Application

ÖLFLEX® FD 855 P cables are oil-resistant, low capacitance control and supply cables with an outer sheath of Polyurethane designed for the European and North American market, for especially high flexible use and fixed installation under normal mechanical load conditions. They are among others designed for use in dry, damp or wet conditions.
Considering the indicated temperature range an outdoor use is possible.
ÖLFLEX® FD 855 P cables are increased oil resistant and at room temperature widely resistant to acids and caustic solutions. The outer sheath is resistant to high mechanical load, particularly to abrasion and scouring, is cut resistant, microbe-proof and hydrolysis resistant.
They are especially suitable for increased requirements (Extended Line) in power chains and in permanently moved machine parts. They are suitable for linear, automated movements. The maximum tensile load is 15 N/mm^2 of conductor cross-section during installation and operation. Compulsory guidance is not permitted.
All materials used are halogen-free.

Application range:
Power chains, also for long travel distance, moving machine parts, machine tools and transfer lines, mechanical engineering, construction machinery, in all kinds of machines.

USE acc. to UL: PUR sheathed cable for internal wiring
USE acc. to cRU: PUR sheathed cable for internal or external use without mechanical abuse

Design

Design	according to UL AWM 758, Style 21576 and based on EN 50525-2-51 resp. VDE 0285-525-2-51 and EN 50525-2-21 resp. VDE 0285-525-2-21
Approvals	UL AWM 758, Style 21576 (File No. E63634) cRU AWM I/II A (File No. E63634)
Conductor	extra fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 6
Core insulation	TPE (Thermoplastic Elastomer)
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
Outer sheath	Polyurethane-compound TMPU acc. to EN 50363-10-2 resp. VDE 0207-363-10-2 colour: Grey, similar RAL 7001

Electrical properties

Nominal voltage	VDE U_0 / U: 300/500 V UL/cRU: 1000V
Test voltage	core / core: 3000 V AC

Mechanical and thermal properties

Min. bending radius	flexing: up from 5 x cable diameter fixed installation: 3 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): -40 °C up to +80 °C max. conductor temp. flexing (UL): up to +80 °C max. conductor temp. fixed installation (VDE): -50 °C up to +80 °C max. conductor temp. fixed installation (UL): up to +80 °C max. conductor temp.

We reserve all rights according to DIN ISO 16016.

Flammability	flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 CSA: FT2
Halogen-free	acc. to VDE 0472-815
UV-resistance	acc. to EN 50618 (VDE 0283-618) EN 50620 (VDE 0285-620) EN ISO 4892-2-2013, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B
Oil resistance	acc. to EN 50363-10-2 resp. VDE 0207-363-10-2
MUD resistance	acc. to IEC 61892-4 Annex D
Tests	acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395, EN 50396, UL 1581, CSA C22.2
EU Directives	These cables are conform to the EU-Directives 2014/35/EU (Low Voltage Directive)

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