

## ÖLFLEX® PETRO FD 865 CP

DB 0023300

valid from: 2014-05-08

### Application

ÖLFLEX® PETRO FD 865 CP cables are oil-resistant control cables with an outer sheath of special polymer compound for high flexible use and fixed installation under medium mechanical load conditions. They are among others designed for use in dry, damp and wet rooms. Considering the indicated temperature range an outdoor use is possible.

ÖLFLEX® PETRO FD 865 CP cables are resistant to oil and drilling fluids according to NEK TS 606:2009 (Oil & MUD) as soon as IEC 61892-4 Annex D and at room temperature widely resistant to acids and caustic solutions. The outer sheath is resistant against high mechanical load, particularly to abrasion and scouring, cut resistant, microbe-proof and hydrolysis resistant. They are especially for use in power chains, also for long travelling distance and high speed, handling tools and in permanently moved machine parts. Usage of cables in moving cable carriers or on motor drum guidance or under a tensile strain of more than 15 N/mm<sup>2</sup> conductor cross-section is not allowed. The used materials are halogen-free. The screen is a protection against electrical interference.

Application range: Power chains or moving machine parts, on- and offshore applications e.g. offshore drilling platform, drill-ship; machine tools and transfer lines, mechanical engineering, construction machinery, assembly lines, production lines, in all kinds of machines.

### Design

Design	based on HD 22.10 S2/ VDE 0282-10, EN 50525-2-21/ VDE 0285-525-2-21 and HD 21.13 S1+A1/ VDE 0281-13, EN 50525-2-51/ VDE 0285-525-2-51
Approval	DNV Det Norske Veritas (Certificate-No. E-12720)
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
Taping	non-woven wrapping
Inner sheath	TPE (Thermoplastic Elastomer)
Screen	braid of tinned copper wires, coverage = 85% (nominal value)
Outer sheath	Special polymer compound Colour: Black, similar RAL 9005

### Electrical properties

Nominal voltage	U <sub>0</sub> /U: 300/500 V
Test voltage	Core/Core and Core/Screen: 3000 V AC

### Mechanical and thermal properties

Min. bending radius	flexing:	7.5 x cable diameter
	fixed installation:	4 x cable diameter
Number of bending/unbending cycles		10 mio. cycles
Travel distance		100 m

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Temperature range	flexing: -50 °C up to +80 °C max. conductor temp. fixed installation: -60 °C up to +90 °C max. conductor temp.
Flammability	flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2
Oil resistance	acc. to EN 50363-10-2 resp. VDE 0207-363-10-2
MUD resistance	acc. to NEK TS 606: 2009 and IEC 61892-4 Annex D
Salt water resistance	acc. to UL 1309
Halogen free	acc. to VDE 0472-815
UV resistance	acc. to EN ISO 4892-2-2006, method A (change of colour allowed)
Tests	acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395
EC Directive	These cables are conform to the EC-Directives 2006/95/EC (Low Voltage Directive), and 2011/65/EC (RoHS, Restriction of the use of certain hazardous substances).