



## ÖLFLEX® SERVO FD 7DSL

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



**Info**

- Suitable for SCS open link and ACURO®link
- Suitable for Hiperface DSL® motor-feedback systems
- Extended Line Performance - Long travel lengths or high acceleration

### Benefits

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

### Application range

- Power drive systems in automation engineering
- Connecting cable between servo controller and motor
- In power chains or moving machine parts
- For use in assembling & pick-and-place machinery
- Particularly in wet areas of machine tools and transfer lines

### Product features

- Maximum DSL transmission length: 100m
- Flammability: 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

### Product Make-up

- Extra-fine-wire, bare copper conductor (power cores and control pair) and 19-wire, tinned copper conductor (signal pair)
- Core insulation: polypropylene (PP)
- Individual design depending on the item: power cores without or with one screened control pair and one DSL signal pair twisted together
- Non-woven wrapping
- Tinned-copper braiding
- PUR outer sheath, orange (RAL 2003)

### Technical data

**Classification ETIM 5/6**  
ETIM 5.0/6.0 Class-ID: EC000104  
ETIM 5.0/6.0 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 white numbers 5 + 6

**Conductor stranding**  
Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6  
DSL pair: 19-wired

**Minimum bending radius**  
Flexing: up from 7,5 x outer diameter  
Fixed installation: 5 x outer diameter

**Nominal voltage**  
Power and control: IEC: U0/U: 600/1000 V  
UL: 1000 V  
Signal pair: 300 V

**Test voltage**  
Power and control: 4 kV  
Signal pair: 1kV

**Protective conductor**  
G = with GN-YE protective conductor

**Bending cycles & operation parameters**  
See Selection Table A2-1 in the appendix of our online catalogue

**Temperature range**  
Flexing: -40°C to +90°C (UL: +80°C)  
Fixed installation: -50°C to +90°C (UL: +80°C)

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
<b>Hybrid cables for power chain applications</b>				
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)	14.0	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)	14.0	195	313
1023280	4 G 4 + (2 x 1,0) + (2 x 22AWG)	15.8	268	407

Unless specified otherwise, the shown product values are nominal values at room temperature. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

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### Similar products

- ÖLFLEX® SERVO 7DSL refer to page 102
- ÖLFLEX® SERVO FD 796 CP refer to page 109

### Accessories

- Protective cable conduit systems and cable carrier systems
- Circular connectors