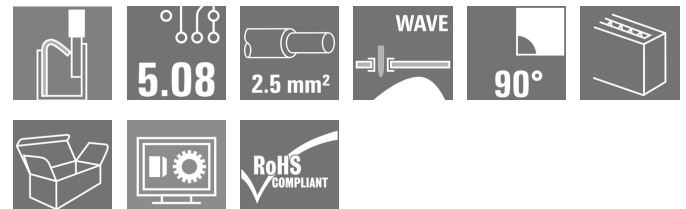


OMNIMATE Signal - series LMF LMFS 5.08/10/90 3.5SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
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The new LMF allows us to meet the current market requirements for a PCB terminal with PUSH IN connection system for wire cross-sections up to 2.5 mm²

- PUSH IN connection system
- LMF with pusher for opening the terminal point
- LMFS without pusher, the terminal point is opened with a screwdriver
- Integrated test point
- 90° and 180° wire outlet direction

General ordering data

| | |
|--------------|--|
| Type | LMFS 5.08/10/90 3.5SN OR BX |
| Order No. | 1331040000 |
| Version | PCB terminal, 5.08 mm, No. of poles: 10, 90°, Solder pin length (l): 3.5 mm, tinned, Orange, PUSH IN without actuator, Clamping range, rated connection, max.: 2.5 mm ² , Box |
| GTIN (EAN) | 4050118134698 |
| Qty. | 25 pc(s). |
| Product data | IEC: 400 V / 24 A / 0.2 - 2.5 mm ² UL: 300 V / 10 A / AWG 26 - AWG 12 |
| Packaging | Box |

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Technical data**Dimensions and weights**

| | |
|------------|----------|
| Net weight | 13.825 g |
|------------|----------|

System parameters

| | | | |
|--|------------------------------|--|--------------------------|
| Product family | OMNIMATE Signal - series LMF | Wire connection method | PUSH IN without actuator |
| Mounting onto the PCB | THT solder connection | Conductor outlet direction | 90° |
| Pitch in mm (P) | 5.08 mm | Pitch in inches (P) | 0.2 inch |
| No. of poles | 10 | Fitted by customer | No |
| Max. adjacent poles per row | 24 | 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 | 45.72 mm |
| L1 in inches | 1.8 inch | 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 | CTI | ≥ 600 |
| Insulation resistance | ≥ 10 ⁸ Ω | UL 94 flammability rating | V-0 |
| Contact material | CuSn | Contact surface | tinned |
| Coating | 4-6 µm SN | Tinning type | matt |
| Layer structure of solder connection | 4-6 µm Sn matt | Storage temperature, min. | -25 °C |
| Storage temperature, max. | 55 °C | Max. relative humidity during storage | 80 % |
| 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, rated connection, min. | 0.12 mm ² | Clamping range, rated connection, max. | 2.5 mm ² |
| Wire connection cross section AWG, min. | AWG 26 | Wire connection cross section AWG, max. | AWG 12 |
| Solid, min. H05(07) V-U | 0.2 mm ² | Solid, max. H05(07) V-U | 2.5 mm ² |
| Flexible, min. H05(07) V-K | 0.2 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 |
| Plug gauge acc. to EN 60999 a x b; Ø | 2.4 mm x 1.5 mm | | |

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Technical data


Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. no. of poles (Ta = 20°C) | 24 A |
| Rated current, max. no. of poles (Ta = 20°C) | 24 A | Rated current, min. no. of poles (Ta = 40°C) | 24 A |
| Rated current, max. no. of poles (Ta = 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

| | | | |
|-------------------------------|---|-------------------------------|----------------|
| Institute (CSA) |  | Certificate No. (CSA) | 200039-1815154 |
| Rated voltage (Use group B) | 300 V | Rated voltage (Use group C) | 50 V |
| Rated voltage (use group D) | 300 V | Rated current (use group B) | 10 A |
| Rated current (use group C) | 10 A | Rated current (use group D) | 10 A |
| Wire cross-section, AWG, min. | AWG 26 | 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) | 300 V | Rated voltage (use group C) | 50 V |
| Rated voltage (use group D) | 300 V | Rated current (use group B) | 10 A |
| Rated current (use group C) | 10 A | Rated current (use group D) | 10 A |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 12 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 3.0 | EC001284 | ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 | ETIM 6.0 | EC002643 |
| eClass 6.2 | 27-26-11-01 | eClass 7.1 | 27-44-04-01 |
| eClass 8.1 | 27-44-04-01 | eClass 9.0 | 27-44-04-01 |
| eClass 9.1 | 27-44-04-01 | | |

Data sheet

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Technical data

Notes

- | | |
|-------|--|
| Notes | <ul style="list-style-type: none"> • Additional colours 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. |
|-------|--|

| | |
|----------------|--|
| IPC conformity | The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request. |
|----------------|--|

Approvals

Approvals



| | |
|------|---------|
| ROHS | Conform |
|------|---------|

Downloads

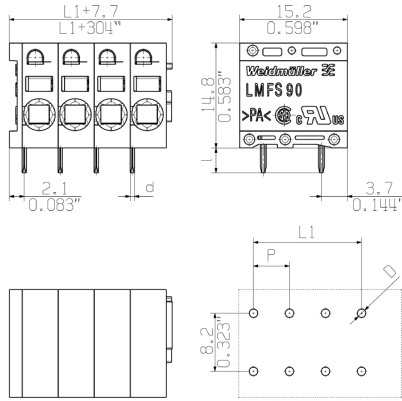
| | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | FL DRIVES EN FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN |
| Engineering Data | EPLAN, WSCAD |

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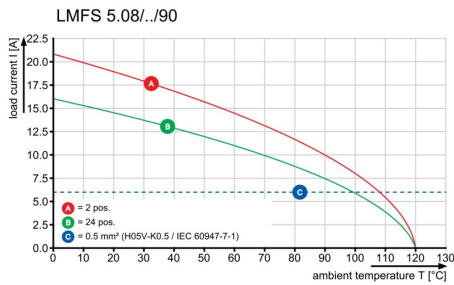
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Drawings

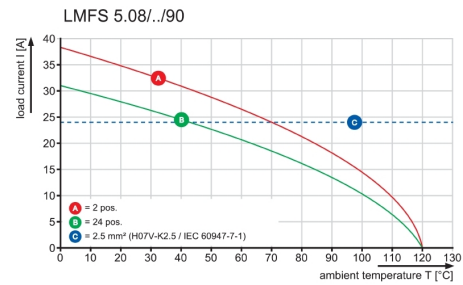
Dimensional drawing



Graph



Graph



Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
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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.