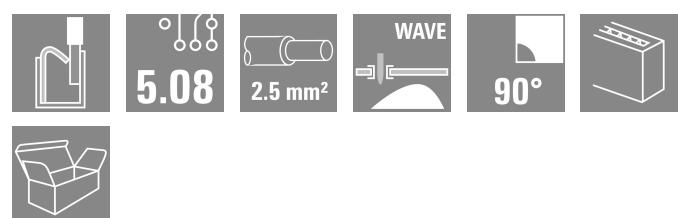


## LMF 5.08/04/90PN 3.5SN BX

Weidmüller Interface GmbH & Co. KG  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)



## Your special benefits

- Cost-effective alternative to RJ45 and M12 connections
- Ethernet-compliant data transmission e.g. for PROFINET applications (Cat. 5, up to 100 Mbps)
- Proven PUSH IN wire connection
- Suitable for THT (LMF) and THR (LSF-SMT)soldering process
- Suitable for data transmission according to ISO / IEC 11801-1; DIN EN 50173-1 (VDE 0800-173-1) and ANSI/TIA-568-B.2-10
- Wide range of applications for all IIoT devices

## General ordering data

Version	Printed circuit board terminals, 5.08 mm, Number of poles: 4, 90°, Solder pin length (l): 3.5 mm, tinned, coloured, PUSH IN with push button, Clamping range, max. : 2.5 mm <sup>2</sup> , Box
Order No.	<a href="#">2672960000</a>
Type	LMF 5.08/04/90PN 3.5SN BX
GTIN (EAN)	4050118697902
Qty.	70 items
Product data	IEC: 400 V / 24 A / 0.5 - 2.5 mm <sup>2</sup> UL: 300 V / 20 A / AWG 24 - AWG 12
Packaging	Box

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## Technical data

## Approvals

## Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (cURus)	E60693

## Dimensions and weights

Depth	19.2 mm	Depth (inches)	0.7559 inch
Height	14.8 mm	Height (inches)	0.5827 inch
Height of lowest version	14.8 mm	Width	22.94 mm
Width (inches)	0.9031 inch	Net weight	7.16 g

## Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

## System specifications

Number of poles	4	Solder pin length (l)	3.5 mm
Mounting onto the PCB	THT solder connection	Pitch in inches (P)	0.200 "
Side termination, characteristic	closed side	Solder eyelet hole diameter tolerance (D)	+ 0.1 mm
Transmission rate	10 / 100 Mbps	Number of solder pins per pole	2
Solder eyelet hole diameter (D)	1.1 mm	Category	Cat. 5
Product family	OMNIMATE Signal - series LMF	Pitch in mm (P)	5.08 mm
Protection degree	IP20	Performance-Category	Cat. 5 10 / 100 Mbps
Soldering process	Manual soldering, Wave soldering	Solder pin dimensions	d = 0.8 mm, 0.6 x 0.8 mm
Tolerance of solder pin position	± 0.1 mm		

## Material data

Insulating material	Wemid (PA)	Colour	coloured
Colour chart (similar)	-	Comparative Tracking Index (CTI)	≥ 600
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Coating	4-6 µm SN	Tinning type	matt
Layer structure of solder connection	4...6 mm Sn matt	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

## Conductors suitable for connection

Clamping range, min.	0.12 mm <sup>2</sup>
Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Stranded, min. H07V-R	0.5 mm <sup>2</sup>

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Stranded, max. H07V-R	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.25 mm <sup>2</sup>
Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, 0.25 mm <sup>2</sup> min.	
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm <sup>2</sup> max.	
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	nominal	0.5 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 12 mm
		Recommended wire- end ferrule	<a href="#">H0,5/16 OR</a>
		Stripping length	nominal 10 mm
		Recommended wire- end ferrule	<a href="#">H0,5/10</a>
	Cross-section for conductor connection	Type	fine-wired
	nominal	0.75 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 12 mm
		Recommended wire- end ferrule	<a href="#">H0,75/16 W</a>
		Stripping length	nominal 10 mm
		Recommended wire- end ferrule	<a href="#">H0,75/10</a>
	Cross-section for conductor connection	Type	fine-wired
	nominal	1 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 12 mm
		Recommended wire- end ferrule	<a href="#">H1,0/16D R</a>
		Stripping length	nominal 10 mm
		Recommended wire- end ferrule	<a href="#">H1,0/10</a>
	Cross-section for conductor connection	Type	fine-wired
	nominal	1.5 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire- end ferrule	<a href="#">H1,5/10</a>
		Stripping length	nominal 12 mm
		Recommended wire- end ferrule	<a href="#">H1,5/16 R</a>
	Cross-section for conductor connection	Type	fine-wired
	nominal	2.5 mm <sup>2</sup>	
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire- end ferrule	<a href="#">H2,5/10</a>

Reference text	Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)
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## Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	24 A
Rated current, max. number of poles (Tu=20°C)	24 A	Rated current, min. number of poles (Tu=40°C)	24 A

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## Technical data

Rated current, max. number of poles (Tu=40°C)	24 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

## Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	20 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 12

## Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	20 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	351.00 mm
VPE width	139.00 mm	VPE height	33.00 mm

