

# ÖLFLEX® SERVO FD 70CS









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

ÖLFLEX® SERVO FD 70CS - hybrid cables for permanently moved power chain applications, UL/cUL AWM.

**Info**

- One cable solutions for servo drives
- Suitable for various OEM transmission protocols
- Extended Line Performance - High power chain requirements



-  Suitable for outdoor use
-  Halogen-free
-  Cold-resistant
-  Mechanical resistance
-  Oil-resistant
-  Power chain
-  Interference signals
-  UV-resistant

**Benefits**

Last Update (21.03.2023)  
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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 70CS

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 integrated data pairs, quads or signal cores take 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

For indoor and outdoor use

### Product features

OCS - One Cable Solution

High oil-resistance

Abrasion and notch-resistant

Flammability:

UL/CSA: VW-1, FT1

IEC/EN: 60332-1-2

Halogen-free materials

Flexible at low temperatures

### Norm references / Approvals

UL AWM Style 21223 or 20233

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 or fine wired conductor made of bare or tinned copper

Core insulation: polypropylene (PP)

Individual design depending on the item: power cores with screened control pair or bundle and specific data pairs, quads or signal cores 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:

Details see datasheet

Conductor stranding:

Power cores and brake pairs or triplets: Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6

Signal cores, data pairs or star quads: Fine-wired

Minimum bending radius:

Flexing: 7.5 x outer diameter

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## ÖLFLEX® SERVO FD 70CS

Nominal voltage:	Fixed installation: 5 x outer diameter Power and control cores: Version 1,3 & 4: IEC U <sub>0</sub> /U 600/1000 V Version 2: IEC 300 V UL all versions: see data sheet Individual data pairs and quads: see data sheet
Test voltage:	Details see datasheet
Protective conductor:	G = with GN-YE protective conductor
Temperature range:	Flexing: -40 °C to +80 °C Fixed installation: -50 °C to +80 °C
Bending cycles & operation parameters:	See Selection Table A2-1 in the appendix of our online catalogue

### 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)

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

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

**ÖLFLEX® SERVO FD 7OCS**

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
7OCS Version 1				
1023375	4 G 1,5 + (2 x 0,75) + (4 x 24AWG)	13.3	154	252
7OCS Version 2				
1023378	4 G 22AWG + (2 x 22AWG) + (4 x 26AWG)	9.8	75	128
1023379	4 G 19AWG + (2 x 21AWG) + (4 x 26AWG)	10.6	100	159
1023385	4 G 22AWG + (2 x 22AWG) + (4 x 0,20)	9.8	75	128
1023386	4 G 19AWG + (2 x 21AWG) + (4 x 0,20)	10.6	100	159
1023380	4 G 1,5 + (2 x 1,5) + (4 x 0,20)	12.7	170	257
1023381	4 G 2,5 + (2 x 1,5) + (4 x 0,20)	13.7	210	303
7OCS Version 3				
1023371	4 G 2,5 + (2 x 1,0) + (2 x 24AWG + 2 x 2 x 26AWG)	15.6	207	313
1023373	4 G 1,5 + (2 x 0,75) + (2 x 0,30 + 2 x 2 x 0,15)	12.8	165	250
1023374	4 G 2,5 + (2 x 1) + (2 x 0,30 + 2 x 2 x 0,15)	14.2	213	316
1023376	4 G 4 + (2 x 1) + (2 x 0,30 + 2 x 2 x 0,15)	15.8	275	395
7OCS Version 4				
1023387	4 G 1,5 + (1 x Z50) + 2 x (2 x 1)	15.7	196	332
1023388	4 G 2,5 + (1 x Z50) + 2 x (2 x 1)	16.7	242	390
1023389	4 G 4 + (1 x Z50) + 2 x (2 x 1)	17.7	300	458

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