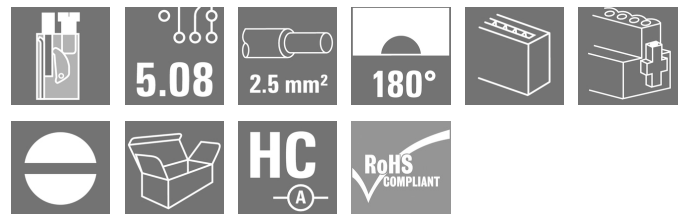


BLT 5.08HC/06/180F SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Female plugs with TOP screw connection system for connecting wires with straight outlet direction and screw flange. The female connectors provide space for labelling and can be coded. HC = High Current.

General ordering data

| | |
|--------------|--|
| Version | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 6, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box |
| Order No. | 1844260000 |
| Type | BLT 5.08HC/06/180F SN BK BX |
| GTIN (EAN) | 4032248356195 |
| Qty. | 42 pc(s). |
| Product data | IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14 |
| Packaging | Box |

Creation date July 16, 2024 5:45:48 AM CEST

Catalogue status 13.07.2024 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Depth | 31.8 mm | Depth (inches) | 1.252 inch |
| Height | 12.2 mm | Height (inches) | 0.48 inch |
| Width | 40.28 mm | Width (inches) | 1.586 inch |
| Net weight | 17.35 g | | |

System Parameters

| | | | |
|--|-------------------------------------|-------------------|--------------|
| Product family | OMNIMATE Signal - series BL/SL 5.08 | | |
| Type of connection | Field connection | | |
| Wire connection method | TOP connection | | |
| Pitch in mm (P) | 5.08 mm | | |
| Pitch in inches (P) | 0.2 " | | |
| Conductor outlet direction | 180° | | |
| Number of poles | 6 | | |
| L1 in mm | 25.4 mm | | |
| L1 in inches | 1 " | | |
| Number of rows | 1 | | |
| Pin series quantity | 1 | | |
| Rated cross-section | 2.5 mm ² | | |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch | | |
| Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10 unplugged | | |
| Protection degree | IP20 | | |
| Volume resistance | ≤5 mΩ | | |
| Can be coded | Yes | | |
| Stripping length | 13 mm | | |
| Clamping screw | M 2.5 | | |
| Screwdriver blade | 0.6 x 3.5 | | |
| Screwdriver blade standard | DIN 5264 | | |
| Plugging cycles | 25 | | |
| Plugging force/pole, max. | 8 N | | |
| Pulling force/pole, max. | 7 N | | |
| Tightening torque | Torque type | Wire connection | |
| | Usage information | Tightening torque | min. 0.4 Nm |
| | | | max. 0.5 Nm |
| | Torque type | Screw flange | |
| | Usage information | Tightening torque | min. 0.2 Nm |
| | | | max. 0.25 Nm |

Material data

| | | | |
|---------------------------------------|----------------------------|---------------------------------------|--------|
| Insulating material | PBT | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Layer structure of plug contact | 4...8 µm Sn hot-dip tinned | 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 | | |

Conductors suitable for connection

| | |
|----------------------|----------------------|
| Clamping range, min. | 0.13 mm ² |
| Clamping range, max. | 2.5 mm ² |

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Technical data

| | | | |
|---|--|------------------------------|-----------------------------|
| 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 ² | | |
| Solid, max. H05(07) V-U | 2.5 mm ² | | |
| Flexible, min. H05(07) V-K | 0.2 mm ² | | |
| Flexible, max. H05(07) V-K | 2.5 mm ² | | |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min. | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max. | | | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.2 mm ² | | |
| w. wire end ferrule, DIN 46228 pt 1, max. | 1.5 mm ² | | |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.4 mm x 1.5 mm ; 2.4 mm | | |
| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.5 mm ² |
| | wire end ferrule | Stripping length | nominal 14 mm |
| | | Recommended wire-end ferrule | H0.5/18 OR |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 1 mm ² |
| | wire end ferrule | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1.0/18 GE |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 1.5 mm ² |
| | wire end ferrule | Stripping length | nominal 15 mm |
| | | Recommended wire-end ferrule | H1.5/18D SW |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire-end ferrule | H1.5/12 |
| Reference text | The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage. | | |

Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 27 A |
| Rated current, max. number of poles (Tu=20°C) | 19 A | Rated current, min. number of poles (Tu=40°C) | 24 A |
| Rated current, max. number of poles (Tu=40°C) | 16 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 kV | 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 100 A |

Rated data acc. to CSA

| | | | |
|-----------------------------------|--------|-----------------------------------|--------|
| 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) | 15 A |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 14 |

BLT 5.08HC/06/180F SN BK BX

Weidmüller Interface GmbH & Co. KG

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Technical data

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated current (Use group B / UL 1059) 17 A

Wire cross-section, AWG, min. AWG 26

Reference to approval values Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, max. AWG 14

Packing

| | | | |
|-----------|--------|------------|--------|
| Packaging | Box | VPE length | 353 mm |
| VPE width | 136 mm | VPE height | 38 mm |

