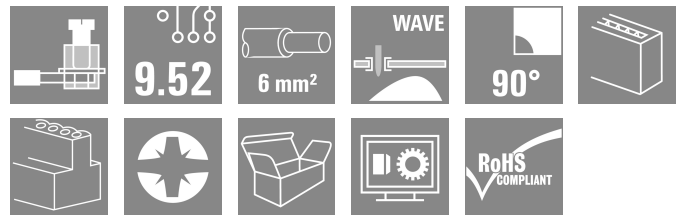


**LL 9.52/03/90 5.0SN BK BX**
**Weidmüller Interface GmbH & Co. KG**

 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

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


This PCB terminal provides connections for 1000 V, 6 mm<sup>2</sup> conductor cross-section and 32 A with proven clamping yoke connection at 9.52 mm pitch, conductor outlet direction in 90° design.

**General ordering data**

|              |                                                                                                                                                                                         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | Printed circuit board terminals, 9.52 mm, Number of poles: 3, 90°, Solder pin length (l): 5 mm, tinned, black, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">1724710000</a>                                                                                                                                                              |
| Type         | LL 9.52/03/90 5.0SN BK BX                                                                                                                                                               |
| GTIN (EAN)   | 4008190959807                                                                                                                                                                           |
| Qty.         | 100 items                                                                                                                                                                               |
| Product data | IEC: 1000 V / 32 A / 0.18 - 6 mm <sup>2</sup><br>UL: 300 V / 30 A / AWG 26 - AWG 10                                                                                                     |
| Packaging    | Box                                                                                                                                                                                     |

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## Technical data

## Approvals

Approvals



|                         |                            |
|-------------------------|----------------------------|
| ROHS                    | Conform                    |
| UL File Number Search   | <a href="#">UL Website</a> |
| Certificate No. (cURus) | E60693                     |

## Dimensions and weights

|                          |            |                 |             |
|--------------------------|------------|-----------------|-------------|
| Depth                    | 12.5 mm    | Depth (inches)  | 0.4921 inch |
| Height                   | 26.5 mm    | Height (inches) | 1.0433 inch |
| Height of lowest version | 21.5 mm    | Width           | 29.16 mm    |
| Width (inches)           | 1.148 inch | Net weight      | 9.03 g      |

## Environmental Product Compliance

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

## System parameters

|                                              |                             |                                            |                          |
|----------------------------------------------|-----------------------------|--------------------------------------------|--------------------------|
| Product family                               | OMNIMATE Signal - series LL | Wire connection method                     | Clamping yoke connection |
| Property, clamping point                     | WireReady                   | Mounting onto the PCB                      | THT solder connection    |
| Conductor outlet direction                   | 90°                         | Pitch in mm (P)                            | 9.52 mm                  |
| Pitch in inches (P)                          | 0.375 "                     | Number of poles                            | 3                        |
| Pin series quantity                          | 1                           | Fitted by customer                         | Yes                      |
| Number of rows                               | 1                           | Max. adjacent poles per row                | 12                       |
| Solder pin length (l)                        | 5 mm                        | Solder pin dimensions                      | 0.5 x 1.0 mm             |
| Solder eyelet hole diameter (D)              | 1.3 mm                      | Solder eyelet hole diameter tolerance (D)+ | 0,1 mm                   |
| Number of solder pins per pole               | 1                           | Screwdriver blade                          | 0.8 x 4.0                |
| Screwdriver blade standard                   | DIN 5264                    | Tightening torque, min.                    | 0.5 Nm                   |
| Tightening torque, max.                      | 0.6 Nm                      | Clamping screw                             | M 3                      |
| Stripping length                             | 7 mm                        | L1 in mm                                   | 19.04 mm                 |
| L1 in inches                                 | 0.750 "                     | Touch-safe protection acc. to DIN VDE 0470 | IP 20                    |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch      | Protection degree                          | IP20                     |

