

# ÖLFLEX® SERVO FD 796 P

High-Acceleration Continuous Flex Servo Cable with PUR Jacket; Unshielded



ÖLFLEX® SERVO FD 796 P is specially designed, manufactured, and tested by Lapp for usage in modern high-acceleration cable track applications as well as over long travel lengths.

## Recommended Applications

Motor connections between servo controllers and motors on industrial machinery; machine tools, apparatus, assembly handling, production lines, and robotic systems with North American and European approvals

## Approvals



## Construction

**Conductors:** Extra fine bare copper

**Pairs:** 1 pair: twisted together; tinned copper braid (85% coverage); 2 pair: laminated foil shield; drain wire; tinned copper braid (85% coverage)

**Insulation:** Polypropylene

**Jacket:** Black polyurethane

## Application Advantage

- High dynamic performance in cable tracks:
  - Acceleration up to 50 m/s<sup>2</sup>
  - Travel speed up to 5 m/s
  - Travel lengths up to 100 m
- Oil-resistant, halogen-free, and flame-retardant
- Flexes at low temperatures

**Cable Attributes, see page 659**

OR-05 OIL	FR-02 FLAME	CF-04A MOTION	MP-05 MECHANICAL
--------------	----------------	------------------	---------------------

**Similar Cables**

- Servo Cables: SIEMENS® Standard 6FX 8 Plus

**Complete the Installation**

SKINTOP® Strain Relief: page 528	EPIC® Connectors: page 278
----------------------------------	----------------------------

## Technical Data

<b>Minimum Bend Radius:</b>	- for continuous flexing: 7.5 x cable diameter - for stationary use: 4 x cable diameter	<b>Color Code:</b>	- Power conductors: Black with white print - Power: Black conductors with white letters: U/L1/C/L+; V/L2; W/L3/D/L- plus green/yellow ground
<b>Temperature Range:</b>	- for continuous flexing: -40°C to +80°C - for stationary use: -50°C to +80°C		- 1 pair: Black & white - 2 pair: Black with white numbers: 5, 6, 7, 8
<b>Nominal Voltage:</b>	- UL/CSA: 1000V - IEC U <sub>0</sub> /U: 600/1000V	<b>Approvals:</b>	UL: AWM 20234 Attributes: VW-1 Canada: cRU AWM FT1 Additional: VDE Reg. no 8591 (16 AWG & larger) CE & RoHS
<b>Test Voltage:</b>	4000V		
<b>Conductor Stranding:</b>	Class 6 super fine wire		

Part Number	Size / Number of Conductors Power Conductors + Control Pairs	Max. Outer Diameter		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	SKINTOP® MS-M BRUSH Metric Thread
		(inches)	(mm)				
<b>Power Conductors + Control Pairs</b>							
0025319	16 AWG/4c + (16 AWG/1pr)	0.461	11.7	67	146	53112240	53112676
0025320	14 AWG/4c + (16 AWG/1pr)	0.516	13.1	90	181	53112240	53112676
0025321	12 AWG/4c + (16 AWG/1pr)	0.559	14.2	131	224	53112250	53112676
0025322	10 AWG/4c + (16 AWG/1pr)	0.630	16.0	183	271	53112250	53112676
0025323	8 AWG/4c + (16 AWG/1pr)	0.724	18.4	286	390	53112260	53112677
0025324	6 AWG/4c + (16 AWG/1pr)	0.870	22.1	441	596	53112650	53112678
0025326	19 AWG/4c + 2 x (22 AWG/1pr)	0.429	10.9	36	96	53112230	53112676
0025327	16 AWG/4c + 2 x (19 AWG/1pr)	0.484	12.3	69	140	53112240	53112676
0025328	14 AWG/4c + 2 x (18 AWG/1pr)	0.563	14.3	102	206	53112250	53112676
0025312	12 AWG/4c + 2 x (18 AWG/1pr)	0.606	15.4	146	256	53112250	53112676
0025329	12 AWG/4c + (18 AWG/1pr) + (16 AWG/1pr)	0.614	15.6	155	261	53112250	53112676
0025330	10 AWG/4c + (18 AWG/1pr) + (16 AWG/1pr)	0.673	17.1	207	309	53112260	53112677

( ) = shielded pairs

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available, please see our SKINTOP® section. Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.