Type tests

| | | |
|--|----------------|--|
| Test: Durability of markings | Standard | DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96 |
| | Test | mark of origin, type of material, date clock |
| | Evaluation | available |
| | Test | durability |
| | Evaluation | passed |
| Test: Misengagement (Non-interchangeability) | Standard | DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.06 |
| | Test | 180° turned with coding elements |
| | Evaluation | passed |
| | Test | visual examination |
| | Evaluation | passed |
| 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 solid 0.08 mm ² conductor cross-section |
| | | Type of conductor and stranded 0.08 mm ² conductor cross-section |
| | | Type of conductor and solid 2.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 2.5 mm ² conductor cross-section |
| | | Type of conductor and AWG 26/1 conductor cross-section |
| | | Type of conductor and AWG 26/19 conductor cross-section |
| | | Type of conductor and AWG 14/1 conductor cross-section |
| | | Type of conductor and AWG 14/19 conductor cross-section |
| | Evaluation | passed |

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www.weidmueller.com**Technical data**

Test for damage to and accidental loosening of conductors

| | |
|----------------|--|
| Standard | DIN EN 60999-1 section 9.4 / 12.00 |
| Requirement | 0.2 kg |
| Conductor type | Type of conductor and AWG 28/1 conductor cross-section |
| | Type of conductor and AWG 26/19 conductor cross-section |
| Evaluation | passed |
| Requirement | 0.3 kg |
| Conductor type | Type of conductor and solid 0.5 mm ² conductor cross-section |
| | Type of conductor and stranded 0.5 mm ² conductor cross-section |
| Evaluation | passed |
| Requirement | 0.7 kg |
| Conductor type | Type of conductor and solid 2.5 mm ² conductor cross-section |
| | Type of conductor and stranded 2.5 mm ² conductor cross-section |
| | Type of conductor and AWG 14/1 conductor cross-section |
| | Type of conductor and AWG 14/19 conductor cross-section |
| Evaluation | passed |

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Technical data

| | | |
|---------------|----------------|--|
| Pull-out test | Standard | DIN EN 60999-1 section 9.5 / 12.00 |
| | Requirement | ≥5 N |
| | Conductor type | Type of conductor and AWG 28/1 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥10 N |
| | Conductor type | Type of conductor and AWG 26/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥20 N |
| | Conductor type | Type of conductor and solid 0.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 0.5 mm ² conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥40 N |
| | Conductor type | Type of conductor and AWG 14/1 conductor cross-section |
| | | Type of conductor and AWG 14/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥50 N |
| | Conductor type | Type of conductor and solid 2.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 2.5 mm ² conductor cross-section |
| | Evaluation | passed |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ECLASS 9.0 | 27-44-03-09 | ECLASS 9.1 | 27-44-03-09 |
| ECLASS 10.0 | 27-44-03-09 | ECLASS 11.0 | 27-46-02-02 |
| ECLASS 12.0 | 27-46-02-02 | ECLASS 13.0 | 27-46-02-02 |

Environmental Product Compliance

| | |
|------------------------|-----------------------------|
| REACH SVHC | / |
| RoHS Compliance Status | Compliant without exemption |

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www.weidmueller.com**Technical data****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"> • Additional variants on request • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • Crimp form A for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes. • P on drawing = pitch • 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. • 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 • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

Approvals

Approvals



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

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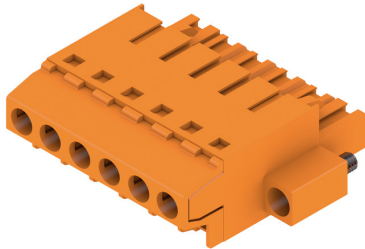
www.weidmueller.com**Technical data****Downloads**

| | |
|---|---|
| Approval/Certificate/Document of Conformity | CB Certificate |
| | CB Testreport |
| | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| Product Change Notification | 20220106 BLT and BLZP in pitch 5.0x – Addition of a screw locking |
| | 20220106 BLT und BLZP im Raster 5.0x – Ergänzung einer Schraubensicherung |
| Catalogues | Catalogues in PDF-format |
| Brochures | FL DRIVES EN |
| | MB DEVICE MANUF. EN |
| | FL DRIVES DE |
| | FL BUILDING SAFETY EN |
| | FL APPL LED LIGHTING EN |
| | FL INDUSTR.CONTROLS EN |
| | FL MACHINE SAFETY EN |
| | FL HEATING ELECTR EN |
| | FL APPL INVERTER EN |
| | FL BASE STATION EN |
| | FL ELEVATOR EN |
| | FL POWER SUPPLY EN |
| | FL 72H SAMPLE SER EN |
| | PO OMNIMATE EN |
| | PO OMNIMATE EN |

