

**LSF-SMD 7.50/03/180 SN BK RL**

Weidmüller Interfaces GmbH &amp; Co. KG

Postfach 3030

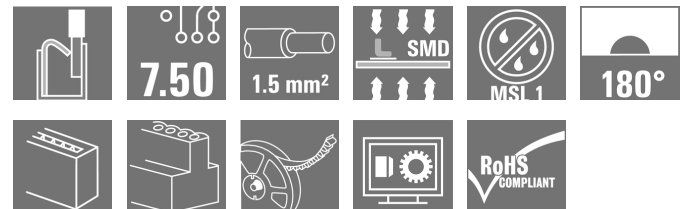
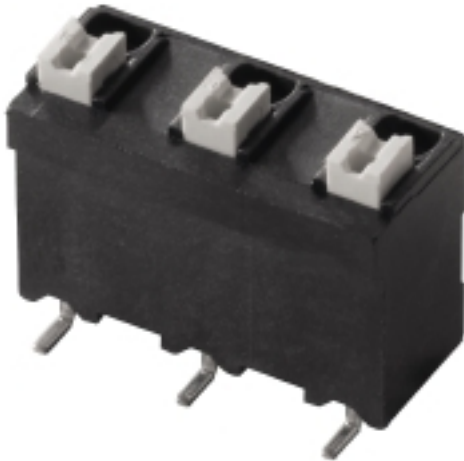
32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

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. **PCB terminal for fully automatic assembly using reflow soldering (SMD), with PUSH IN wire connections. Conductor insertion and slider operation from the same direction (TOP).**

- **Solid & flexible conductors with wire-end ferrules need only to be inserted and they are ready.**
- **When connecting stranded wires without wire-end ferrules the actuating element is used to open the terminal point**
- **Intuitive handling – since the wire-entry area and handling area are clearly separated.**
- **Packaged in tape-on-reel**
- **Conductor outlet direction 180°**

**General ordering data**

|              |  |
|--------------|--|
| Version      | Printed circuit board terminals, 7.50 mm, Number of poles: 3, 180°, black, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Tape |
| Order No.    | <a href="#">1473850000</a>   |
| Type         | LSF-SMD 7.50/03/180 SN BK RL   |
| GTIN (EAN)   | 4050118280753  |
| Qty.         | 180 pc(s).   |
| Product data | IEC: 800 V / 17.5 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 12 A / AWG 28 - AWG 14  |
| Packaging    | Tape   |

## LSF-SMD 7.50/03/180 SN BK RL

Weidmüller Interfaces GmbH &amp; Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmuller.com

www.weidmuller.com

## Technical data

## Dimensions and weights

|                          |         |                 |            |
|--------------------------|---------|-----------------|------------|
| Depth                    | 10.5 mm | Depth (inches)  | 0.413 inch |
| Height                   | 16.3 mm | Height (inches) | 0.642 inch |
| Height of lowest version | 16.3 mm | Net weight      | 3.066 g    |
| Width                    | 19.2 mm | Width (inches)  | 0.756 inch |

## System parameters

|  |                              |  |                        |
|--|------------------------------|--|------------------------|
| Product family                             | OMNIMATE Signal - series LSF | Wire connection method                       | PUSH IN                |
| Mounting onto the PCB                      | SMD solder connection        | Conductor outlet direction                   | 180°                   |
| Pitch in mm (P)                            | 7.5 mm                       | Pitch in inches (P)                          | 0.295 inch             |
| Number of poles                            | 3                            | Pin series quantity                          | 1                      |
| Fitted by customer                         | No                           | Coplanarity:                                 | 100 µm                 |
| Number of solder pins per pole             | 2                            | Stripping length                             | 8 mm                   |
| L1 in mm                                   | 15 mm                        | L1 in inches                                 | 0.59 inch              |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20                        | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Volume resistance                          | 1.60 mΩ                      |  |                        |

