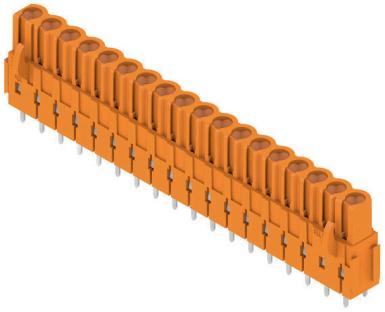
Data sheet

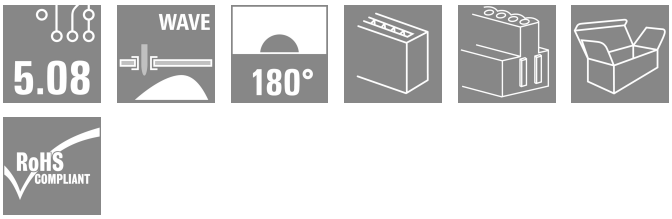
# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Product image






Similar to illustration

Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

## General ordering data

| | |
|---|---|
| Version | PCB plug-in connector, female header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 18, 180°, Solder pin length (l): 3.2 mm, Au (Gold), black, Box |
| Order No. | 1767760000 |
| Type | BLL 5.08/18/180B 3.2AU BK BX |
| GTIN (EAN) | 4032248103188 |
| Qty. | 18 items |
| Product data | IEC: 400 V / 23 A<br>UL: 300 V / 15 A |
| Packaging | Box |



Downloaded from Arrow.com.

# Data sheet

## BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

# Technical data

### Approvals

| | |
|---|---|
| Approvals | |
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (UR) | E60693 |

### Dimensions and weights

| | |
|---|---|
| Net weight | 19.33 g |

### Environmental Product Compliance

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

### System specifications

| | | | |
|---|---|---|---|
| Product family | OMNIMATE Signal - series BL/SL 5.08 | Type of connection | Board connection |
| Mounting onto the PCB | THT solder connection | Pitch in mm (P) | 5.08 mm |
| Pitch in inches (P) | 0.200 " | Outgoing elbow | 180° |
| Number of poles | 18 | Number of solder pins per pole | 2 |
| Solder pin length (l) | 3.2 mm | Solder pin length tolerance | +0.1 / -0.3 mm |
| Solder pin dimensions | 0.4 x 1.00 mm | Solder eyelet hole diameter (D) | 1.3 mm |
| Solder eyelet hole diameter tolerance (D) | + 0,1 mm | L1 in mm | 86.36 mm |
| L1 in inches | 3.400 " | Number of rows | 1 |
| Pin series quantity | 1 | Touch-safe protection acc. to DIN VDE 57 106 | Safe from back-of-hand touch |
| Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged | Protection degree | IP20 |
| Volume resistance | ≤5 mΩ | Can be coded | Yes |
| Plugging cycles | ≥ 25 | Plugging force/pole, max. | 5 N |
| Pulling force/pole, max. | 5 N | | |

### Material data

| | | | |
|---|---|---|---|
| Insulating material | PBT GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | Insulation resistance | 108 Ω |
| Moisture Level (MSL) | | UL 94 flammability rating | V-0 |
| Contact material | Copper alloy | Contact surface | Au (Gold) |
| Layer structure of solder connection | ≥ 2 µm Ni / ≥ 1.5 µm Au | Layer structure of plug contact | ≥ 2 µm Ni / ≥ 1.5 µm Au |
| Storage temperature, min. | -40 °C | Storage temperature, max. | 70 °C |
| Operating temperature, min. | -50 °C | Operating temperature, max. | 100 °C |
| Temperature range, installation, min. | -25 °C | Temperature range, installation, max. | 100 °C |

### Rated data acc. to IEC

| | | | |
|---|---|---|---|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 23 A |
| Rated current, max. number of poles (Tu=20°C) | 16 A | Rated current, min. number of poles (Tu=40°C) | 20 A |



Downloaded from Arrow.com.

# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Technical data

| | | | |
|---|---|---|---|
| Rated current, max. number of poles (Tu=40°C) | 14 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 V | 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) | CSA | Certificate No. (CSA) | 200039-1121690 |
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group D / CSA) | 300 V |
| Rated current (Use group B / CSA) | 15 A | Rated current (Use group D / CSA) | 10 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

### Rated data acc. to UL 1059

| | | | |
|---|---|---|---|
| Institute (UR) | UR | Certificate No. (UR) | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V | Rated voltage (Use group D / UL 1059) | 300 V |
| Rated current (Use group B / UL 1059) | 15 A | Rated current (Use group D / UL 1059) | 10 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

### Packing

| | | | |
|---|---|---|---|
| Packaging | Box | VPE length | 348.00 mm |
| VPE width | 137.00 mm | VPE height | 31.00 mm |

### 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 | • Additional variants on request<br>• Gold-plated contact surfaces on request<br>• Rated current related to rated cross-section & min. No. of poles.<br>• P on drawing = pitch<br>• 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.<br>• In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load<br>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 8.0 | EC002637 | ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 | | |



Downloaded from Arrow.com.