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 Germany

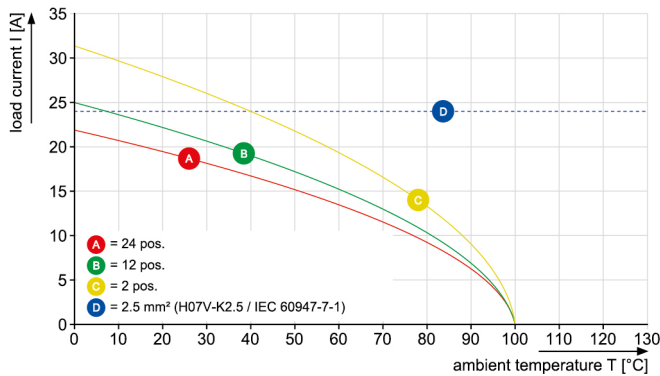
www.weidmueller.com

Drawings
Product image

Dimensional drawing


MIN. FRONT PLATE CUT-OUT

Graph

BLT 5.08HC/./180 - SL-SMT 5.08HC/./90

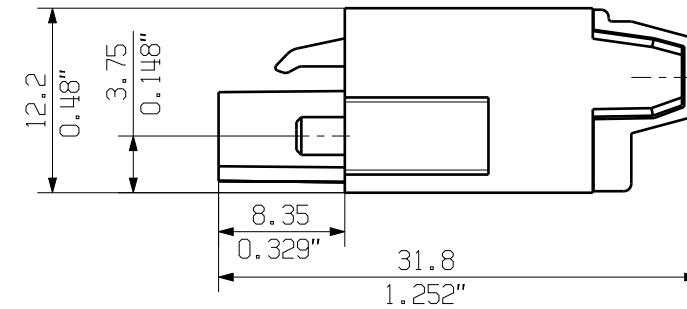


WEITERGABE SOWIE Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksmusterertragung vorbehalten. THE REPRODUCTION, 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. WEIDMUELLER EXCLUSIVELY RESERVES THE RIGHT TO FILE FOR PATENT'S UTILITY MODELS OR DESIGNS.

Technical drawing of a 4-hole 1/2 inch NPT female manifold. The drawing shows a cross-section of the manifold with four circular ports. Dimensions are provided in inches:

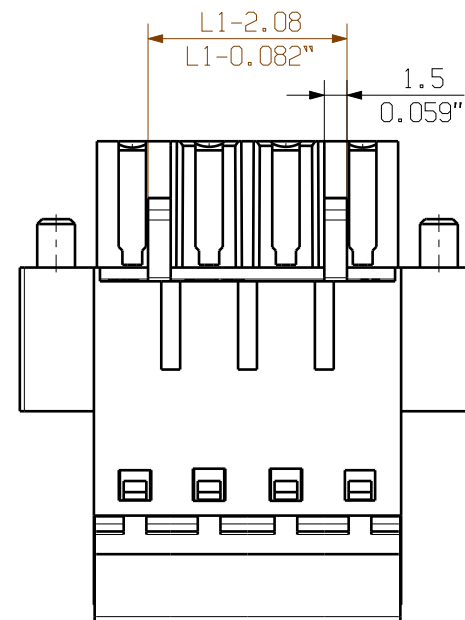
- Overall length: $L1 + 14.88$
- Distance from end face to center of first port: $L3 = L1 + 0.585''$
- Distance between centers of adjacent ports: $L1 + 5.08^{+0.05}_{-0.12}$
- Distance from end face to center of last port: $L1 + 0.2''^{+0.002}_{-0.005}$
- Distance from center of first port to center of last port: $L1$
- Distance from end face to center of last port (alternative): $L1 + 10.08$
- Distance from end face to center of last port (alternative): $L1 + 0.397''$

The drawing also indicates a port diameter of P and shows the internal structure of the manifold.

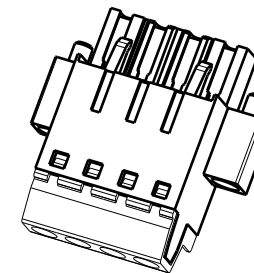


TOOL

CONDUCTOR






1:1



| | | | |
|---|------------------|------------|--------------|
| n | POLZAHL POLES | L1 [mm] | L1 [inch] |
|---|------------------|------------|--------------|

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

| | | | | | | | |
|---|--|------------------------------|--|---|--|-----------------------|--|
| GENERAL TOLERANCE: DIN ISO 2768-m | | 78309/4 01.04.15 HERTEL_S | | 03 | | CAT.NO.: | |
|  | | MODIFICATION | |  | | C 36024 | |
|  | | DATE | | NAME | | DRAWING NO. | |
| SCALE: 2/1 | | DRAWN | | 10.07.2003 | | KNOTH_G | |
| SUPERSEDES: | | RESPONSIBLE | | 01.04.2015 | | HERTEL_S | |
| CHECKED | | 01.04.2015 | | HELIS_MA | | ISSUE NO. | |
| APPROVED | | LANG_T | | PRODUCT FILE: BLT 5.08 | | SHEET 01 OF 02 SHEETS | |
| 7143 | | BLT 5.08HC/.. /180... | | BUCHSENLEISTE | | SOCKET BLOCK | |