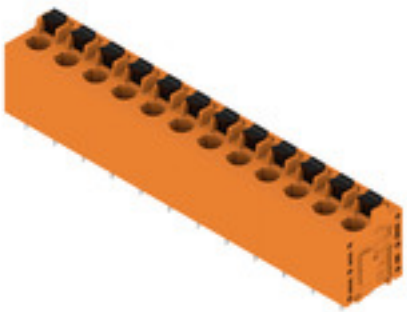
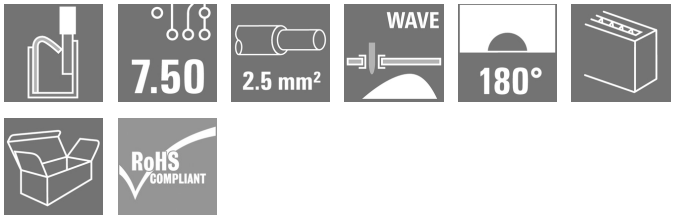
LMF 7.50/12/180 3.5SN OR BX

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, 180°, Solder pin length (l): 3.5 mm, tinned, orange, PUSH IN with actuator, Box
Order No.	2774640000
Type	LMF 7.50/12/180 3.5SN OR BX
GTIN (EAN)	4064675039341
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 June 13, 2025 2:18:10 AM CEST

LMF 7.50/12/180 3.5SN OR BX

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

www.weidmueller.com

Technical data

Dimensions and weights

Depth	14.8 mm	Depth (inches)	0.583 inch
Height	22.7 mm	Height (inches)	0.894 inch
Width	90.2 mm	Width (inches)	3.551 inch
Net weight	11 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	180°
Pitch in mm (P)	7.5 mm	Pitch in inches (P)	0.295 "
Number of poles	12	Pin series quantity	2
Number of rows	1	Solder pin length (l)	3.5 mm
Solder pin dimensions	0.6 x 0.8 mm	Stripping length	10 mm
Touch-safe protection acc. to DIN VDE 0470	IP 20	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch

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
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		

Conductors suitable for connection

Wire connection cross section AWG, min.	AWG 24	Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm²	Solid, max. H05(07) V-U	2.5 mm²
Flexible, min. H05(07) V-K	0.25 mm²	Flexible, max. H05(07) V-K	2.5 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm²
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)		

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)	19 A	Rated current, min. number of poles (Tu=40°C)	21 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

LMF 7.50/12/180 3.5SN OR BX

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

www.weidmueller.com

Technical data

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

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

Packing

Packaging	Box	VPE length	338 mm
VPE width	130 mm	VPE height	27 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	
Test: Clampable cross section	Conductor type	Type of conductor and conductor cross-section	solid 0.2 mm²
		Type of conductor and conductor cross-section	solid 2.5 mm²
		Type of conductor and conductor cross-section	stranded 0.2 mm²
		Type of conductor and conductor cross-section	flexible 4 mm²
		Type of conductor and conductor cross-section	AWG 12/7
		Type of conductor and conductor cross-section	AWG 24/11
	Evaluation	passed	

LMF 7.50/12/180 3.5SN OR BX

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

www.weidmueller.com

Technical data

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: solid 0.2 mm²
		Type of conductor and conductor cross-section: stranded 0.2 mm²
	Evaluation	passed
	Requirement	0.7 kg
	Conductor type	Type of conductor and conductor cross-section: solid 2.5 mm²
	Evaluation	passed
	Requirement	0,9 kg
	Conductor type	Type of conductor and conductor cross-section: flexible 4 mm²
	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: solid 0.2 mm²
		Type of conductor and conductor cross-section: stranded 0.2 mm²
	Evaluation	passed
	Requirement	≥50 N
	Conductor type	Type of conductor and conductor cross-section: solid 2.5 mm²
	Evaluation	passed
	Requirement	≥ 60 N
	Conductor type	Type of conductor and conductor cross-section: flexible 4 mm²
	Evaluation	passed

Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ETIM 8.0	EC002643	ETIM 9.0	EC002643
ETIM 10.0	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	ECLASS 14.0	27-46-01-01
ECLASS 15.0	27-46-01-01		

