

ÖLFLEX<sup>®</sup> FD 90

DB 0026600

valid from: 2014-02-21

**Application**

ÖLFLEX<sup>®</sup> FD 90 are 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. Considering the temperature range an outdoor use is possible. In USA and Canada an outdoor use is not allowed. Usage of these cables in moving cable carriers or on motor drum guidance or under a tensile strain of more than 15 N/mm<sup>2</sup> is not allowed.

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) ≥150 mm <sup>2</sup> cUL AWM I A/B, II A/B ≤120 mm <sup>2</sup> CSA AWM I A/B, II A/B, FT1
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)
Core identification	BK or GN/YE
Sheath	PVC compound (UL/CSA 90°C rating); colour: Black, similar RAL 9005

**Electrical properties at 20 °C**

Nominal voltage U <sub>0</sub> /U	IEC	600 / 1000 V
	UL/CSA	600 V
Test voltage		4000 V AC
Specific insulation resistance		> 20 G Ω x 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).