U.I. Lapp GmbH

DATA SHEET



ÖLFLEX® FD 90 CY

DB 00266521 valid from: 2014-02-21

Application

ÖLFLEX® FD 90 CY are **DESINA**® compliant screened, high-flexible sheathed cables designed for the European, North American and Canadian market, for flexible use and fixed installation, under light and medium mechanical load conditions. The PVC sheath is increased oil resistant. They are among others designed for use in dry and humid rooms. Outdoor use: They may only be installed with UV-protection and considering the temperature range. Usage of these cables in moving cable carriers or on motor drum guidance or under a tensile strain of more than 15 N/mm² is not allowed. The screen is a protection against electrical interference.

Application range:

In machine tools or for internal wiring in industrial machines etc.

USE acc. to UL: PVC sheathed cable for external wiring or internal wiring of electric and electronic equipment.

USE acc. to CSA: Cables for internal wiring or external wiring with or without mechanical stresses.

Design

Approvals UL AWM Style 10107 (File No. E63634)

 \geq 150 mm² cUL AWM I A/B, II A/B \leq 120 mm² CSA AWM I A/B, II A/B, FT1

DESINA_®

Design based on VDE 0250

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

Core insulation PVC compound (UL/CSA 90°C rating)

Screen braid of tinned copper wires, coverage 85% (nominal value)

Core identification BK or GN/YE

Sheath PVC compound (UL/CSA 90°C rating); colour: Orange, similar RAL 2003

Electrical properties at 20 °C

Nominal voltage U_0/U IEC 600 / 1000 V

UL/CSA 600 V

Test voltage 4000 V AC Specific insulation resistance $20 \text{ G} \Omega \times \text{cm}$

Mechanical and thermal properties

Min. bending radius flexing: 7,5 x cable diameter

fixed installation: 3 x cable diameter

Number of bending/unbending

cycles 5 mio. cycles

Travel distance 10 m

Temperature range flexing: -5 °C up to +90 °C (UL/CSA) max. conductor temp.

fixed installation: -40 °C up to +90 °C (UL/CSA) max. conductor temp.

Oil resistance acc. to IEC 60811 bzw. VDE 0473-811 (90 °C, 7d)

80°C rating acc. to UL 758; CSA C22.2 No.210-05

Flammability flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2

UL: Vertical flame test VW-1

CSA: FT1; FT2

Tests acc. to IEC 60811 resp. VDE 0473-811 and VDE 0472. EN 50395. EN 50396

EC Directives These cables are conform to the EC-Directives 2006/95/EC (Low Voltage

Directive) and 2011/65/EU (RoHS, Restriction of the use of certain

hazardous substances).

Originator: KASC / PDC
approved: HAPF / PDC

Document: DB0026651EN

Page 1 of 1