0023300	DATA SHEET	LAPP
valid from: 10.02.2020	ÖLFLEX® PETRO FD 865 CP	

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 also suitable for use in dry, damp or wet areas. They are suitable for outdoor use if the indicated temperature range is observed.
ÖLFLEX® PETRO FD 865 CP cables are resistant to oil and drilling fluids according to NEK TS 606:2016 (Oil & MUD) as well as IEC 61892-4 Annex D and at room temperature widely resistant to acids and alkalis.
The outer sheath withstands high mechanical stresses, in particular abrasion and dragging. It is also cut proof and resists microbes and hydrolysis.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. The screening braid protects against interference from electrical fields.

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

Design

Design	based on EN 50525-2-21 resp. VDE 0285-525-2-21 and EN 50525-2-51 resp. VDE 0285-525-2-51
Certification	DNV GL (Certificate-No. TAE000031E)
Conductor	extra fine wire strands of bare copper acc. to IEC 60228 resp. VDE 0295, Class 6
Insulation	TPE (Thermoplastic Elastomer)
Core identification code	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 at 20°C

Nominal voltage	U_0 /U :	300 / 500 V
	acc. to DNV GL:	250 V
Test voltage	core / core:	3000 V AC
	core / screen:	3000 V AC

Mechanical and thermal properties

Minimum bending radius	flexing:	up from 7.5 x cable diameter
	fixed installation:	4 x cable diameter
Temperature range	flexing:	-50 °C up to +80 °C max. conductor temp.
	fixed installation:	-60 °C up to +80 °C max. conductor temp.
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	
Flammability	flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2	
Halogen free	acc. to VDE 0472-815	
UV resistance	Acc. to EN 50525-1 (VDE 0285-525-1) cables with black sheath are suitable for permanent outdoor use. acc. to EN 50618 resp. VDE 0283-618 acc. to EN 50620 resp. VDE 0285-620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)	
Oil resistance	acc. to EN 50363-10-2 resp. VDE 0207-363-10-2	
MUD resistance	acc. to NEK TS 606: 2016 and IEC 60092-360	
Water-resistance	Salt water resistance acc. to UL 1309	
Tests	acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395	
General requirements	These cables are conform to the EU-Directives 2014/35/EU (Low Voltage Directive)	
Environmental information	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).	

We reserve all rights according to DIN ISO 16016.