## Material data

|                                       |              |                                       |                     |
|---------------------------------------|--------------|---------------------------------------|---------------------|
| Insulating material                   | LCP GF       | Colour                                | black               |
| Colour chart (similar)                | RAL 9011     | Insulating material group             | Illa                |
| Comparative Tracking Index (CTI)      | ≥ 175        | Insulation strength                   | ≥ 10 <sup>8</sup> Ω |
| Moisture Level (MSL)                  | 1            | UL 94 flammability rating             | V-0                 |
| Contact material                      | Copper alloy | Layer structure of solder connection  | 4...6 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. | -30 °C       | Temperature range, installation, max. | 120 °C              |

## Conductors suitable for connection

|   |  |   |                      |
|---|--|---|----------------------|
| Clamping range, min.                            | 0.13 mm <sup>2</sup>   | Clamping range, max.                            | 1.5 mm <sup>2</sup>  |
| Wire connection cross section AWG, min.         | AWG 28   | Wire connection cross section AWG, max.         | AWG 14               |
| Solid, min. H05(07) V-U                         | 0.2 mm <sup>2</sup>  | Solid, max. H05(07) V-U                         | 1.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                      | 0.2 mm <sup>2</sup>  | Flexible, max. H05(07) V-K                      | 1.5 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.25 mm <sup>2</sup>   | w. plastic collar ferrule, DIN 46228 pt 4, max. | 0.75 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, min.       | 0.25 mm <sup>2</sup>   | w. wire end ferrule, DIN 46228 pt 1, max.       | 1.5 mm <sup>2</sup>  |
| 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) |   |                      |

## LSF-SMD 7.50/03/180 SN BK RL

Weidmüller Interfaces GmbH &amp; Co. KG

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0


Fax. +49 5231 14-2083

## Technical data


## Rated data acc. to IEC

|   |                        |   |                  |
|---|------------------------|---|------------------|
| tested acc. to standard   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 17.5 A           |
| Rated current, max. number of poles (Tu=20°C)                             | 17.5 A                 | Rated current, min. number of poles (Tu=40°C)                         | 17.5 A           |
| Rated current, max. number of poles (Tu=40°C)                             | 15 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 800 V            |
| Rated voltage for surge voltage class / pollution degree III/2            | 630 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 80 A |

## Rated data acc. to CSA

|                                   |   |                                   |                |
|-----------------------------------|---|-----------------------------------|----------------|
| Institute (CSA)                   |  | Certificate No. (CSA)             | 200039-1664286 |
| Rated voltage (Use group B / CSA) | 300 V   | Rated voltage (Use group C / CSA) | 150 V          |
| Rated voltage (Use group D / CSA) | 300 V   | Rated current (Use group B / CSA) | 10 A           |
| Rated current (Use group C / CSA) | 10 A  | Rated current (Use group D / CSA) | 10 A           |
| Wire cross-section, AWG, min.     | AWG 28  | Wire cross-section, AWG, max.     | AWG 14         |
| 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 C / UL 1059) | 150 V  |
| Rated voltage (Use group D / UL 1059) | 300 V   | Rated current (Use group B / UL 1059) | 12 A   |
| Rated current (Use group C / UL 1059) | 10 A  | Rated current (Use group D / UL 1059) | 10 A   |
| Wire cross-section, AWG, min.         | AWG 28  | Wire cross-section, AWG, max.         | AWG 14 |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.              |                                       |        |

## Packing

|  |         |                                       |                               |
|--|---------|---------------------------------------|-------------------------------|
| Packaging  | Tape    | VPE length                            | 35 mm                         |
| VPE width  | 330 mm  | VPE height                            | 330 mm                        |
| Tape depth (T2)  | 17.6 mm | Tape width (W)                        | 32 mm                         |
| Tape pocket depth (K0)                                       | 17.1 mm | Tape pocket height (A0)               | 11.2 mm                       |
| Tape pocket width (B0)                                       | 19.5 mm | Tape pocket separation (P1)           | 20 mm                         |
| Tape hole separation (E)                                     | 1.75 mm | Tape pocket separation (F)            | 14.2 mm                       |
| Tape reel diameter $\varnothing$ (A)                         | 330 mm  | Surface resistance                    | $R_s = 10^9 - 10^{12} \Omega$ |
| Width Pick & Place Pad ( $W_{PPP}$ )                         | 7.5 mm  | Length Pick & Place Pad ( $L_{PPP}$ ) | 8.5 mm                        |
| Diameter of the withdrawal surface ( $\varnothing D_{max}$ ) | 9 mm    |                                       |                               |

Creation date November 23, 2020 9:46:47 AM CET

Catalogue status 21.11.2020 / We reserve the right to make technical changes.