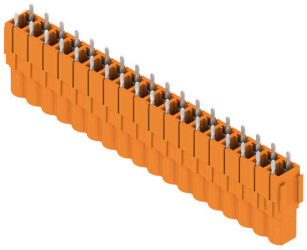
# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

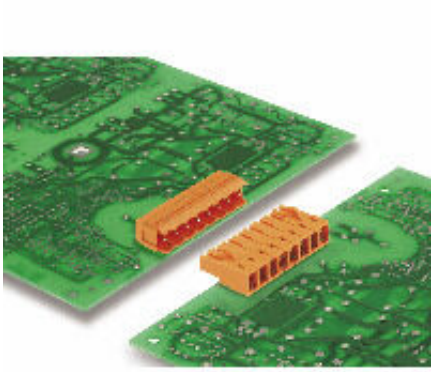
## Drawings

### Product image

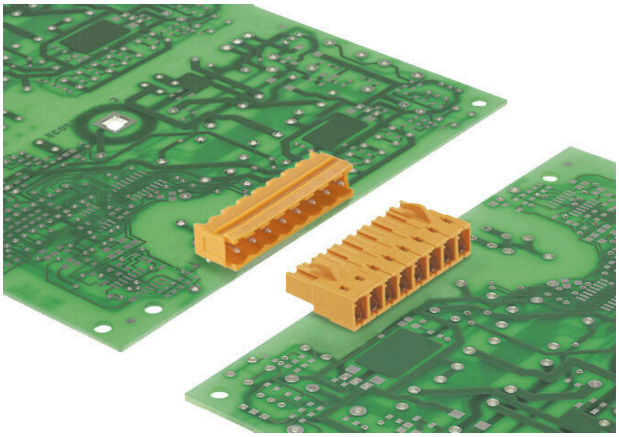


Similar to illustration

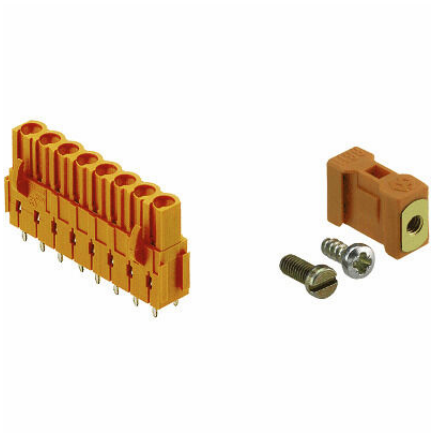
### Dimensional drawing



### Example of use



### Example of use





Downloaded from Arrow.com.

# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Accessories

### Blocks for PCB mounting



Minor component, major effect:
Clip-on attachment elements increase the mechanical resilience of the whole plug connection by
- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:
- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:
- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

### General ordering data

| | | |
|---|---|---|
| Type | SLA BB12R SW | Version |
| Order No. | 1626880000 | PCB plug-in connector, Accessories, Mounting block, black, Number |
| GTIN (EAN) | 4008190198213 | of poles: 0 |
| Qty. | 100 ST | |
| Type | SLA BB11R SW | Version |
| Order No. | 1692340000 | PCB plug-in connector, Accessories, Mounting block, black, Number |
| GTIN (EAN) | 4008190864965 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB1R OR | Version |
| Order No. | 1723430000 | PCB plug-in connector, Accessories, Mounting block, orange, Number |
| GTIN (EAN) | 4008190365981 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB2R OR | Version |
| Order No. | 1723440000 | PCB plug-in connector, Accessories, Mounting block, orange, Number |
| GTIN (EAN) | 4008190365998 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB5R OR | Version |
| Order No. | 1723460000 | PCB plug-in connector, Accessories, Mounting block, orange, Number |
| GTIN (EAN) | 4008190366018 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB6R OR | Version |
| Order No. | 1723470000 | PCB plug-in connector, Accessories, Mounting block, orange, Number |
| GTIN (EAN) | 4008190366025 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB1R SW | Version |
| Order No. | 1723480000 | PCB plug-in connector, Accessories, Mounting block, black, Number |
| GTIN (EAN) | 4008190366032 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB2R SW | Version |
| Order No. | 1723490000 | PCB plug-in connector, Accessories, Mounting block, black, Number |
| GTIN (EAN) | 4008190366049 | of poles: 0 |
| Qty. | 20 ST | |
| Type | SLA BB5R SW | Version |
| Order No. | 1723510000 | PCB plug-in connector, Accessories, Mounting block, black, Number |
| GTIN (EAN) | 4008190366063 | of poles: 0 |
| Qty. | 20 ST | |



Downloaded from Arrow.com.

# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Accessories

| | | |
|---|---|---|
| Type | SLA BB6R SW | Version |
| Order No. | 1723520000 | PCB plug-in connector, Accessories, Mounting block, black, Number |
| GTIN (EAN) | 4008190366070 | of poles: 0 |
| Qty. | 20 ST | |

### Coding elements



Only connects what is supposed to be connected: the right connection at the right place.
Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase.
The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.
Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible.
The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

| | | |
|---|---|---|
| Type | BLZ/SL KO BK BX | Version |
| Order No. | 1545710000 | PCB plug-in connector, Accessories, Coding element, black, Number |
| GTIN (EAN) | 4008190087142 | of poles: 1 |
| Qty. | 50 ST | |

| | | |
|---|---|---|
| Type | BLZ/SL KO OR BX | Version |
| Order No. | 1573010000 | PCB plug-in connector, Accessories, Coding element, orange, Number |
| GTIN (EAN) | 4008190048396 | of poles: 1 |
| Qty. | 100 ST | |

### Blocks for PCB mounting



Minor component, major effect:
Clip-on attachment elements increase the mechanical resilience of the whole plug connection by
- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:
- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:
- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

### General ordering data

| | | |
|---|---|---|
| Type | SLA BB12R OR | Version |
| Order No. | 1593450000 | PCB plug-in connector, Accessories, Mounting block, orange, Number |
| GTIN (EAN) | 4008190122164 | of poles: 0 |
| Qty. | 100 ST | |



Downloaded from Arrow.com.

# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Accessories

| | | |
|---|---|---|
| Type | SLA BB11R OR | Version |
| Order No. | 1604120000 | PCB plug-in connector, Accessories, Mounting block, orange, Number |
| GTIN (EAN) | 4008190182977 | of poles: 0 |
| Qty. | 20 ST | |



Downloaded from Arrow.com.

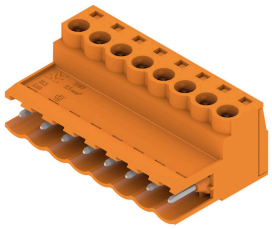
# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Counterpart

### SLS 5.08/180 SN

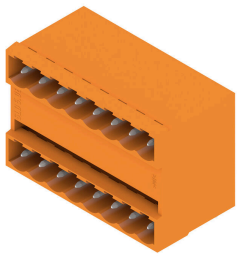


Male plugs with clamping-yoke screw wire-connect system. The male plugs provide space for labelling and can be coded.

#### General ordering data

| | | |
|---|---|---|
| Type | SLS 5.08/18/180 SN OR BX | Version |
| Order No. | 1644850000 | PCB plug-in connector, male plug, 5.08 mm, Number of poles: 18, |
| GTIN (EAN) | 4008190284060 | 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², |
| Qty. | 18 ST | Box |

### SLD 5.08/90G



2-tier male header with parallel pin arrangement. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

#### General ordering data

| | | |
|---|---|---|
| Type | SLD 5.08/36/90G 3.2SN O... | Version |
| Order No. | 1601950000 | PCB plug-in connector, male header, closed side, THT solder |
| GTIN (EAN) | 4008190052188 | connection, 5.08 mm, Number of poles: 36, 90°, Solder pin length (l): |
| Qty. | 10 ST | 3.2 mm, tinned, orange, Box |

### SLDV-THR 5.08/180FLF



High-temperature resistant, double level, laterally offset, male connector with flange or solder flange. 1.5 mm solder pin is suitable for reflow soldering. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded.

#### General ordering data

| | | |
|---|---|---|
| Type | SLDV-THR 5.08/36/180FLF... | Version |
| Order No. | 1889270000 | PCB plug-in connector, male header, Flange / Solder flange, THT/THR |
| GTIN (EAN) | 4032248495610 | solder connection, 5.08 mm, Number of poles: 36, 180°, Solder pin |
| Qty. | 8 ST | length (l): 3.2 mm, tinned, black, Box |



Downloaded from Arrow.com.

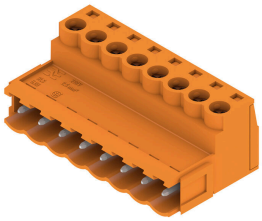
# BLL 5.08/18/180B 3.2AU BK BX

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

www.weidmueller.com

## Counterpart

### SLS 5.08/180B



Male plugs with clamping-yoke screw wire-connect system. The male plugs provide space for labelling and can be coded.

### General ordering data

| | | |
|---|---|---|
| Type | SLS 5.08/18/180B SN OR ... | Version |
| Order No. | 1645160000 | PCB plug-in connector, male plug, 5.08 mm, Number of poles: 18, |
| GTIN (EAN) | 4008190284374 | 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², |
| Qty. | 18 ST | Box |
| Type | SLS 5.08/18/180B SN BK ... | Version |
| Order No. | 1645390000 | PCB plug-in connector, male plug, 5.08 mm, Number of poles: 18, |
| GTIN (EAN) | 4008190284602 | 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², |
| Qty. | 18 ST | Box |



Downloaded from Arrow.com.