

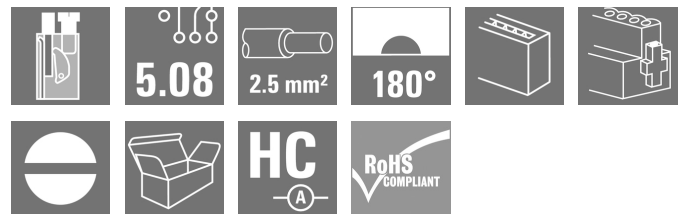
BLT 5.08HC/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

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: 16, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box |
| Order No. | 1011460000 |
| Type | BLT 5.08HC/16/180F SN GN BX |
| GTIN (EAN) | 4032248718016 |
| Qty. | 18 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 8:30:04 PM CEST

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

BLT 5.08HC/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Depth | 31.8 mm | Depth (inches) | 1.252 inch |
| Height | 12.2 mm | Height (inches) | 0.48 inch |
| Width | 91.08 mm | Width (inches) | 3.586 inch |
| Net weight | 45.523 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 | 16 | | |
| L1 in mm | 76.2 mm | | |
| L1 in inches | 3 " | | |
| 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 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 | Pale green |
| Colour chart (similar) | RAL 6021 | 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 |
| Wire connection cross section AWG, max. | AWG 14 |

Creation date July 16, 2024 8:30:04 PM CEST

BLT 5.08HC/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

| | | | |
|---|--|------------------------------|-----------------------------|
| 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, 0.2 mm ² min. | | | |
| w. wire end ferrule, DIN 46228 pt 1, 1.5 mm ² max. | | | |
| 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/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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 | 351 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 |
| Test: Misengagement (Non-interchangeability) | Evaluation | passed |
| | 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: Misengagement (Non-interchangeability) | 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 |

BLT 5.08HC/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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 |

BLT 5.08HC/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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 |

BLT 5.08HC/16/180F SN GN BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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 |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | CB Certificate CB Testreport |
| 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 FL DRIVES DE |

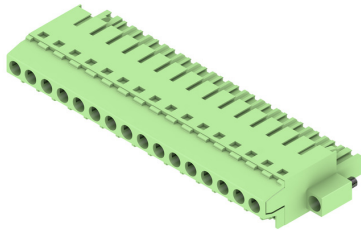
BLT 5.08HC/16/180F SN GN BX

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

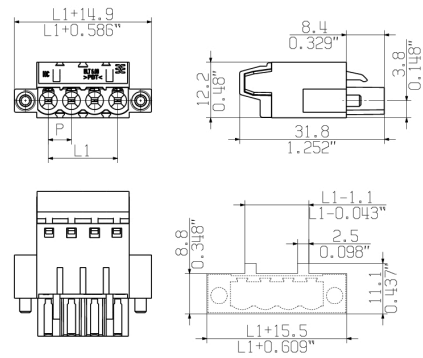
www.weidmueller.com

Drawings

Product image



Dimensional drawing



MIN. FRONT PLATE CUT-OUT

Graph

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

