

## ÖLFLEX® SERVO FD 7DSL

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

ÖLFLEX® SERVO FD 7DSL - hybrid cable for permanently moved power chain applications, UL/cUL AWM.

### Info

One cable solution for servo drives

Suitable for Hiperface DSL® and SCS open link interfaces

Extended Line Performance - Long travel lengths or high acceleration



Halogen-free



Mechanical resistance



Oil-resistant



Power chain



Interference signals



UV-resistant

### 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 a specific integrated data 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

Last Update (19.05.2025)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

## ÖLFLEX® SERVO FD 7DSL

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

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000104 ETIM 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, white
Conductor stranding:	Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6 DSL data 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 Data pair: 1kV

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## ÖLFLEX® SERVO FD 7DSL

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)

### Note

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

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

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Prices are net prices without VAT and surcharges. Sale to business customers only.

**ÖLFLEX® SERVO FD 7DSL**

Article number	Number of cores and mm <sup>2</sup> 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)	14.0	218	343
1023282	4 G 0,5 + (2 x 0,34) + (2 x 26AWG)	9.6	73	132
1023273	4 G 0,75 + (2 x 0,34) + (2 x 26AWG)	10.6	97	160
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
1023281	4 G 6 + (2 x 1,0) + (2 x 22AWG)	17.8	334	485