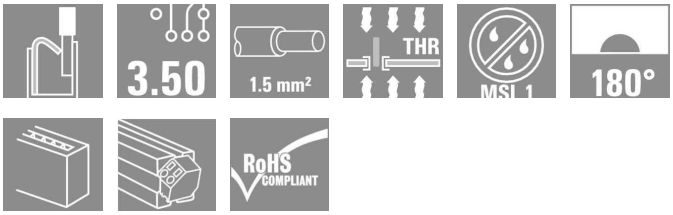
# OMNIMATE Signal - series LSF
# LSF-SMT 3.50/20/180 3.5SN BK TU

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






PCB terminal for fully automatic assembly in reflow soldering (SMT), with PUSH IN conductor connection system. Conductor inserted and slider operated in same direction (TOP). Packed in box or as tape on reel. Pin lengths optimised at 1.5 mm or 3.5 mm.

- 0.20 - 1.5 mm² (IEC) / 24 - 16 AWG (UL)
- 320 V (IEC) / 300 V (UL)
- 17.5 A (IEC) / 12 A (UL)

## General ordering data

| | |
|---|---|
| Type | LSF-SMT 3.50/20/180 3.5SN BK TU |
| Order No. | 1870570000 |
| Version | PCB terminal, 3.50 mm, No. of poles: 20, 180°, Solder pin length (l): 3.5 mm, tinned, Black, PUSH IN spring connection, Clamping range, rated connection, max.: 1.5 mm², Tube |
| GTIN (EAN) | 4032248447961 |
| Qty. | 7 pc(s). |
| Product data | IEC: 320 V / 17.5 A / 0.2 - 1.5 mm²<br>UL: 300 V / 12 A / AWG 24 - AWG 16 |
| Packaging | Tube |

Erstellungs-Datum January 16, 2014 10:02:09 AM CET

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## Technische Daten

### Dimensions and weights

| | |
|---|---|
| Net weight | 15 g |

### System characteristics

| | | | |
|---|---|---|---|
| Product family | OMNIMATE Signal - series LSF | Wire connection method | PUSH IN spring connection |
| Mounting onto the PCB | Reflow solder connection | Conductor outlet direction | 180° |
| Pitch in mm (P) | 3.5 mm | Pitch in inches (P) | 0.138 inch |
| No. of poles | 20 | Fitted by customer | No |
| Solder pin length (l) | 3.5 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 |
| Stripping length | 8 mm | L1 in mm | 66.5 mm |
| L1 in inches | 2.618 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 | LCP GF | Colour | Black |
| UL 94 flammability rating | V-0 | CTI | ≥ 175 |
| Contact material | Cu-Leg | Contact surface | tinned |
| Contact base material | Cu-Leg | | |

### Connectable conductors

| | | | |
|---|---|---|---|
| Clamping range, rated connection, min. | 0.13 mm² | Clamping range, rated connection, max. | 1.5 mm² |
| Wire connection cross section AWG, min. | AWG 24 | Wire connection cross section AWG, max. | AWG 16 |
| Solid, min. H05(07) V-U | 0.2 mm² | Solid, max. H05(07) V-U | 1.5 mm² |
| Flexible, min. H05(07) V-K | 0.2 mm² | Flexible, max. H05(07) V-K | 1.5 mm² |
| w. wire end ferrule, DIN 46228 pt 1, min | 0.25 mm² | w. wire end ferrule, DIN 46228 pt 1, max. | 1.5 mm² |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.25 mm² | w. plastic collar ferrule, DIN 46228 pt 4, max. | 0.75 mm² |

### DIN IEC rating data

| | | | |
|---|---|---|---|
| Rated current, min. no. of poles (TU=20°C) | 17.5 A | Rated current, max. no. of poles (Tu=20°C) | 16 A |
| Rated current, number of poles (Tu=40°C), min | 17.5 A | Rated current, number of poles (Tu=40°C), max. | 14 A |
| Rated voltage for surge voltage class pollution degree II/2 | 320 V | Rated voltage for surge voltage class pollution degree III/2 | 160 V |
| Rated voltage for surge voltage class pollution degree III/3 | 160 V | Rated impulse voltage for surge voltage classpollution degree II/2 | 2.5 kV |
| Rated impulse voltage for surge voltage classpollution degree III/2 | 2.5 kV | Rated impulse voltage for surge voltage classcontamination degree III/3 | 2.5 kV |
| Short-time withstand current resistance | 3 x 1s with 80 A | | |

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## Technische Daten

### CSA rating data

| | | | |
|---|---|---|---|
| Institute (CSA) | | Rated voltage (Use group B) | 300 V |
| Rated current (use group B) | 10 A | Rated voltage (use group D) | 300 V |
| Rated current (use group D) | 10 A | Wire cross-section, AWG, min. | AWG 24 |
| Wire cross-section, AWG, max. | AWG 16 | | |

### UL 1059 rating data

| | | | |
|---|---|---|---|
| Rated voltage (use group B) | 300 V | Rated current (use group B) | 12 A |
| Rated voltage (use group D) | 300 V | Rated current (use group D) | 10 A |
| Wire cross-section, AWG, min. | AWG 24 | Wire cross-section, AWG, max. | AWG 16 |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 3.0 | EC001284 | UNSPSC | 30-21-18-11 |
| eClass 5.1 | 27-26-11-01 | eClass 6.2 | 27-26-11-01 |
| eClass 7.1 | 27-44-04-01 | | |

### Notes

Notes

- Additional push button colours on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- P on drawing = pitch
- Operating force of slider max. 40 N
- 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.
- Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes.

### Approvals

Approvals

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

### Downloads

| | |
|---|---|
| CAD Library (P-CAD Format - ASCII) | LSF-SMT.zip |
| CAD Library (P-CAD Format - Standard) | LSF-SMT.zip |
| 3D Modell | |

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## Zeichnungen

