



DATA SHEET	0037030
ÖLFLEX® SERVO FD 790 CP	valid from : 01.07.2008

Application

ÖLFLEX® SERVO FD 790 CP are high flexible screened servomotor cables with PUR jacket, UL approved and with DESINA admission, provided for flexible use and fixed installation under medium mechanical load conditions. They are among others for use in dry, damp and wet rooms. Outdoors they may only be installed in observation of the temperature range.

ÖLFLEX® SERVO FD 790 CP cables are increased oil-resistant and at room temperature generally resistant against acids and caustic solutions. They are microbe-proof and hydrolysis resistant. Furthermore the jacket is resistant against abrasion and scouring and also cut resistant. The cables are special for use as connection between frequency converter and servomotors and for use in power chains, automatic manipulators and in permanently moved machine parts. Usage of these cables in moving cable carriers, respectively on motor drum guidance or under a strain of more than 15 N / mm² is not allowed. The screen is a protection against electrical interference.

USE according to UL: PUR-sheathed cables for external interconnection of electrical equipment
USE according to CSA: PUR-sheathed cables for external interconnection of electrical equipment with or without mechanical load

Design

Conductor extra fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, class 6

Core insulation PVC-compound TI2 acc. to HD 21.1 resp. VDE 0281-1 and UL 1581
Core identification acc. to VDE 0293-1, with or without gn/ye ground conductor
black cores with white numbers
acc. to DIN EN 50334 resp. VDE 0293 part 334

Taping nonwoven wrapping over core assembly
Inner sheath for cables with control pairs only, special PVC compound, colour: grey

Screen braid of tinned copper, coverage = 85% (nominal value)
Outer sheath PUR-compound TMPU acc. to HD 22.10 S1 resp. VDE 0282-10, flame retardant colour: orange

Electrical properties at 20 °C

Nominal voltage	supply cores:	IEC	600 / 1000V	UL/CSA	600 V
	control pairs:	IEC	300 V	UL/CSA	300 V
Test voltage	supply cores:	C/C	4000 V	C/S	4000 V
	control pairs:	C/C	1500 V	C/S	750 V

Mechanical and thermal properties

Temperature range for flex. applications -0 °C up to +80 °C max. conductor temperature
fixed installation -40 °C up to +80 °C max. conductor temperature

Min. bending radius 4 x cable diameter for fixed installation
12 x cable diameter for flex. applications

Flammability vertical flame test acc. to UL 1581 § 1061 FT-1
flame retardant in acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2

Oil resistance acc. to IEC 60811-2-1 resp. VDE 0473 part 811-2-1

Approvals UL AWM Style 20234, CSA AWM II A/B, without control pairs
UL AWM Style 20235, with control pairs

Tests acc. to IEC 60811-x-x resp. VDE 0473 part 811-x-x and VDE 0472
EC directive this cable confirms to ECD 2006/95/EC (low voltage directive)

created by: R. Krämer / TE-K released: M. Herb / TE-K	Document: DB0037030EN	page 1 of 1
--	-----------------------	-------------