

1020010	<b>DATA SHEET</b>	
valid from: 01.01.2019	<b>ÖLFLEX® SERVO 719 CY</b>	

## Application

ÖLFLEX® SERVO 719 CY cables are low capacitance, screened 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 areas.

Outdoor use: They may only be installed with UV protection and considering the 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/mm<sup>2</sup> are not allowed. The screen is a protection against electrical interference, the data pairs are additionally screened.

### Application range:

Connecting cable between frequency converter and motor, 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 cRU: 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 50525-2-5 1 resp. VDE 0285-2-5 1
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 <sup>2</sup> : 19x0.15
Insulation	Polypropylen- based compound
Core identification code	Power cores: with 1 control pair: white; black white; brown for following art.: 1020041; 1020042; 1020043; 1020047;1020048; 1020049; 1020050  with 2 control pairs: 0.34 mm <sup>2</sup> : DIN 47 100 (WH; BN; GN; YE) > 0.75 mm <sup>2</sup> : black cores with white numbers 5-8 acc. to EN 50334 Control pairs with different conductor cross-sections: 1 mm <sup>2</sup> : black cores with white numbers 5-6 1.5 mm <sup>2</sup> : black cores with white numbers 7-8  Triplet: black cores with white numbers 1-3 acc. to EN 50334 (VDE 0293-334)  Pair shield /triplet shield: with 1 control pair: Braid of tinned copper wires, coverage = 85% (nominal value) For art. 1020053; 1020054; 1020055; 1020056; 1020057; 1020058: aluminium-laminated foil, drain wire, braid of tinned copper wires, coverage = 85% (nominal value)  with 2 control pairs + triplet: Aluminium-laminated foil, drain wire, braid of tinned copper wires, coverage = 85% (nominal value)
Stranding	4 power cores (optionally with 1 resp. 2 signal pairs, triplet) stranded together (optionally with filler)
Screen	braid of tinned copper wires, coverage = 85% (nominal value)
Outer sheath	PVC- based compound (UL/CSA 80° C rating) Colour: orange, similar RAL 2003

## Electrical properties at 20°C

Transfer impedance	at 30 MHz: max. 250 mΩ/m acc. to DIN EN 50525-2-5 1 resp. VDE 0285-2-5 1
Rated voltage	VDE U <sub>o</sub> /U: 600/1000 V UL/CSA: 1000 V
Test voltage	Core/Core: 4000 V AC Core/Screen: 4000 V AC Pairscreen /overall screen: 500 V AC

## Mechanical and thermal properties

Minimum bending radius                      occasional flexing:                      15 x outer diameter

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Temperature range	fixed installation: 6 x outer diameter 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 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, EN 50396, UL 1581 and CSA C22.2
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

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