Environmental Product Compliance

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

LMF 7.50/12/180 3.5SN OR BX

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

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	• 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

ROHS	Conform

Downloads

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

LMF 7.50/12/180 3.5SN OR BX

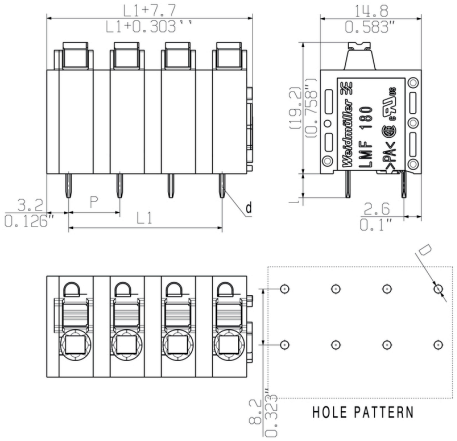
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

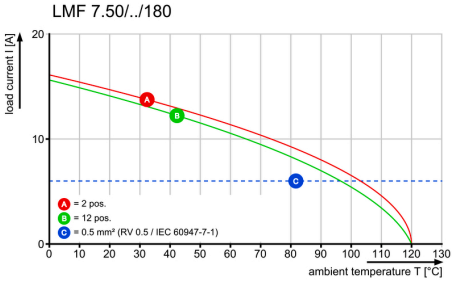
Drawings

Product image

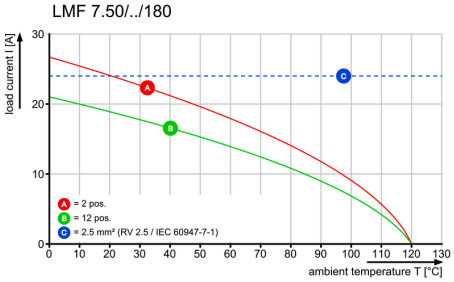
Dimensional drawing



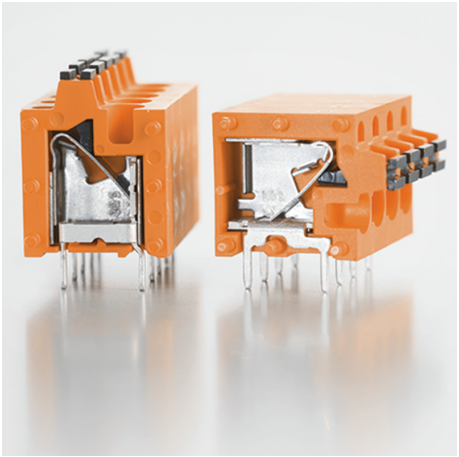
Derating curve



Derating curve



Product benefits



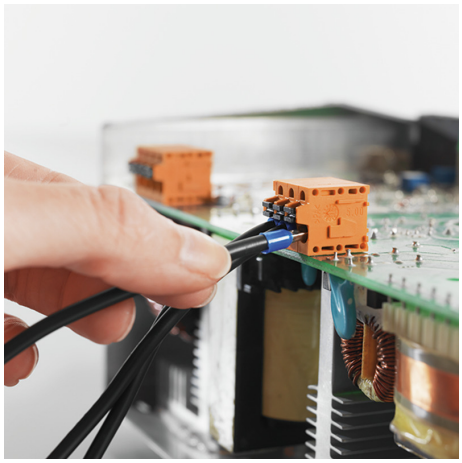
LMF 7.50/12/180 3.5SN OR BX

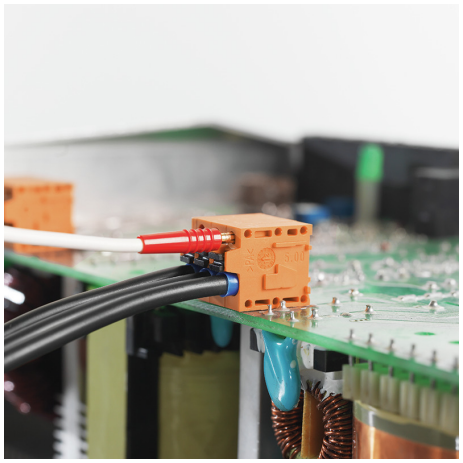
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Drawings

