


1026003	DATA SHEET	
Valid from: 19.07.2018	ÖLFLEX® FD 891	

Application

ÖLFLEX® FD 891 cables are high flexible, oil-resistant cables for power chains for the European, Northern American and Canadian market.

They are designed for flexible use as well as for fixed installation subject to medium mechanical load conditions.

They are also suitable for use in dry, damp or wet areas.

They are suitable for outdoor use if the indicated temperature range is observed.

ÖLFLEX® FD 891 are increased resistant to oils and at room temperature largely resistant to acids and alkalis.

They are suitable for linear, automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted.

Application range: power chains or moving machine parts, suitable for use in measuring, control and regulating circuits, assembly lines, production lines, in all kinds of machines, machine tools, plant engineering

USE according to RU: PVC sheathed cables for external interconnection or internal wiring of electronic equipment appliances where exposed to oil at a temperature not exceeding 80°C (80°C oil rating)

USE according to CSA: Cables for internal and external interconnection with or without mechanical use

Design

Design acc. to UL AWM Style 21098, CSA C22.2 No. 210-15 and based on EN 50525-2-51 resp. VDE 0285-525-2-51

Approvals RU AWM 758, Style 21098 (File No. E63634)
CSA AWM I A/B, II A/B

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

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

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 0293-334

Outer sheath PVC compound (UL/CSA 90°C rating) with increased requirements acc. to LAPP specification
colour: black, similar RAL 9005

Electrical properties

Nominal voltage IEC U₀ / U: 300 / 500 V
UL/CSA: 600 V

Test voltage core / core: 4000 V AC


Mechanical and thermal properties

Min. bending radius flexing: up from 7.5 x cable diameter
fixed installation: 4 x cable diameter

Bending cycles and power chain operation parameters See Selection Table A2-1 in the appendix of our online catalogue
For use in power chains: Please comply with assembly guideline Appendix T3

Temperature range flexing (VDE): -5 °C up to +70 °C max. conductor temperature
flexing (UL/CSA): -5 °C up to +90 °C max. conductor temperature
fixed installation (VDE): -40 °C up to +80 °C max. conductor temperature
fixed installation (UL/CSA): up to +90 °C max. conductor temperature

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Flammability	flame retardant acc. to IEC 60332-1 resp. VDE VDE 0482-332-1-2 UL: vertical flame test VW-1 CSA: FT1
Oil resistance	acc. to EN 50363-4-1 resp. VDE 0207-363-4-1, TM5 UL: 80°C rating acc. to UL 758 CSA: CSA C22.2 No. 210-15
UV-resistance	acc. to EN 50525-1 (VDE 0285-525-1) cable with black sheath are suitable for permanent outdoor use.
Tests	acc. to IEC 60811 resp. VDE 0473-811, EN 50395, EN 50396 UL 1581 and CSA C22.2
EU Directives	These cables are conform to the EU-Directives 2014/35/EU (Low Voltage Directive)

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