## Type tests

Test: Durability of markings	Standard	IEC 61984 section 6.2 and 7.3.2 / 10.11
	Test	mark of origin, type identification, type of material, approval marking UL, approval marking CSA, durability, pitch, date clock
	Evaluation	available
Test: Clampable cross section	Standard	IEC 60999-1 section 7 and 9.1 / 11.99, IEC 60947-1 section 8.2.4.5.1 / 03.11
	Conductor type	Type of conductor and conductor cross-section
		solid 0,12 mm <sup>2</sup>
		flexible 0,12 mm <sup>2</sup>
		solid 2.5 mm <sup>2</sup>
		stranded 2.5 mm <sup>2</sup>
		AWG 26/1
		AWG 26/19
		AWG 14/1

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## Technical data

		Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed	
Test for damage to and accidental loosening of conductors	Standard	IEC 60999-1 section 9.4 / 11.99	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	stranded 0.25 mm <sup>2</sup>
		Type of conductor and conductor cross-section	AWG 26/1
		Type of conductor and conductor cross-section	AWG26/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
		Type of conductor and conductor cross-section	H07V-K2.5
		Type of conductor and conductor cross-section	AWG 14/1
	Evaluation	passed	
	Requirement	0.9 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 12/19
	Evaluation	passed	
Pull-out test	Standard	IEC 60999-1 section 9.5 / 11.99	
	Requirement	≥10 N	
	Conductor type	Type of conductor and conductor cross-section	AWG 26/1
		Type of conductor and conductor cross-section	AWG 26/19
	Evaluation	passed	
	Requirement	≥15 N	
	Conductor type	Type of conductor and conductor cross-section	stranded 0.25 mm <sup>2</sup>
	Evaluation	passed	
	Requirement	≥20 N	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
	Evaluation	passed	
	Requirement	≥25 N	

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## Technical data

Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
	Type of conductor and conductor cross-section	H07V-K2.5
	Type of conductor and conductor cross-section	AWG 14/1
Evaluation	passed	
Requirement	≥60 N	
Conductor type	Type of conductor and conductor cross-section	AWG 12/19
Evaluation	passed	

## Important note

## IPC conformity

Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

## Notes

- Additional variants on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- The test point can only be used as potential-pickup point.
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

## Classifications

ETIM 8.0	EC002643	ETIM 9.0	EC002643
ETIM 10.0	EC002643	ECLASS 14.0	27-46-01-01
ECLASS 15.0	27-46-01-01		

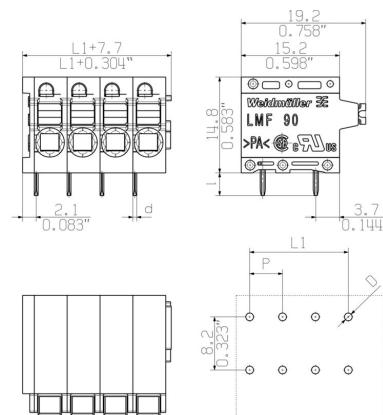
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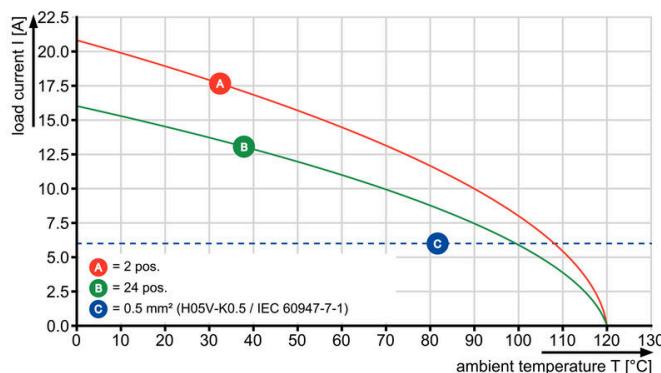
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## Drawings

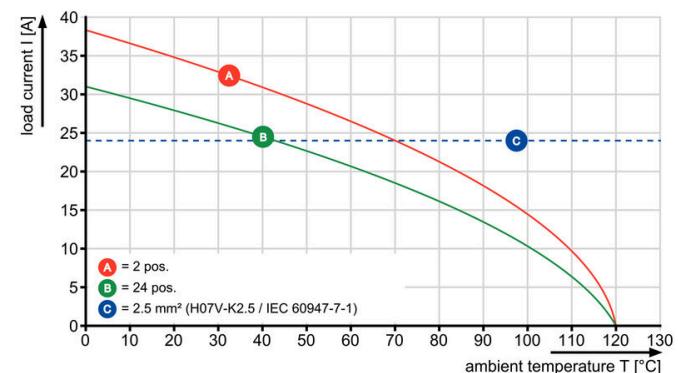
## Dimensioned drawing



LMF 5.08/..90



LMF 5.08/..90



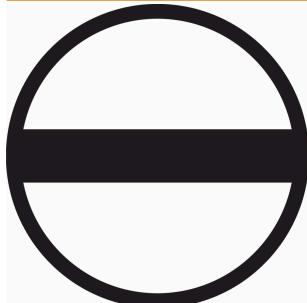
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## Accessories

## Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1.  
SoftFinish grip

## General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 ST	

## Additional accessories



No task is too small when creating the perfect solution. Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but essential details:

- Test plugs ensure reliable pick-up from diagnostic sockets

In tandem with the manufacturing process and application.

## General ordering data

Type	PS 2.0 MC	Version
Order No.	<a href="#">0310000000</a>	PCB plug-in connector, Accessories, Test plug, red, Number of poles:
GTIN (EAN)	4008190000059	1
Qty.	20 ST	