



**Info**

- Extended Line for heavy duty in power chain applications
- EMC-compliant

**ÖLFLEX® SERVO FD 796 CP**  
High-end servo cable, screened

LAPP KABEL STUÏGART ÖLFLEX® SERVO FD 796 CP CE



**Benefits**

- Allows much faster speed and accelerations which increases the economic efficiency of the machines
- Multi-standard = fewer part varieties = cost savings
- Suitable for use with servomotor drives from leading manufacturers
- To substitute 7 ÖLFLEX® SERVO FD product lines:  
755CP/-755CP DESINA/-781CP/-785CP/-785CP DESINA/-790CP/-795CP

**Application range**

- 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
- Assembly lines, production lines, in all kinds of machines

**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  
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
- UL File Nr. E63634

**Product make-up**

- Extra-fine wire strand made of bare copper wires (class 6)
- Core insulation: polypropylene (PP)
- Individual design depending on the item: power cores with or without one pair, or with two control core pairs, in pairs, with screening, twisted together in short lay lengths
- Non-woven wrapping
- Tinned-copper braiding
- PUR outer sheath, orange (RAL 2003)

**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  
Optional designs with one pair of control cores: black; white  
Two pairs of control cores: black with white numbers: 5, 6, 7, 8

**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 (1.5-16 mm<sup>2</sup>)  
10 x outer diameter (25-50 mm<sup>2</sup>)  
Fixed installation: 4 x outer diameter

**Nominal voltage**  
VDE: power cores and control cores:  
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 CP</b>				
0027950	4 G 1,5	9.1	79.0	140
0027951	4 G 2,5	10.6	129.0	197
0027952	4 G 4	11.9	186.0	268
0027953	4 G 6	14.5	296.0	397
0027954	4 G 10	17.5	449.0	591
0027955	4 G 16	21.6	716.0	955
0027956	4 G 25	25.2	1,073.0	1337
0027957	4 G 35	28.6	1,480.0	1769
0027958	4 G 50	33.4	2,115.0	2468
0027959	4 G 1,5 + (2 x 1,5)	11.6	135.0	261
0027960	4 G 2,5 + (2 x 1,5)	13.4	188.0	318
0027961	4 G 4 + (2 x 1,5)	14.8	235.0	385
0027962	4 G 6 + (2 x 1,5)	16.8	329.0	486
0027963	4 G 10 + (2 x 1,5)	19.4	515.0	701

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
0027964	4 G 16 + (2 x 1,5)	23.1	757.0	1048
0027965	4 G 25 + (2 x 1,5)	26.6	1,147.0	1532
0027966	4 G 35 + (2 x 1,5)	30.9	1,538.0	2097
0027967	4 G 50 + (2 x 1,5)	34.0	2,181.0	2721
0027969	4 G 1,5 + 2 x (2 x 0,75)	12.2	159.0	313
0027970	4 G 2,5 + 2 x (2 x 1,0)	14.6	207.0	395
0027980	4 G 4 + 2 x (2 x 1,0)	16.1	274.0	466
0027971	4 G 4 + (2 x 1,0) + (2 x 1,5)	16.3	344.0	485
0027972	4 G 6 + (2 x 1,0) + (2 x 1,5)	18.1	436.0	588
0027973	4 G 10 + (2 x 1,0) + (2 x 1,5)	21.8	610.0	819
0027974	4 G 16 + 2 x (2 x 1,5)	25.5	801.0	1135
0027975	4 G 25 + 2 x (2 x 1,5)	28.8	1,187.0	1559
0027976	4 G 35 + 2 x (2 x 1,5)	30.9	1,588.0	2093
0027977	4 G 50 + 2 x (2 x 2,5)	36.3	2,557.0	2920

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.

**Accessories**

- Circular connectors refer to page 608
- SKINTOP® EMC/Earthing refer to page 674