

## LSF-DK 3.50/02/180 SN BK BX

**Weidmüller Interface GmbH & Co. KG**

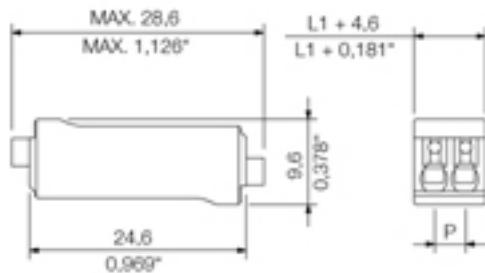
Klingenbergstraße 26

D-32758 Detmold

Germany

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

### Dimensional drawing



Similar to illustration

Feed-through terminal with PUSH IN wire connection technology. Conductor inserted and slider operated in same direction (TOP). Packed in box.

- Tool-free installation
- Small compact design

### General ordering data

|              |                                                                                                                                |
|--------------|--------------------------------------------------------------------------------------------------------------------------------|
| Version      | Printed circuit board terminals, 3.50 mm, Number of poles: 2, 180°, tinned, black, PUSH IN, Clamping range, max.: 1.5 mm², Box |
| Order No.    | <a href="#">1934660000</a>                                                                                                     |
| Type         | LSF-DK 3.50/02/180 SN BK BX                                                                                                    |
| GTIN (EAN)   | 4032248591848                                                                                                                  |
| Qty.         | 100 pc(s).                                                                                                                     |
| Product data | IEC: 250 V / 17.5 A / 0.2 - 1.5 mm²<br>UL:                                                                                     |
| Packaging    | Box                                                                                                                            |

Creation date March 26, 2021 10:12:48 AM CET

## LSF-DK 3.50/02/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

|                          |         |                 |            |
|--------------------------|---------|-----------------|------------|
| Depth                    | 9.65 mm | Depth (inches)  | 0.38 inch  |
| Height                   | 28.6 mm | Height (inches) | 1.126 inch |
| Height of lowest version | 28.6 mm | Net weight      | 2.8 g      |
| Width                    | 8.1 mm  | Width (inches)  | 0.319 inch |

## System parameters

|                                            |                              |                                              |                        |
|--------------------------------------------|------------------------------|----------------------------------------------|------------------------|
| Product family                             | OMNIMATE Signal - series LSF | Wire connection method                       | PUSH IN                |
| Conductor outlet direction                 | 180°                         | Pitch in mm (P)                              | 3.5 mm                 |
| Pitch in inches (P)                        | 0.138 inch                   | Number of poles                              | 2                      |
| Pin series quantity                        | 1                            | Fitted by customer                           | No                     |
| Number of solder pins per pole             | 2                            | Stripping length                             | 8 mm                   |
| L1 in mm                                   | 3.5 mm                       | L1 in inches                                 | 0.138 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             | IIIa         |
| Comparative Tracking Index (CTI)      | ≥ 175    | Moisture Level (MSL)                  | 1            |
| UL 94 flammability rating             | V-0      | Contact material                      | Copper alloy |
| Contact surface                       | tinned   | 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.                            | 0.13 mm <sup>2</sup>                                                                                                                                                  | Clamping range, max.                            | 1.5 mm <sup>2</sup>  |
| Wire connection cross section AWG, min.         | AWG 24                                                                                                                                                                | Wire connection cross section AWG, max.         | AWG 16               |
| 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-DK 3.50/02/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## 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)                             | 17.5 A                 | Rated voltage for surge voltage class / pollution degree II/2         | 250 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 class/ pollution degree II/2      | 2.5 kV                 | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 2.5 kV           |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 2.5 kV                 | Short-time withstand current resistance                               | 3 x 1s with 77 A |

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 60 mm  |
| VPE width | 100 mm | VPE height | 110 mm |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002643    | ETIM 7.0    | 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 |

## 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"> <li>• Additional push button colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• P on drawing = pitch</li> <li>• Operating force of slider max. 40 N</li> <li>• 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.</li> <li>• Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul> |

## Approvals

Approvals



ROHS

Conform

### LSF-DK 3.50/02/180 SN BK BX

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

## Technical data

### Downloads

Approval/Certificate/Document of  
Conformity

[Declaration of the Manufacturer](#)

Engineering Data

[STEP](#)

Engineering Data

[WSCAD](#)

