ÖLFLEX® SERVO FD 7DSL

Low capacitive hybrid servo cable with PUR sheath for highly dynamic power chain application - certified

ÖLFLEX® SERVO FD 7DSL - hybrid cable for permanently flexing applications with UL/cUL AWM.

Info
OCS - One Cable Solution
Suitable for Hiperface DSL® motor-feedback systems
Extended line for high loads in power chains

UV-resistant

Interference signals

Power chain

Oil-resistant

Mechanical resistance

Halogen-free

Last Update (06.05.2017)

Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16

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Benefits
Allows much faster motion sequences which increases the economic efficiency of machines
Only one connection line between frequency converter and motor-feedback system. Instead of the encoder cable, an integrated DSL pair takes over the signalling.
Fewer cables required and reduced connection costs
Space and weight savings thanks to hybrid cable design
Durable under harsh conditions thanks to robust PUR sheath material
Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media

Application range
Applications in electric drive systems
Connecting cable between servo controller and motor
In power chains or mobile machine parts
For use in assembly & automatic placement machines
Particularly in wet areas of machine tools and transfer lines

Product features
Dynamic drag chain performance:
Acceleration up to 50 m/s².
Travel speeds up to 5 m/s.
Travel distances up to 20m.
Maximum DSL transmission length: 100m
Flame retardance:
UL/CSA: VW-1, FT1
IEC/EN: 60332-1-2
Halogen-free materials
Low-capacitance design
Oil-resistant

Norm references / approvals
UL AWM Style 21223
cRU AWM I/II A/B FT1
UL File No. E63634
For use in power chains: Please comply with assembly guideline appendix T3

Design
Extra-fine wire, bare copper conductor (power cores and control pair) and 19-wire, tin-plated copper conductor (signal pair)
Core insulation: Polypropylene (PP)
Individual design depending on the item: Power cores without or with one individually shielded control pair and one DSL signal pair twisted together
Fleece wrapping
Tin-plated copper braiding
Polyurethane sheath (PUR), orange (RAL 2003)

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Technical Data

Classification:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Core identification code:	Power cores: black with marking U/L1/C/L+; V/L2; W/L3/D /L-; GN/YE protective conductor Signal pair: white, blue Control pair (optional): black with numbers 5 + 6
Conductor design:	Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6 DSL pair: 19-wire
Minimum bending radius:	For flexible use: 7.5 x outer diameter Fixed installation: 5 x outer diameter
Nominal voltage:	Power and control cores: IEC: U_0/U: 600/1000 V UL: 1000 V Signal pair: 300 V
Test voltage:	Power and control cores: 4 kV Signal pair: 1kV
Protective conductor:	G = with GN-YE protective conductor
Temperature range:	Flexing: -40°C to +90°C (UL: +80°C) Fixed installation: -50°C to +90°C (UL: +80°C)
Alternating bending cycles:	10 million cycles

Note

Unless specified otherwise, the shown product values are nominal values at room temperature. You can receive further values, such as tolerances, upon request if they available and have been released for publication.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
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PRODUCT INFORMATION

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Hybrid cables for power chain applications				
1023275	4 G 1,5 + (2 x 22AWG)	11.2	115	198
1023276	4 G 2,5 + (2 x 22AWG)	12.6	160	269
1023277	4 G 4 + (2 x 22AWG)	14	218	343
1023274	4 G 1 + (2 x 0,75) + (2 x 22AWG)	11.8	133	202
1023278	4 G 1,5 + (2 x 1,0) + (2 x 22AWG)	13.2	152	256
1023279	4 G 2,5 + (2 x 1,0) + (2 x 22AWG)	14	195	313
1023280	4 G 4 + (2 x 1,0) + (2 x 22AWG)	15.8	268	407

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