairs) stranded together (optionally with filler)
Outer sheath	PVC- based compound (UL/CSA 80° C rating) Colour: black, similar RAL 9005

Electrical properties at 20°C

Rated voltage	VDE U ₀ /U: 600/1000 V UL/CSA: 1000 V
Test voltage	Core/Core: 4000 V AC Core/Pair screen: 4000 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 6 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 +80 °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

Creator: LABU / PDC	Document: DB1020060EN	Page 1 of 2
Released: ALTE / PDC	Version: 02	

1020060	DATA SHEET	
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	UL: Vertical flame test VW-1 CSA: FT1
UV resistance	acc. to EN 50525-1 (VDE 0285-525-1) cable with black sheath are suitable for permanent outdoor use. (change of colour allowed)
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, EN 50396, UL 1581 and CSA C22.2
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

Creator: LABU / PDC	Document: DB1020060EN	Page 2 of 2
Released: ALTE / PDC	Version: 02	