

DATA SHEET

LK SMS - FX5

Servo Cables acc. to Siemens* Standard 6FX5008

DB0025724EN

Valide from:

04.08.2011

Application

LAPP servo cables according to Siemens* Standard 6FX5008 are screened servo drive cables (Art-Nr: 00257001 to 0025719), Signal cables for encoders or resolvers (Art-Nr: 0025724 to 0025726), with PVC outer sheath and UL/CSA approvals. They are especially designed for fixed installation or occasional flexible use. Its oil resistant, DESINA conform PVC sheath allows usage in typical industrial environments. These cables are generally used for the interconnection between Siemens* servo amplifiers and servo motors. Typical kind of application: in machine tools, production plants, car body presses, transfer lines... Those cables can be used in dry and damp areas at the recommended temperatures of use. 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-FX5 cables are increased oil-resistant and free of lacquer destructive substances.

Technical Data:

Conductors: Copper, fine wire stranding in acc. to IEC 60228 Cl.5 / VDE 0295 Cl. 5.

Insulation: Motor cables: Power cond. 1.5mm² up to 6mm²: PP (Polypropylene)

10mm² & larger: PVC (Polyvinylchloride)

Signal pair (optional): PP (Polypropylene)

Signal cables: PP (Polypropylene)

Conductor ID- Code: Power cables: Power cond: Black with white Letters (U/L1/C/L+; V/L2; W/L3"D/L-)

Signal pair (optional): Black; white

Signal cables: see P/Ns individual Add-on data

Screening: Power cables:

Signal pair (optional): braid of tinned copper. Optical coverage factor: ≥80% **Overall shield** braid of tinned copper, optical coverage: 80% (nominal value).

Signal cables: see P/N individual add-on data

Jacket: Special PVC compound flame retardant colour Orange (Servo cables – RAL 2003)

and green (data cables - RAL 6018), DESINA®.

Nominal Voltage: Power cables: Power conductors: 600/1000 V (IEC/VDE)

Signal pair (optional): 24 V (IEC/VDE)

Signal cables: 30 V AC (EN50395)

Operating voltages: Power cables: Power conductors: 1000 V (UL/CSA)

Signal pair (optional): 1000 V (UL/CSA)

Signal cables: 30 V (UL/CSA)

Test voltage: Power cables: 4000 V Signal cables: 500 V

Temperature range: For flexible use: 0°C to +60°C max. Conductor temperature

For static use: -10°C to +80°C max. Conductor temperature

Min. bending radii. For flexible use: 12 x outer diameter

For static use: 5 x outer diameter

Oil resistance: Acc. HD21.13 (VDE 0281-13) & IEC 60811-2-1 (VDE 0473-811-2-1)

Flame retardant: In accordance to IEC/EN 60332.1, UL: FT1 VW-1

Elaborated from:

PD-KL – Chr. Meyer, revised per
05.08.2011 by V. Huber PCM

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Approvals: Power cables: UL AWM Style 2570, CSA AWM I/II A/B, VDE reg.

Signal cables: UL AWM Style 2502, CSA AWM I/II A/B

EC -directives: Power Cables are conform to ECD 73/23/EEC & 2006/95/EC (low voltage directive).

Add-on data of P/N 0027711 4x2x0.38+4x0.5 C

Element 4x2x0.34mm² brown/black – red/orange – yellow/green – blue/violet

Element 4x0.5mm² blue/white – black/white – red/white – yellow/white

Overall shield Braid, made of tinned copper wires. Optical covering factor: > 80%

Outer sheath PCV oil resistant – Colour Green (RAL 6018)

Outer diameter approx. 8.9 mm

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

Element 3x2x0.14mm² yellow/green – black/brown – red/orange

Pair shield tinned copper wires – Covering> 90%

Element 0.5 mm² brown/red + brown/blue

Element 4x0.14mm² grey – blue – white/yellow – white/black

Overall shield Braid, made of tinned copper wires. Optical covering factor: > 80%

Outer sheath PVC oil resistant - Colour Green (RAL 6018)

Outer diameter approx. 8.8 mm

Add-on data of P/N 0027714 3x(2x0.14 D) + 2x0.5 + 4x0.14 + 4x0.23 C

Element 3x2x0.14mm² yellow/green – black/brown – red/orange

Pair shield tinned copper wire— Covering> 90%

Element 0.5 mm² brown/red + brown/blue

Element 4x0.14mm² grey – blue – white/yellow – white/black

Element 4x0.22mm² brown/yellow – brown/grey – green/black – green/red

Overall shield Braid, made of tinned copper wires. Opt. covering factor: > 80%

Outer sheath PVC oil resistant – Colour Green (RAL 6018)

Outer diameter approx. 9.5 mm

^{**}DESINA is a registered trade mark of the Verein der Deutschen Werkzeugmaschinen Hersteller (VDW)

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