**DATA SHEET** 



ÖLFLEX<sup>®</sup> ROBUST FD



## Application

ÖLFLEX<sup>®</sup> ROBUST FD are high flexible power and control cables for flexible use and fixed installation for normal 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. At room temperature, they are largely resistant to the effects of acids, alkalis and oils, as well as greases and plant-, animal-, mineral- or synthetic-based waxes.

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<sup>2</sup> of conductor cross-section during installation and operation. Compulsory guidance is not permitted. All materials used are halogen-free.

Application range:

machine tool building, medical technology, laundries, car washing equipment, chemical industry, composting plants, sewage works, particularly in wet areas of machine tools and transfer lines, food and beverage industry, especially for production and protection and processing equipment of milk and meat productions

## Design

Design	based on EN 50525-2-51 resp. VDE 0285-525-2-51
Conductor	extra fine wire strand of tinned copper acc. to IEC 60228 resp. VDE 0295, Class 6
Core insulation	TPE compound P4/11
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
Stranding	cores with short length of layer stranded, nonwoven materials taping over outer layer
Outer sheath	TPE compound P4/11, colour: black, similar RAL 9005

## **Electrical properties**

Nominal voltage	U <sub>0</sub> / U:	300 / 500 V
Test voltage	core / core:	4000 V AC

## Mechanical and thermal properties

Min. bending radius	for flexible applications: fixed installation:	up from 7.5 x cable diameter at temperatures < 70° C up from 10 x cable diameter at temperatures ≤ 105° C 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	for flexible applications: fixed installation:	-40 °C up to + 105 °C max. conductor temp. -50 °C up to + 105 °C max. conductor temp.	
Halogen-free	acc. to VDE 0472-815		
UV-resistance	acc. to EN ISO 4892-2, n	acc. to EN ISO 4892-2, method A (change of colour allowed)	
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B		

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Oil resistance

Tests

EU Directives

acc. to IEC 60811, EN 50395, EN 50396

TM5 acc. to EN 50363-4-1 resp. VDE 0207-363-4-1

These cables are conform to the EU-Directives 2014/35/EU (Low Voltage Directive)

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