

Application

ÖLFLEX[®] 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/mm² 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_0 / U: 300 / 500 V Test voltage core / core: 4000 V AC

Mechanical and thermal properties

Min. bending radius for flexible applications: up from 7.5 x cable diameter at temperatures < 70° C

up from 10 x cable diameter at temperatures ≤ 105° C

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 for flexible applications: -40 °C up to + 105 °C max. conductor temp.

fixed installation: -50 °C up to + 105 °C max. conductor temp.

Halogen-free acc. to VDE 0472-815

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

acc. to IEC 60811, EN 50395, EN 50396 Tests

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

Directive)

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