**LSF-SMD 7.50/03/180 SN BK RL**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

[info@weidmueller.com](mailto:info@weidmueller.com)

[www.weidmueller.com](http://www.weidmueller.com) EC002643

eClass 9.1 27-44-04-01

eClass 11.0 27460101

**Technical data**

**Classifications**

|             |             |             |                     |
|-------------|-------------|-------------|---------------------|
| ETIM 6.0    | EC002643    | ETIM 7.0    | www.weidmueller.com |
| eClass 9.0  | 27-44-04-01 | eClass 9.1  | 27-44-04-01         |
| eClass 10.0 | 27-44-04-01 | eClass 11.0 | 27460101            |

**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.

**Approvals**

Approvals



ROHS Conform

UL File Number Search E60693

**Downloads**

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>   |
| Brochure/Catalogue                          | <a href="#">FL DRIVES EN</a><br><a href="#">PI OMNIMATE LSF SMD EN</a><br><a href="#">FL ANALO.SIGN.CONV. EN</a><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</a><br><a href="#">FL BUILDING SAFETY EN</a><br><a href="#">FL APPL LED LIGHTING EN</a><br><a href="#">FLIndustr.CONTROLS EN</a><br><a href="#">FL MACHINE SAFETY EN</a><br><a href="#">FL HEATING ELECTR EN</a><br><a href="#">FL APPL INVERTER EN</a><br><a href="#">FL_BASE_STATION EN</a><br><a href="#">FL ELEVATOR EN</a><br><a href="#">FL POWER SUPPLY EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a> |
| Engineering Data                            | <a href="#">STEP</a>  |
| Engineering Data                            | <a href="#">EPLAN.WSCAD</a>   |

**LSF-SMD 7.50/03/180 SN BK RL**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

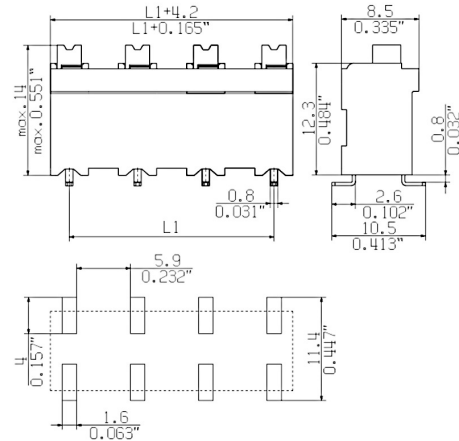
32760 Detmold

Tel. +49 5231 14-0

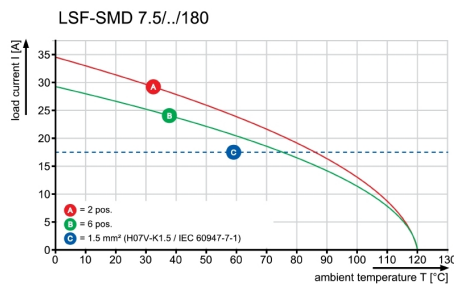
Fax. +49 5231 14-2083

**Drawings**

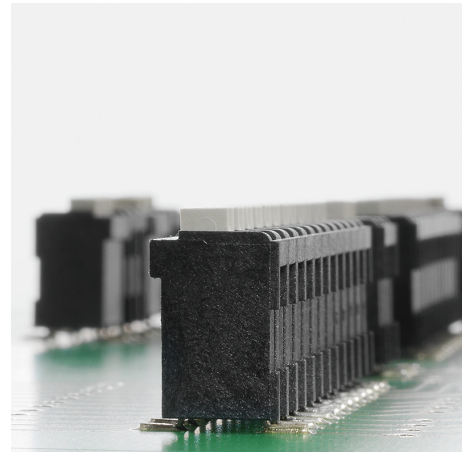
**Dimensional drawing** [info@weidmueller.com](mailto:info@weidmueller.com)