## Material data

|                                       |            |                                       |                                |
|---------------------------------------|------------|---------------------------------------|--------------------------------|
| Insulating material                   | Wemid (PA) | Colour                                | black                          |
| Colour chart (similar)                | RAL 9011   | Insulating material group             | I                              |
| Comparative Tracking Index (CTI)      | ≥ 600      | Moisture Level (MSL)                  |                                |
| UL 94 flammability rating             | V-0        | Contact material                      | Cu-alloy                       |
| Contact surface                       | tinned     | Coating                               | 4-6 µm SN                      |
| Tinning type                          | matt       | Layer structure of solder connection  | 2...4 µm Ni / 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. | -25 °C     | Temperature range, installation, max. | 120 °C                         |

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## Technical data

## Conductors suitable for connection

|                                                                     |                      |
|---------------------------------------------------------------------|----------------------|
| Clamping range, min.                                                | 0.18 mm <sup>2</sup> |
| Clamping range, max.                                                | 6 mm <sup>2</sup>    |
| Wire connection cross section AWG, min.                             | AWG 26               |
| Wire connection cross section AWG, max.                             | AWG 10               |
| Solid, min. H05(07) V-U                                             | 0.18 mm <sup>2</sup> |
| Solid, max. H05(07) V-U                                             | 6 mm <sup>2</sup>    |
| Stranded, min. H07V-R                                               | 0.22 mm <sup>2</sup> |
| Flexible, min. H05(07) V-K                                          | 0.22 mm <sup>2</sup> |
| Flexible, max. H05(07) V-K                                          | 4 mm <sup>2</sup>    |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max. |                      |
| w. wire end ferrule, DIN 46228 pt 1, min.                           | 0.5 mm <sup>2</sup>  |
| w. wire end ferrule, DIN 46228 pt 1, max.                           | 4 mm <sup>2</sup>    |

Plug gauge in accordance with EN 60999 a x b; ø 3.6 mm x 3.1 mm; 2.7 mm

|                     |                                        |                              |                         |      |
|---------------------|----------------------------------------|------------------------------|-------------------------|------|
| Clampable conductor | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 0.5 mm <sup>2</sup>     |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 6 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H0.5/6</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 1 mm <sup>2</sup>       |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 6 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H1.0/6</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 1.5 mm <sup>2</sup>     |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 7 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H1.5/7</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 2.5 mm <sup>2</sup>     |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 7 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H2.5/7</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 0.75 mm <sup>2</sup>    |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 6 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H0.75/6</a> |      |

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) | 32 A |
| Rated current, max. number of poles (Tu=20°C) | 32 A                   | Rated current, min. number of poles (Tu=40°C) | 32 A |

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## Technical data

|                                                                           |        |                                                                       |                   |
|---------------------------------------------------------------------------|--------|-----------------------------------------------------------------------|-------------------|
| Rated current, max. number of poles (Tu=40°C)                             | 32 A   | Rated voltage for surge voltage class / pollution degree II/2         | 1000 V            |
| Rated voltage for surge voltage class / pollution degree III/2            | 1000 V | Rated voltage for surge voltage class / pollution degree III/3        | 690 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 | 8 kV              |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 8 kV   | Short-time withstand current resistance                               | 3 x 1s with 120 A |

## Rated data acc. to CSA

|                                   |                                                                        |                                   |                |
|-----------------------------------|------------------------------------------------------------------------|-----------------------------------|----------------|
| Institute (CSA)                   | CSA                                                                    | Certificate No. (CSA)             | 200039-1815154 |
| Rated voltage (Use group B / CSA) | 300 V                                                                  | Rated voltage (Use group C / CSA) | 300 V          |
| Rated current (Use group B / CSA) | 30 A                                                                   | Rated current (Use group C / CSA) | 35 A           |
| Wire cross-section, AWG, min.     | AWG 26                                                                 | Wire cross-section, AWG, max.     | AWG 10         |
| Reference to approval values      | Specifications are maximum values, details - see approval certificate. |                                   |                |

