

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

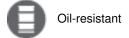


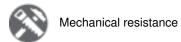
















Benefits

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 $\mathsf{T}3$

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)





Technical Data

Nominal voltage:

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

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Power and control cores: IEC: U₀/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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Prices are net prices without VAT and surcharges. Sale to business customers only.

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