**Graph**

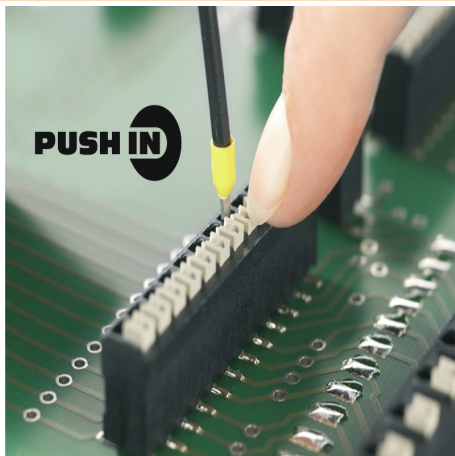


**Product benefits**



Stable solder connection

**Product benefits**



PUSH IN wire connection

**Product benefits**



Packaged in tape-on-reel

**LSF-SMD 7.50/03/180 SN BK RL**

**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

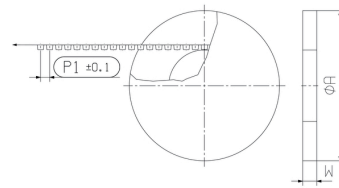
Tel. +49 5231 14-0

Fax. +49 5231 14-2083

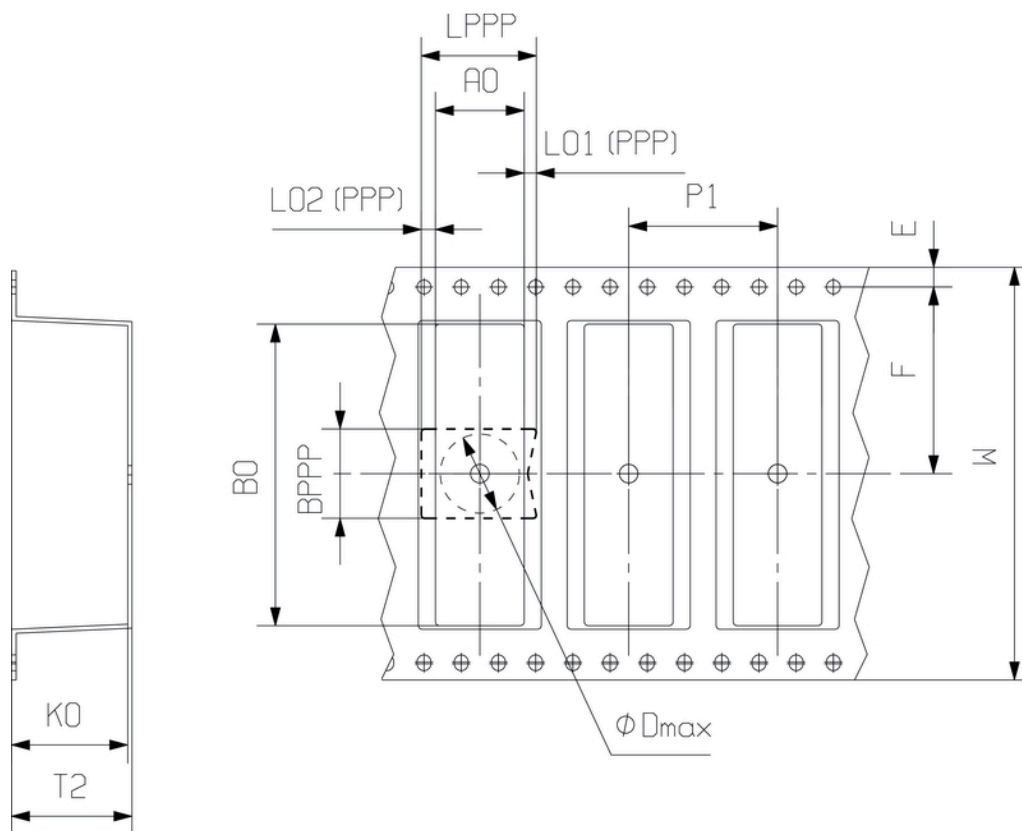
info@weidmueller.com

**Drawings**

**Dimensional drawing**



**Dimensional drawing**



DIRECTION OF UNREELING 