



DATA SHEET	0027710
LK SMS – FX8 Servo cables acc. to Siemens Standard 6FX8008	gültig ab : 15.07.2009

Application

LAPP servo cables according to Siemens Standard 6FX8008 are highly flexible screened servo drive cables (P/Ns 0027724 to 0027732), signal (encoder and resolver-) cables (P/Ns 0027710 to 0027117), with PUR outer sheath and UL/CSA approvals. They are suitable for highly flexible use in power chains and also for static use. These cables are generally used for the interconnection between frequency converters and servo drives. Typical kind of application: in machine tools, production plants, car body presses, transfer lines... Those cables can be used in dry and damp areas and also outdoor provided the recommended temperatures of use are respected. Usage of these cables in moving cable carriers, respectively on motor drum guidance or under a strain of more than 15 N/mm² is not allowed. LK SMS-FX8 cables are increased oil-resistant, halogen-free and free of lacquer destructive substances.

Technical Data

Conductor	Bare copper, extra fine wire stranding in acc. to IEC 60228 Class 6.		
Core insulation	TPE-E compound (Motor and servo cables) PP compound (Signal cables = Resolver and encoder cables)		
Identification	Servo motor cables: black cores with white letters (U, V, W) and green/yellow ground conductor. Control pairs: one conductor white, one conductor black. Signal cables: See P/N relating add-on data of that document.		
Screen	Braid made of tinned copper wires, optical coverage: 80% (nominal value).		
Outer sheath	PUR compound TPU in acc. to HD 22.10 S1, flame retardant IEC 60332-1 & FT1, oil-resistant EN60811-2-1, colour orange (Servo cables – RAL 2003) and green (data cables – RAL 6018), DESINA®.		
Nominal Voltage	Power: Power cores: 600/1000 V (IEC) 1000 V (UL) Control cores: 24 V AC (IEC) 1000 V (UL/CSA)	Signal: 250 V (IEC) 30 V (UL/CSA)	
Test voltage	Power cables: Power cores: 4000 V Control cores: 2000 V	Signal cables: 500 V	
Temp. range	Flexible use: -10°C up to +60°C conductor temperature max. Static use: -50°C up to +80°C conductor temperature max.		
Min. bending radius	Servo motor cables (P/Ns 0027724 to 0027732) Flexible use Up to 4mm²: 10 x cable outer diameter Up from 6mm² 12 x cable outer diameter Static use: 6 x cable outer diameter Signal cables (P/Ns 0027710 to 0027117) Flexible use: min: 100mm Static use: min: 60mm		
Oil resistance	Acc. to EN 60811-2-1		

Approvals	Power cables:	UL AWM Style 20234, CSA AWM I/II A/B
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Signal cables: UL AWM Style 20236, CSA AWM I/II A/B

EG directive Servo motor cables conform to 2006/95/EG (low voltage directive).

Add-on for P/N **0027710 / 8x2x0.18 C**

Pairs White/yellow + white/green
White/red + white/orange
White/black + white/brown
Grey + white
Blue + violet
Yellow + green
Red + orange
Black + brown

Overall shield Braid made of tinned copper wires, covering > 80%

Outer sheath Polyurethane – Green (RAL 6018)

Outer diameter approx. 7.8mm

Add-on for P/N **0027711 / 4x2x0.38+4x0.5 C**

Pairs 0.38mm² Brown/black – red/orange – yellow/green – blue/violet

Cores 0.5mm² Blue/white – black/white – red/white – yellow/white

Overall shield Braid made of tinned copper wires, covering > 80%

Outer sheath Polyurethane – Green (RAL 6018)

Outer diameter Approx. 8.9 mm

Add-on for P/N **0027712 / 3x(2x0.14 D) + 2x(0.5 D) C**

Pairs 0.14mm² Yellow/green – black/brown – red/orange
Pair shield Spiral made of tinned copper wires – Covering > 90%

Cores 0.5mm² Core 1: black
Spiral made of tinned copper wire – Covering > 90%

Core 2: red
Spiral made of tinned copper wire – Covering > 90%

Overall shield Braid made of tinned copper wires - Covering > 80%

Outer sheath Polyurethane – Green (RAL 6018)

Outer diameter Approx. 9.0 mm

Add-on for P/N **0027713 / 3x(2x0.14 D) + 4x0.14 + 2x0.5 C**

Pairs 0.14mm² Yellow/green – black/brown – red/orange

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Pair shield	Spiral made of tinned copper wire– Covering> 90%
Cores 0.5 mm ²	Brown/red + brown/blue
Quad 0.14mm ²	Grey – blue – white/yellow – white/black
Overall shield	Braid made of tinned copper wires, covering> 80%
Outer sheath	Polyurethane – Green (RAL 6018)
Outer diameter	Approx. 8.9 mm
Add-on for P/N	0027714 / 3x(2x0.14 D) + 2x0.5 + 4x0.14 + 4x0.23 C
Pairs 0.14mm ²	Yellow/green – black/brown – red/orange
Pair shield	Spiral made of tinned copper wires, covering> 90%
Cores 0.5mm ²	Brown/red + brown/blue
Quad 0.14mm ²	Grey – blue – white/yellow – white/black
Quad 0.23mm ²	Brown/yellow – brown/grey – green/black – green/red
Overall shield	Braid made of tinned copper wires, covering> 80%
Outer sheath	Polyurethane – Green (RAL 6018)
Outer diameter	Approx. 9.5 mm

Add-on for P/N	0027715 / 4x2x0.18
Pair	Black/brown – red/orange – yellow/green – blue/violet
Overall shield	Braid made of tinned copper wires, covering> 80%
Outer sheath	Polyurethane –Green (RAL 6018)
Outer diameter	Approx. 6.4 mm

Add-on for P/N	0027716 / 2x2x0.18
Pairs	(Star Quad) Pair 1: Red + Orange. Pair 2: Black+ Brown
Overall shield	Braid made of tinned copper wires, covering> 80%
Outer sheath	Polyurethane – Green (RAL 6018)
Outer diameter	Approx. 5.0 mm

Add-on for P/N	0027717 / 12x0.23
Pairs	Black – brown – red – orange – yellow – green – blue – violet – grey – white – white/black – white/brown
Overall shield	Braid made of tinned copper wires, covering> 80%

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Outer sheath Polyurethane – Green (RAL 6018)

Outer diameter Approx. 6.9 mm