



# DATA SHEET

0038010

**ÖLFLEX® SERVO 709 CY UL/CSA**valid from :  
01.09.2009

## Application

ÖLFLEX® SERVO 709 CY cables are oil resistant, screened PVC connecting cables with UL/CSA approval for occasional flexible use and fixed installation which meet the *DESINA*® requirements. They are designed for use in dry, damp and wet conditions but not for outdoor use. ÖLFLEX® SERVO 709 CY cables are increased oil resistant and at room temperature widely resistant to certain oils and resistant to acids. Continuous busy movements, compulsory guidance respectively usage on cable drums or pulleys or under a strain of more than 15 N / mm<sup>2</sup> are not allowed.

The control core pairs are provided for signalling and controlling purposes such as thermo sensor / brake. In order to avoid any interference of the signals, the pairs are screened twice, i.e. by means of a laminated aluminium foil and a layer of tinned copper wire. The outside screen is a overall protection against electrical interference.

Application range:

Connecting cable between frequency converter and motor, connecting cable between servo controller and motor, mechanical and plant engineering and construction, machine tools and printing units.

## Design

Design	acc. to UL AWM 758, CSA 22.2 No. 210.2, based on HD 21.13 S1+A1
Conductor	fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 5
Core insulation	PVC compound UL-Class 43 and CSA-90 °C
Core identification	acc. to DIN EN 50334 resp. VDE 0293-334 Power cores: Black cores with white numbers 1-3 and GN/YE ground conductor control pairs with 0,34 mm <sup>2</sup> : WH/BN and GN/YE control pairs starting at 0,5 mm <sup>2</sup> : Black cores with white numbers 5/6 and 7/8 control pairs with different cross-section: 1,0 mm <sup>2</sup> : Black cores with white numbers 5/6 1,5 mm <sup>2</sup> : Black cores with white numbers 7/8
Taping	plastic foil
Screen	braid of tinned copper, coverage ca. 85% (nominal value)
Outer sheath	PVC compound UL-Class 43 and CSA-90 °C colour: Orange

## Electrical properties at 20 °C

Nominal voltage	power cores	IEC 600 / 1000 V	UL 1000 V
	control core pairs	IEC 300 / 500 V	UL 1000 V
Test voltage	power cores	C/C & C/S: 4000 V AC	
	control pairs	C/C: 4000 V AC	C/S: 3000 V AC

## Mechanical and thermal properties

Min. bending radius	occasional flexing:	15 x cable diameter
	fixed installation:	6 x cable diameter
Temperature range	occasional flexing:	-5 °C up to +70 °C (VDE) / +90 °C (UL/CSA) max. conductor temp.
	fixed installation:	-40 °C up to +70 °C (VDE) / +90 °C (UL/CSA) max. conductor temp.
Flammability	flame retardant in acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 UL VW1, CSA FT1	
Oil resistance	acc. to VDE 0472 part 803 test method B	
Tests	acc. to IEC 60811 resp. VDE 0473-811, VDE 0472, UL 1581	
Approvals	UL AWM Style 20886 CSA AWM II A/B	
EC directive	This cable is conform to ECD 2006/95/EC (Low Voltage Directive).	

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