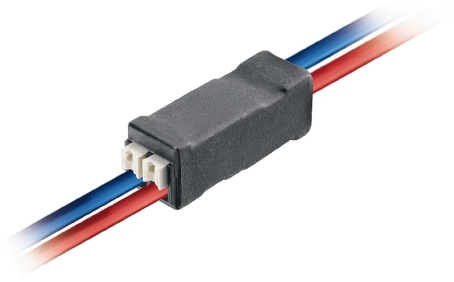
### LSF-DK 3.50/02/180 SN BK BX

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

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

## Drawings

### Example of use



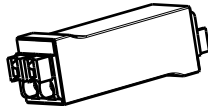
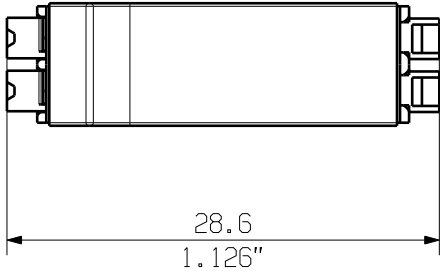
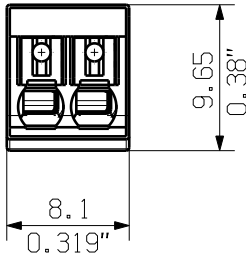
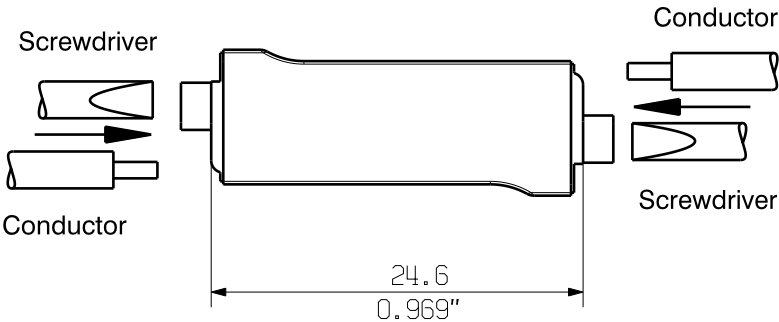
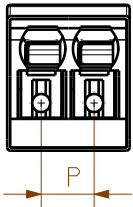
WEITERGABE SOWIE Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet.  
Zu widerhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmustererhaltung vorbehalten.  
THE REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS THE COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPLICIT AUTHORIZATION IS PROHIBITED.  
OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHTS RESERVED IN THE EVENT OF THE GRANT OF A PATENT, UTILITY MODEL OR DESIGN.

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH  
THE GERMAN VERSION IS BINDING

