

LMF 7.50/12/90 3.5SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image****The innovative quick connector - simple, safe and economical:**

PCB terminals with spring connection and direct PUSH IN technology. A milestone in connection technology.

Amazingly simple and simply amazing in practice:

- Connect and easily detach solid wires or wires with wire-end ferrules without using tools
- Processed automatically in the reflow or vapour phase
- Potentials and clamping points marked clearly by coloured push buttons

World-class design-in and processing phases, and suitable for a vast range of applications.

General ordering data

Version	Printed circuit board terminals, 7.50 mm, Number of poles: 12, 90°, Solder pin length (l): 3.5 mm, tinned, orange, PUSH IN with actuator, Clamping range, max. : 2.5 mm², Box
Order No.	2668150000
Type	LMF 7.50/12/90 3.5SN OR BX
GTIN (EAN)	4050118804560
Qty.	15 pc(s).
Product data	IEC: 1000 V / 24 A / 0.5 - 2.5 mm² UL: 300 V / 20 A / AWG 24 - AWG 12
Packaging	Box

Creation date July 22, 2024 8:49:15 PM CEST

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Technical data

Dimensions and weights

Depth	19.2 mm	Depth (inches)	0.756 inch
Height	18.3 mm	Height (inches)	0.72 inch
Height of lowest version	14.8 mm	Width	65.2 mm
Width (inches)	2.567 inch	Net weight	21.155 g

System parameters

Product family	OMNIMATE Signal - series LMF	Wire connection method	PUSH IN with actuator
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	7.5 mm	Pitch in inches (P)	0.295 "
Number of poles	12	Pin series quantity	1
Number of rows	1	Solder pin length (l)	3.5 mm
Solder pin dimensions	d = 0.8 mm	Solder eyelet hole diameter (D)	1.1 mm
Solder eyelet hole diameter tolerance (D)+	0,1 mm	Number of solder pins per pole	2
Screwdriver blade	0.6 x 3.5	Screwdriver blade standard	DIN 5264
Stripping length	10 mm	L1 in mm	82.5 mm
Touch-safe protection acc. to DIN VDE 0470	IP 20	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Protection degree	IP20		

Material data

Insulating material	Wemid (PA)	Colour	orange
Colour chart (similar)	RAL 2000	Comparative Tracking Index (CTI)	≥ 600
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...8 µm 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 ²	Clamping range, max.	2.5 mm ²
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 ²	Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.25 mm ²	Flexible, max. H05(07) V-K	2.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
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
Rated current, max. number of poles (Tu=40°C)	24 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	600 V	Rated voltage for surge voltage class / pollution degree III/3	500 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 120 A

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1815154
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
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Rated data acc. to UL 1059

Institute (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	350 mm
VPE width	138 mm	VPE height	31 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, approval marking UL, approval marking CSA, durability
	Evaluation	available

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Test: Clampable cross section	Conductor type	Type of conductor and solid 0.2 mm ² conductor cross-section
		Type of conductor and solid 2.5 mm ² conductor cross-section
		Type of conductor and stranded 0.2 mm ² conductor cross-section
	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 solid 0.2 mm ² conductor cross-section
		Type of conductor and stranded 0.2 mm ² conductor cross-section
	Evaluation	passed
	Requirement	0.7 kg
	Conductor type	Type of conductor and solid 2.5 mm ² conductor cross-section
	Evaluation	passed
Pull-out test	Standard	IEC 60999-1 section 9.5 / 11.99
	Requirement	≥10 N
	Conductor type	Type of conductor and solid 0.2 mm ² conductor cross-section
		Type of conductor and stranded 0.2 mm ² conductor cross-section
	Evaluation	passed
	Requirement	≥50 N
	Conductor type	Type of conductor and solid 2.5 mm ² conductor cross-section
	Evaluation	passed

Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ETIM 9.0	EC002643
ECLASS 9.0	27-44-04-01	ECLASS 9.1	27-44-04-01
ECLASS 10.0	27-44-04-01	ECLASS 11.0	27-46-01-01
ECLASS 12.0	27-46-01-01	ECLASS 13.0	27-46-01-01

Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

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www.weidmueller.com**Technical data****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	<ul style="list-style-type: none">• 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

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format

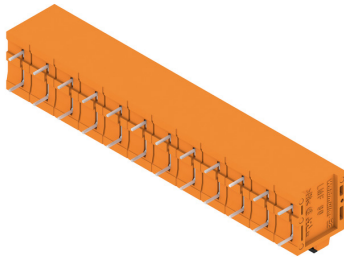
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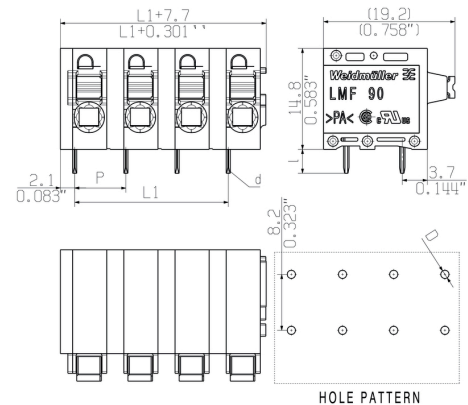
www.weidmueller.com

Drawings

Product image



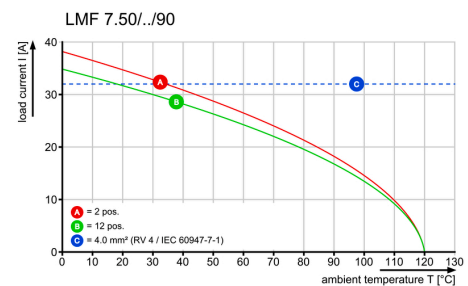
Dimensional drawing



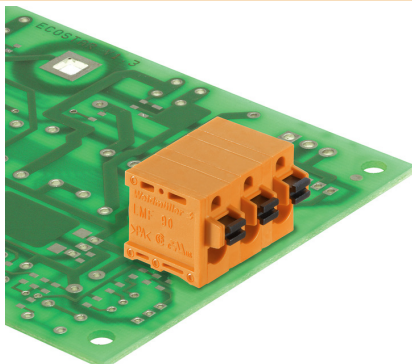
Derating curve



Derating curve



Product benefits



Product benefits



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www.weidmueller.com**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.	9008390000	Screwdriver, Screwdriver
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

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	Product data	Packaging
Order No.	0310000000	PCB plug-in connector, Accessories, Test plug, red, Number of poles: 1		Box
GTIN (EAN)	4008190000059			
Qty.	20 pc(s).			

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Drawings

Product benefits



Product benefits



Recommended wave soldering profiles

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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260 °C . In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.