Product benefits



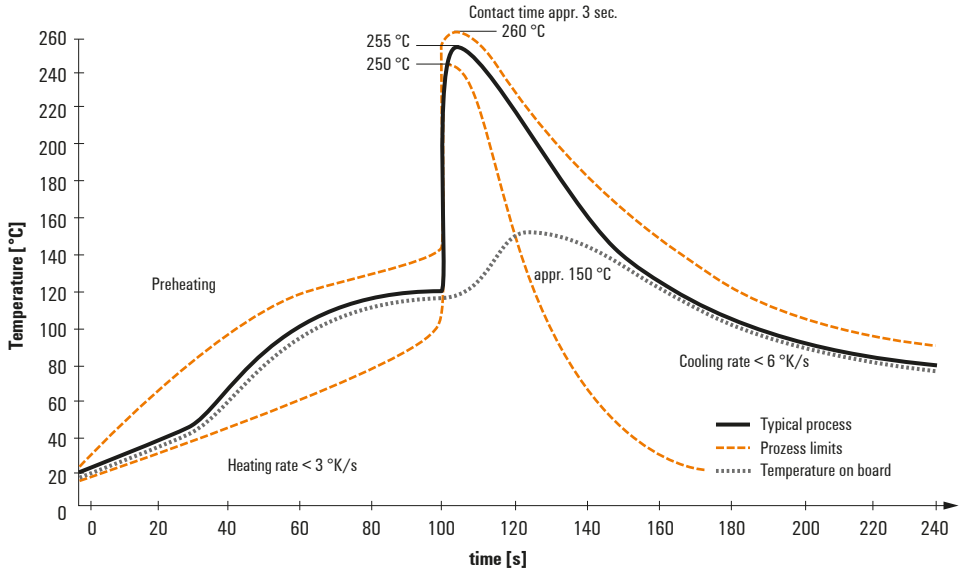


Wave Solder Profile

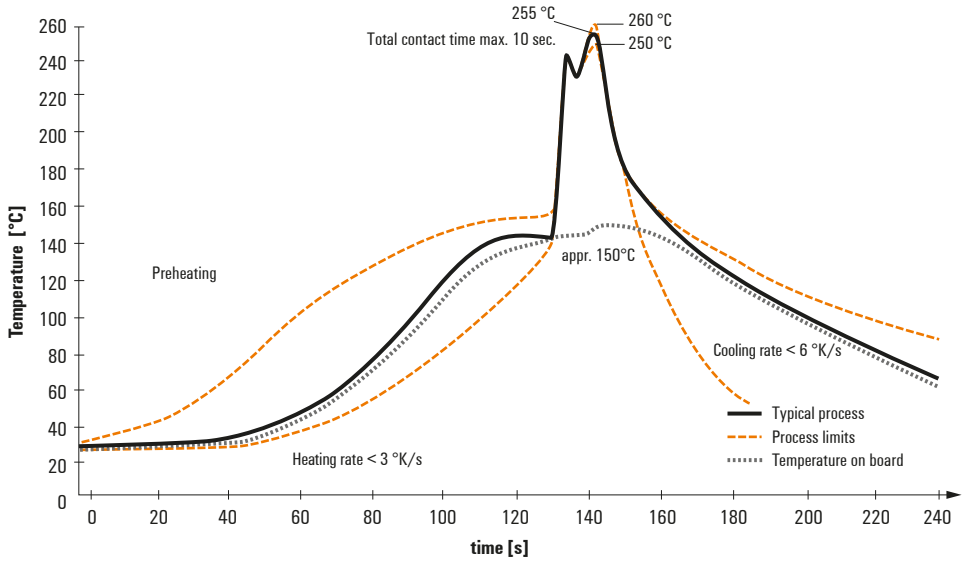
Recommended wave solderding profiles

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

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.