## Rated data acc. to UL 1059

|                                       |                                                                        |                                       |        |
|---------------------------------------|------------------------------------------------------------------------|---------------------------------------|--------|
| Institute (cURus)                     | CURUS                                                                  | Certificate No. (cURus)               | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V                                                                  | Rated voltage (Use group C / UL 1059) | 300 V  |
| Rated current (Use group B / UL 1059) | 30 A                                                                   | Rated current (Use group C / UL 1059) | 30 A   |
| Wire cross-section, AWG, min.         | AWG 26                                                                 | Wire cross-section, AWG, max.         | AWG 10 |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate. |                                       |        |

## Packing

|           |           |            |           |
|-----------|-----------|------------|-----------|
| Packaging | Box       | VPE length | 47.00 mm  |
| VPE width | 134.00 mm | VPE height | 313.00 mm |

## Type tests

|                               |                |                                                                                                                     |                               |
|-------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Test: Durability of markings  | Test           | mark of origin, type identification, pitch, type of material, approval marking UL, approval marking CSA, durability |                               |
|                               | Evaluation     | available                                                                                                           |                               |
| Test: Clampable cross section | Standard       | DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02                                  |                               |
|                               | Conductor type | Type of conductor and conductor cross-section                                                                       | solid 0,18 mm <sup>2</sup>    |
|                               |                | Type of conductor and conductor cross-section                                                                       | flexible 0,22 mm <sup>2</sup> |
|                               |                | Type of conductor and conductor cross-section                                                                       | flexible 4 mm <sup>2</sup>    |
|                               |                | Type of conductor and conductor cross-section                                                                       | solid 6 mm <sup>2</sup>       |
|                               |                | Type of conductor and conductor cross-section                                                                       | AWG 26/1                      |
|                               |                | Type of conductor and conductor cross-section                                                                       | AWG 26/19                     |

## Technical data

|                                                           |                |                                               |                               |
|-----------------------------------------------------------|----------------|-----------------------------------------------|-------------------------------|
| Test for damage to and accidental loosening of conductors |                | Type of conductor and conductor cross-section | AWG 10/1                      |
|                                                           |                | Type of conductor and conductor cross-section | AWG 10/19                     |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Standard       | DIN EN 60999-1 section 9.4 / 12.00            |                               |
|                                                           | Requirement    | 0.2 kg                                        |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | stranded 0.25 mm <sup>2</sup> |
|                                                           |                | Type of conductor and conductor cross-section | AWG 26/1                      |
|                                                           |                | Type of conductor and conductor cross-section | AWG 26/19                     |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Requirement    | 0.3 kg                                        |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 0.5 mm <sup>2</sup>     |
|                                                           |                |                                               |                               |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Requirement    | 1.4 kg                                        |                               |
| Pull-out test                                             | Conductor type | Type of conductor and conductor cross-section | solid 6 mm <sup>2</sup>       |
|                                                           |                | Type of conductor and conductor cross-section | AWG 10/1                      |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Requirement    | 0.9 kg                                        |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | flexible 4 mm <sup>2</sup>    |
|                                                           |                |                                               |                               |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Standard       | DIN EN 60999-1 section 9.5 / 12.00            |                               |
|                                                           | Requirement    | ≥10 N                                         |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | AWG 26/1                      |
|                                                           |                | Type of conductor and conductor cross-section | AWG 26/19                     |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Requirement    | ≥20 N                                         |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | H05V-K0.5                     |
|                                                           |                | Type of conductor and conductor cross-section | H05V-U0.5                     |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Requirement    | ≥60 N                                         |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | H07V-K4                       |
|                                                           |                |                                               |                               |
|                                                           | Evaluation     | passed                                        |                               |
|                                                           | Requirement    | ≥80 N                                         |                               |
|                                                           | Conductor type | Type of conductor and conductor cross-section | H07V-U6                       |
|                                                           |                |                                               |                               |

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|            |                                               |          |
|------------|-----------------------------------------------|----------|
|            | Type of conductor and conductor cross-section | AWG 10/1 |
| Evaluation | passed                                        |          |

