

Power chain applications

Servo applications - power drive systems, approved



New

# ÖLFLEX® SERVO FD 796 P

High-end servo cable

LAPP KABEL STÜTTGART ÖLFLEX® SERVO FD 796 P CE



Info

- Extended Line for heavy duty in power chain applications
- Unshielded version of ÖLFLEX® SERVO FD 796 CP with control pair(s)

**Benefits**

- Allows much faster speed and accelerations which increases the economic efficiency of the machines
- Multi-standard = fewer part varieties = cost savings
- To substitute 3 ÖLFLEX® SERVO FD product lines: -750P/-755P/-795P (with control pair)

**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**

- Dynamic performance in power chains: Acceleration up to 50 m/s<sup>2</sup>. Travel speeds up to 5 m/s. Travel distances up to 100 m.
- Low-capacitance design
- Halogen-free materials
- Flame retardancy: UL/CSA: VW-1, FT1 IEC/EN: 60332-1-2
- Oil-resistant

**Norm references / Approvals**

- VDE - reg - no. 8591 (from 4G1,5) UL AWM Style 20234 CSA AWM I/II, A/B 1000 V 80° FT 1
- For use in power chains: Please comply with the assembly guidelines listed in Appendix T3
- Minimum bending radius for flexible use: After consulting, in particular cases, usage at bending factor smaller 7,5 x outer diameter is possible.
- UL File Nr. E63634

**Product make-up**

- Extra-fine wire strand made of bare copper wires (class 6)
- Core insulation: polypropylene (PP)
- According to P/N individual design: Power cores with one or with two control pair(s), twisted together in short lay length
- Non-woven wrapping
- PUR outer sheath, black (RAL 9005)

**Technical data**



**Classification**

ETIM 5.0 Class-ID: EC000104  
ETIM 5.0 Class-Description: Control cable



**Core identification code**

Power: black cores with marking U/L1/C/L+; V/L2; W/L3/D /L- and 1 green-yellow core  
Designs with one pair of control cores: black; white two pairs of control cores: black with white numbers: 5, 6, 7, 8  
0,34mm<sup>2</sup>: WH/BN/GN/YE



**Specific insulation resistance**

> 20 GOhm x cm



**Conductor stranding**

Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6



**Minimum bending radius**

For flexible use: 7.5 x outer diameter  
Fixed installation: 4 x outer diameter



**Nominal voltage**

IEC U<sub>0</sub>/U: 600/1000 V  
UL & CSA: 1000 V



**Test voltage**

Core/Core: 4 kV  
Core/Screen: 4 kV



**Protective conductor**

G = with GN-YE protective conductor



**Temperature range**

Flexing: -40°C to +90°C  
(UL/CSA: +80°C)  
Fixed installation: -50°C to +90°C  
(UL/CSA: +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>ÖLFLEX® SERVO FD 796 P</b>				
0025319	4 G 1,5 + (2 x 1,5)	11.7	99.0	217
0025320	4 G 2,5 + (2 x 1,5)	13.1	134.0	270
0025321	4 G 4 + (2 x 1,5)	14.2	195.0	333
0025322	4 G 6 + (2 x 1,5)	16.0	272.0	403
0025323	4 G 10 + (2 x 1,5)	18.4	425.0	581
0025324	4 G 16 + (2 x 1,5)	22.1	656.0	887
0025326	4 G 0,75 + 2 x (2 x 0,34)	10.9	54.0	143
0025327	4 G 1,5 + 2 x (2 x 0,75)	12.3	103.0	209
0025328	4 G 2,5 + 2 x (2 x 1,0)	14.3	152.0	306
0025312	4 G 4 + 2 x (2 x 1,0)	15.4	218.0	381
0025329	4 G 4 + (2 x 1,0) + (2 x 1,5)	15.6	231.0	388
0025330	4 G 6 + (2 x 1,0) + (2 x 1,5)	17.1	308.0	460

Unless specified otherwise, the shown product values are nominal values. 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 are not to scale and do not represent detailed images of the respective products.

**Similar products**

- ÖLFLEX® SERVO FD 796 CP refer to page 101

**Accessories**

- Protective cable conduit systems and cable carrier systems refer to page 770
- Circular connectors refer to page 608