



**ÖLFLEX® SERVO FD 796 CP**

Screened servo cable with PUR outer sheath for highly dynamic power chain application - certified

**i Info**

- Extended Line Performance - Long travel lengths or high acceleration
- Product range extension



**Benefits**

- Allows much faster speed and accelerations which increases the economic efficiency of the machines
- Suitable for use with servomotor product lines from leading drive manufacturers
- Longer cable connection possible between frequency converter and motor due to low capacitance design
- Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media
- Wide temperature range for applications in harsh climatic environments
- Copper braiding screens the cable against electromagnetic interference

**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
- For indoor and outdoor use

**Product features**

- Flammability: UL/CSA: VW-1, FT1 IEC/EN: 60332-1-2
- Halogen-free materials
- Abrasion and notch-resistant
- Oil-resistant

**Norm references / Approvals**

- VDE - Reg. - No. 8591 (0027925,..926,..927,..930 pending)
- UL AWM Style 20234
- cULus AWM I/II A/B, 1000V 80° FT1
- CSA AWM I/II A, 1000V 80° FT1
- UL File No. E63634
- For use in power chains: Please comply with assembly guideline Appendix T3

**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 without or with one or two individually shielded control core pairs twisted together in short lay lengths; Power cores with control core triplet twisted together in short lay lengths
- 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**  
Power cores: black with marking U/L1/C/L+; V/L2; W/L3/D /L-; GN/YE protective conductor  
Single-paired versions: individual design depending on the item black; white or brown; white  
Double-paired versions: black with white numbers 5; 6; 7; 8  
0.34 mm<sup>2</sup> pairs: WH/BN/GN/YE  
Triplet: black with white numbers 1; 2; 3

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

**Minimum bending radius**  
Flexing:  
up from 7.5 x outer diameter (up to 16mm<sup>2</sup>)  
up from 10 x outer diameter (from 25mm<sup>2</sup>)  
Fixed installation: 4 x outer diameter

**Nominal voltage**  
Power cores and control cores:  
IEC U0/U: 600/1000 V  
UL & CSA: 1000 V

**Test voltage**  
Core/Core: 4 kV  
Core/Screen: 2 kV

**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/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) approx.	Copper index (kg/km)	Weight (kg/km)
<b>ÖLFLEX® SERVO FD 796 CP</b>				
0027950	4 G 1,5	9.1	79	140
0027951	4 G 2,5	10.6	129	197
0027952	4 G 4	11.9	186	268
0027953	4 G 6	14.5	296	397
0027954	4 G 10	17.5	449	591
0027955	4 G 16	21.6	716	955
0027956	4 G 25	25.2	1073	1337
0027957	4 G 35	28.6	1480	1769
0027958	4 G 50	33.4	2115	2468
0027930	4 G 0,75 + (2 x 0,5)	11.0	85.5	155
0027925	4 G 1 + (2 x 0,5)	11.5	97.4	164
0027931	4 G 1 + (2 x 1,0)	11.7	106.7	174
0027926	4 G 1,5 + (2 x 0,5)	12.0	117.2	187
0027948	4 G 1,5 + (2 x 1,0)	12.2	129.9	202

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm) approx.	Copper index (kg/km)	Weight (kg/km)
0027932	4 G 1,5 + (3 x 1,0)	12.0	143.8	220
0027959	4 G 1,5 + (2 x 1,5)	11.6	135	261
0027927	4 G 2,5 + (2 x 0,5)	12.6	161.2	243
0027978	4 G 2,5 + (2 x 1,0)	13.5	169.2	253
0027933	4 G 2,5 + (3 x 1,0)	13.5	204.3	294
0027960	4 G 2,5 + (2 x 1,5)	13.4	188	318
0027981	4 G 4 + (2 x 1,0)	14.8	238.9	359
0027934	4 G 4 + (3 x 1,0)	14.7	250	361
0027961	4 G 4 + (2 x 1,5)	14.8	235	385
0027982	4 G 6 + (2 x 1,0)	16.8	339.5	469
0027962	4 G 6 + (2 x 1,5)	16.8	329	486
0027935	4 G 6 + (3 x 1,5)	16.5	381.4	505
0027983	4 G 10 + (2 x 1,0)	18.8	530.1	689
0027963	4 G 10 + (2 x 1,5)	19.4	515	701
0027936	4 G 10 + (3 x 1,5)	19.7	568.9	722
0027984	4 G 16 + (2 x 1,0)	22.8	786.7	985
0027964	4 G 16 + (2 x 1,5)	23.1	757	1048
0027937	4 G 16 + (3 x 1,5)	23.3	824.6	1030
0027965	4 G 25 + (2 x 1,5)	26.6	1147	1532
0027966	4 G 35 + (2 x 1,5)	30.9	1538	2097
0027967	4 G 50 + (2 x 1,5)	34.0	2181	2721
0027969	4 G 1,5 + 2 x (2 x 0,75)	12.2	159	313
0027970	4 G 2,5 + 2 x (2 x 1,0)	14.6	207	395
0027980	4 G 4 + 2 x (2 x 1,0)	16.1	274	466
0027971	4 G 4 + (2 x 1,0) + (2 x 1,5)	16.3	344	485
0027972	4 G 6 + (2 x 1,0) + (2 x 1,5)	18.1	436	588
0027973	4 G 10 + (2 x 1,0) + (2 x 1,5)	21.8	610	819
0027974	4 G 16 + 2 x (2 x 1,5)	25.5	801	1135
0027975	4 G 25 + 2 x (2 x 1,5)	28.8	1187	1559
0027976	4 G 35 + 2 x (2 x 1,5)	30.9	1588	2093
0027977	4 G 50 + 2 x (2 x 2,5)	36.3	2557	2920

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](http://www.lappkabel.de/en/cable-standardlengths)  
 Photographs and graphics are not to scale and do not represent detailed images of the respective products.

**Accessories**

- Circular connectors
- EMC

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 UNITRONIC®  
 ETHERLINE®  
 HITRONIC®  
 EPIC®  
 SKINTOP®  
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 FLEXIMARK®  
 ACCESSORIES  
 APPENDIX