## Important note

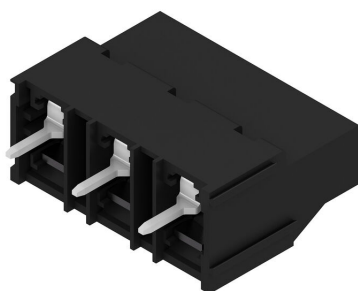
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>• 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>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• The data given under CSA relates to a cUL approval - E60693</li> <li>• P on drawing = pitch</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>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul> |

## Classifications

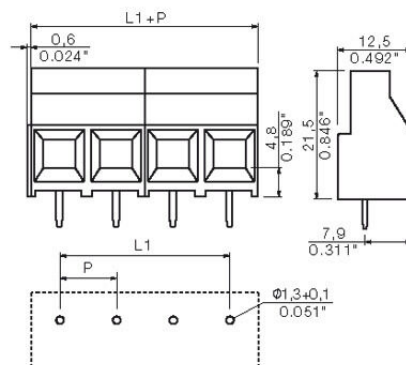
|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC002643    | ETIM 9.0    | EC002643    |
| ETIM 10.0   | EC002643    | ECLASS 14.0 | 27-46-01-01 |
| ECLASS 15.0 | 27-46-01-01 |             |             |

## Drawings

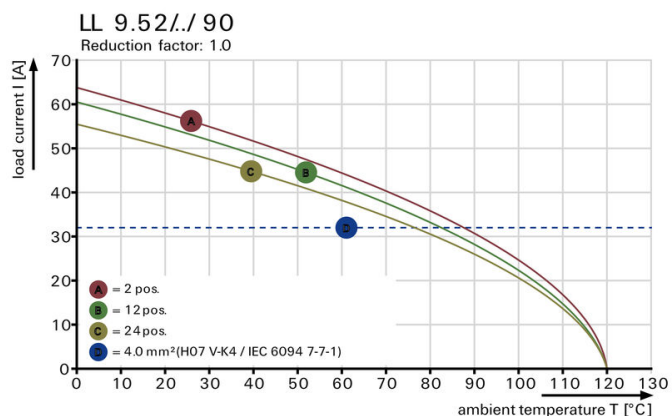
### Product image



### Dimensional drawing



### Graph



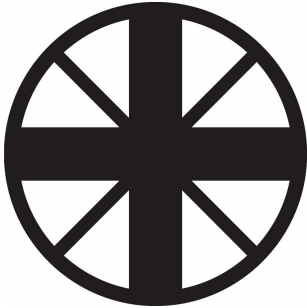
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## Accessories

## Crosshead screwdriver Pozidriv



VDE insulated crosshead screwdriver type Pozidriv SDIK PZ DIN 7438, ISO 8764/2-PZ, output to ISO 8764-PZ, SoftFinish grip

## General ordering data

|            |                            |                                                                      |
|------------|----------------------------|----------------------------------------------------------------------|
| Type       | SDIK PZ1 X 80              | Version                                                              |
| Order No.  | <a href="#">2749920000</a> | Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1    |
| GTIN (EAN) | 4050118897227              |                                                                      |
| Qty.       | 1 ST                       |                                                                      |
| Type       | SDK PZ1 X 80               | Version                                                              |
| Order No.  | <a href="#">2749440000</a> | Screwdriver, Blade width (B): 14.5 mm, 80 mm, Blade thickness (A): 1 |
| GTIN (EAN) | 4050118895667              |                                                                      |
| Qty.       | 1 ST                       |                                                                      |

## Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

## General ordering data

|            |                            |                          |
|------------|----------------------------|--------------------------|
| Type       | SDIS 0.8X4.0X100           | Version                  |
| Order No.  | <a href="#">9008400000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056361              |                          |
| Qty.       | 1 ST                       |                          |
| Type       | SDS 0.8X4.0X100            | Version                  |
| Order No.  | <a href="#">9008340000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056293              |                          |
| Qty.       | 1 ST                       |                          |