


70388718	DATA SHEET	
Valid from: 01.04.2019	LAPPKABEL SERVO Cables LK – HDH Cables for Heidenhain* Measuring Systems	

Application

LAPP LK HDH Encoder cables, suitable for Heidenhain* Measuring Systems.

The highly flexible versions (P/N 70388718 – 70388721) are suitable in continuous flexing (i.e. power chains) at ordinary duty, as well as for static usage.

Usage profile: Interconnection between Servo controller and feedback systems.

Typical Fields of Applications: Industrial Machines, such as Machine Tools, Production Plants, Handling Systems, Body Press, Transfer Lines.


Outside of the USA, these cables can be used in dry, wet, and damp locations, also outdoors under respect of its recommended temperature ratings. All cables have increased resistance to oils and coolants, and are CFC-free, and free of PWIS – Paint-Wetting Impairment Substances (silicone-free).

Usage of these cables inside moving cable carriers, respectively in motor drum guidance, or under strain of more than 15 N/mm² is not allowed.

Technical Data

Conductor	tinned copper extra-fine wire stranding acc. IEC 60228 Cl. 6	
Insulation	signal conductor	TPE-E / thermoplastic polyester elastomer
	power conductor	PVC
Conductor identification code	see further information below	
Design	conductors and pairs twisted together using short lay length	
Screen	overall screen braid made of tinned copper wires optic coverage ≥80 %	
Outer sheath	TMPU / polyurethane acc. to HD 22.10 S1 oil resistant flame retardant UL/CSA FT1	
Rated voltage	300 V (UL/CSA) 30 V (IEC)	
Test voltage	1500 V	
Temperature range	flexible usage	0° C up to +60° C
	static usage	-50 °C up to +80 °C
Minimum bend radius	flexing use	10 x outer cable diameter
	static use	4 x outer cable diameter
Oil resistance	IEC 60811-2-1	
Approvals	UL AWM CSA AWM I/II A/B	


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Additional data of P/N 70388718: (4x2x0,14+4x0,50)

4x2x0.14 mm²	conductor identification code	green+brown yellow+violet pink+grey red+black
4x0.5 mm²	conductor identification code	white blue white/green brown/green
Overall screen	tinned copper braid optic coverage ≥85 %	
Outer sheath	PUR oil resistant colour	black (similar to RAL 9005)
Nominal outer diameter	8.5 mm	


Servo cable imprint legend

LAPP KABEL STUTTGART SERVO LK HDH 4x2x0,14+4x0,50 — E63634  AWM 80°C 300V - 214533M CSA AWM I/II A/B 75°C 600V FT1 ROHS Art, Nr. 70388718

Electrical characteristics

0.14 mm² pairs	nominal capacitance core/core	60 pF/m
	nominal impedance @ 1 MHz	100 ohms


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Additional data of P/N 70388719: **3x(2x0,14)+2x(1x0,50)**

3x(2x0.14 mm²)	conductor identification code	green+yellow grey+pink blue+red
Pair screening	spiral of tinned copper wires wire diameter 0.1 mm	
Pair inner sheath	PVC grey	
2x(1x0.50 mm²)	conductor identification code	white brown
Conductor screening	spiral of tinned copper wires wire diameter 0.1 mm	
Conductor sheath	PVC white brown	
Design	conductors and pairs twisted together using short lay length	
Overall screening	braid made of tinned copper wires optic coverage ≥85 %	
Outer jacket	PUR oil resistant colour	black (similar to RAL 9005)
Outer diameter	approx. 8.3 mm	


Cable imprint legend

LAPP KABEL STUTTGART SERVO LK HDH 3x(2x0.14+2x(1x0,50)) — E63634  AWM 80°C 30V – 214533M CSA AWM I/II A/B 75°C 30V FT1 ROHS Art. Nr. 70388719

Electrical characteristics

0.14 mm² pairs	nominal capacitance core/core	130 pF/m
	nominal capacitance core/shield	205 pF/m
	nominal impedance @ 1 MHz	60 ohms


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Additional data of P/N 70388720: **3x(2x0,14)+2x(1x1,0)**

3x(2x0.14 mm²)	conductor identification code	green+yellow grey+pink blue+red
Pair screening	spiral of tinned copper wires wire diameter 0.1 mm	
Pair inner sheath	PVC grey	
2x(1x1.0 mm²)	conductor identification code	white brown
Conductor screening	spiral of tinned copper wires wire diameter 0.1 mm	
Conductor sheath	PVC white brown	
Design	conductors and pairs twisted together using short lay length	
Overall screening	braid made of tinned copper wires optic coverage ≥85 %	
Outer jacket	PUR oil resistant colour	black (similar to RAL 9005)
Outer diameter	approx. 9.1 mm	

Cable imprint legend

LAPP KABEL STUTTGART SERVO LK HDH 3x(2x0.14+2x(1x1,0)) — E63634  AWM 80°C 30V – 214533M CSA AWM I/II A/B 75°C 30V FT1 ROHS Art. Nr. 70388720

Electrical characteristics

0.14 mm² pairs	nominal capacitance core/core	130 pF/m
	nominal capacitance core/shield	205 pF/m
	nominal impedance at 1 MHz	60 ohms

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