Technical Data

|      |  |                                                            |                    |
|------|--|------------------------------------------------------------|--------------------|
| Rev. |  | Material data                                              |                    |
|      |  | Insulation material type                                   | LCP, halogen -free |
|      |  | Insulation material colours                                | black              |
|      |  | Insulation material flammability class                     | UL94               |
|      |  | Insulation resistance                                      | MOhm               |
|      |  | Conatct base material                                      | Copper-alloy       |
|      |  | Contact plating                                            | tin-plated         |
|      |  | System characteristic values                               |                    |
|      |  | Pitch <b>P</b>                                             | mm/inch            |
|      |  | Number of rows                                             | 1                  |
|      |  | Dielectric strength (r.m.s withstand voltage)              | kV                 |
|      |  | Through resistance (typical)                               | mOhm               |
|      |  | Operating temperature range                                | °C                 |
|      |  | Degree of protection acc. to VDE 0140-1                    | finger safe        |
|      |  | Degree of protection acc. to DIN EN 60529                  | IP20               |
|      |  | Conductor connection method                                | tension clamp      |
|      |  | Screw size                                                 | n.a.               |
|      |  | Screw torque max. acc. to EN 60999-1                       | Nm                 |
|      |  | Screw driver type                                          | SD 0.6x3.5         |
|      |  | Solder pin length <b>L</b>                                 | mm/inch            |
|      |  | PCB hole diameter <b>D</b> (wave soldering)                | mm/inch            |
|      |  | PCB hole diameter <b>D</b> (reflow soldering)              | mm/inch            |
|      |  | Resistance to soldering heat acc. to DIN IEC 60512-6       | °C/sec             |
|      |  | Resistance to soldering heat acc. to EN 61760-1            | °C/sec             |
|      |  | Solderability classification acc. to EN 61760-1            | n.a.               |
|      |  | Solder connection type                                     | n.a.               |
|      |  | Solder pin diameter <b>d</b> (max.)                        | mm/inch            |
|      |  | Application notes                                          |                    |
|      |  | Coding possibility                                         | yes/no             |
|      |  | Joinable without loss of pitch                             | yes/no             |
|      |  | Manual assembly of modules                                 | yes/no             |
|      |  | Max. number of poles                                       | n                  |
|      |  | Conductor                                                  |                    |
|      |  | Clamping range                                             | mm <sup>2</sup>    |
|      |  | "e" solid H05(07) V-U                                      | mm <sup>2</sup>    |
|      |  | "f" flexible H05(07) V-K                                   | mm <sup>2</sup>    |
|      |  | "f" with ferrule acc. to DIN 46228/1                       | mm <sup>2</sup>    |
|      |  | ... with plastic collar acc. to DIN 46228/4                | mm <sup>2</sup>    |
|      |  | Conductor insulation stripping length                      | mm/inch            |
|      |  | Conductor insulation diameter max.                         | mm/inch            |
|      |  | Two wire clamping range                                    | mm <sup>2</sup>    |
|      |  | Gauge to EN 60999-1 (a x b ; Ø)                            | mm                 |
|      |  | IEC 60664-1 / VDE0110 (4.97) rated data                    |                    |
|      |  | Rated cross section acc. to EN 60999                       | mm <sup>2</sup>    |
|      |  | Rated current @ 20°C ambient                               | A                  |
|      |  | Rated current @ 40°C ambient                               | A                  |
|      |  | Overvoltage category / Pollution degree                    | III/3 III/2 II/2   |
|      |  | Rated voltage                                              | V                  |
|      |  | Rated impulse voltage                                      | kV                 |
|      |  | UL 1059 rated data                                         | C File No.: xxxxx  |
|      |  | Rated voltage                                              | 300                |
|      |  | Rated current                                              | 12                 |
|      |  | AWG wire range (field wiring / factory wiring)             | 26...14            |
|      |  | Packaging                                                  |                    |
|      |  | Downloads                                                  |                    |
|      |  | 1) Sum of ambient temperature and temperature rise         |                    |
|      |  | 2) Recommendation for manual assembly                      |                    |
|      |  | 3) Recommendation for automatic assembly                   |                    |
|      |  | 4) Recommendation for wave soldering                       |                    |
|      |  | 5) Recommendation for reflow soldering                     |                    |
|      |  | 6) Referred to rated cross section and minimum pole number |                    |
|      |  | 7) Referred to Rated Cross-Section                         |                    |
|      |  | *factory wiring                                            |                    |
|      |  | n.a. = not applicable                                      |                    |
|      |  | Subject to technical changes                               |                    |



M 1:1

|                                                                                       |  |             |  |                                                                                                         |  |                                                                                                      |  |
|---------------------------------------------------------------------------------------|--|-------------|--|---------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------|--|
|                                                                                       |  |             |  |                                                                                                         |  | CAT.NO.: .                                                                                           |  |
| 38015/5<br>10.08.07 KRUG_M                                                            |  | 00          |  | <b>Weidmüller</b>  |  | <b>C 39813</b>  |  |
| MODIFICATION                                                                          |  |             |  |                                                                                                         |  | DRAWING NO. ISSUE NO.                                                                                |  |
|                                                                                       |  | DATE        |  | NAME                                                                                                    |  | SHEET 2 OF 2 SHEETS                                                                                  |  |
|  |  | DRAWN       |  | 09.08.2007                                                                                              |  | KRUG_M                                                                                               |  |
| SCALE: 2:1                                                                            |  | RESPONSIBLE |  |                                                                                                         |  | KRUG_M                                                                                               |  |
| SUPERSEDES: .                                                                         |  | CHECKED     |  | 10.08.2007                                                                                              |  | HECKERT_M                                                                                            |  |
| SUPERSEDED BY: .                                                                      |  | APPROVED    |  |                                                                                                         |  | HECKERT_M                                                                                            |  |
|                                                                                       |  |             |  |                                                                                                         |  | <b>LSF DK 3.5/2/180</b><br>LEITERPLATTENKLEMME<br>PCB TERMINAL                                       |  |
| PRODUCT FILE:LSF-SMT                                                                  |  |             |  |                                                                                                         |  |                                                                                                      |  |
|                                                                                       |  |             |  |                                                                                                         |  | 7358                                                                                                 |  |