



ÖLFLEX® SERVO FD 70CS

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

i Info

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



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 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 5/6
ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 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
Fixed installation: 5 x outer diameter

Nominal voltage
Power and control cores:
Version 1,3 & 4: IEC U₀/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

Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
70CS Version 1				
1023375	4 G 1,5 + (2 x 0,75) + (4 x 24AWG)	13.3	154	252
70CS 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
70CS Version 3				
1023370	4 G 1,5 + (2 x 0,75) + (2 x 24AWG + 2 x 2 x 28AWG)	13.6	153	248
1023371	4 G 2,5 + (2 x 1,0) + (2 x 24AWG + 2 x 2 x 28AWG)	14.7	202	306
1023372	4 G 4 + (2 x 1,0) + (2 x 24AWG + 2 x 2 x 28AWG)	16.0	270	394
70CS Version 4				
1023382	4 G 1,5 + (3 x 1,0) + (1 x 20AWG)	13.6	170	275
1023383	4 G 2,5 + (3 x 1,0) + (1 x 20AWG)	15.0	215	326
1023384	4 G 4 + (3 x 1,0) + (1 x 20AWG)	16.2	284	420

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

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

Similar products

- ÖLFLEX® SERVO 7DSL refer to main catalogue 2020/21
- ÖLFLEX® SERVO FD 7DSL refer to main catalogue 2020/21

Accessories

- Protective cable conduit systems and cable carrier systems refer to main catalogue 2020/21
- Circular connectors refer to main catalogue 2020/21