

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image





















Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

General ordering data

| Version | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 6, 180°, PUSH IN with actuator, Tension-clamp connection, Clamping range, max. : 3.31 mm², Box |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Order No. | 1368850000 |
| Туре | BLF 5.08HC/06/180B SN OR BX |
| GTIN (EAN) | 4050118170979 |
| Qty. | 54 pc(s). |
| Product data | IEC: 400 V / 24 A / 0.2 - 2.5 mm ² UL: 300 V / 18.5 A / AWG 26 - AWG 12 |
| Packaging | Вох |



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Technical data

Dimensions and weights

| Depth | 27.7 mm | Depth (inches) | 1.091 inch |
|------------|----------|-----------------|------------|
| Height | 14.2 mm | Height (inches) | 0.559 inch |
| Width | 32.48 mm | Width (inches) | 1.279 inch |
| Net weight | 12.13 g | | |

System Parameters

| Product family | OMNIMATE Signal - series BL/SL 5.08 | Type of connection | Field connection |
|----------------------------------------------|----------------------------------------------------|--------------------------------------------|---------------------|
| Wire connection method | PUSH IN with actuator, Tension-clamp connection | Pitch in mm (P) | 5.08 mm |
| Pitch in inches (P) | 0.2 inch | Conductor outlet direction | 180° |
| Number of poles | 6 | L1 in mm | 25.4 mm |
| L1 in inches | 1 inch | 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 | IP 20 |
| Protection degree | IP20 | Volume resistance | ≤5 mΩ |
| Can be coded | Yes | Stripping length | 10 mm |
| Screwdriver blade | 0.6 x 3.5 | Screwdriver blade standard | DIN 5264 |
| Plugging cycles | 25 | Plugging force/pole, max. | 7 N |
| Pulling force/pole, max. | 5.5 N | | |

Material data

| Insulating material | PBT | Colour | orange |
|---------------------------------------|-------------------------|---------------------------------------|--------|
| Colour chart (similar) | RAL 2000 | Insulating material group | Illa |
| Comparative Tracking Index (CTI) | ≥ 200 | UL 94 flammability rating | V-0 |
| Contact material | CuSn | Contact surface | tinned |
| Layer structure of plug contact | 48 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. | -30 °C |
| Temperature range, installation, max. | 100 °C | | |

Conductors suitable for connection

| Clamping range, min. | 0.13 mm ² |
|-------------------------------------------------|----------------------|
| Clamping range, max. | 3.31 mm ² |
| Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 12 |
| 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 min. | 4, 0.25 mm² |
| w. plastic collar ferrule, DIN 46228 pt 4 max. | 4, 2.5 mm² |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.25 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, max. | 2.5 mm ² |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.0 mm |

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Technical data

| Clampable conductor | Cross-section for conductor connection | Туре | fine-wired |
|---------------------|----------------------------------------|----------------------------------|----------------------|
| | | nominal | 0.5 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | H0,5/16 OR |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H0,5/10 |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.75 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | H0,75/16 W |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H0,75/10 |
| | Cross-section for conductor connection | Туре | fine-wired |
| | | nominal | 1 mm ² |
| | wire end ferrule | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | H1,0/16D R |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H1,0/10 |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 1.5 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H1,5/10 |
| | | Stripping length | nominal 12 mm |
| | | Recommended wire- end ferrule | H1,5/16 R |
| | Cross-section for conductor connection | Туре | fine-wired |
| | | nominal | 2.5 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H2,5/10 |
| | | Stripping length | nominal 10 mm |
| | | Recommended wire- end ferrule | H2,5/14DS BL |

Rated data acc. to IEC

| tested acc. to standard | | Rated current, min. number of poles | |
|-----------------------------------------|------------------------|-----------------------------------------|-------------------|
| | IEC 60664-1, IEC 61984 | (Tu=20°C) | 24 A |
| Rated current, max. number of poles | | Rated current, min. number of poles | |
| (Tu=20°C) | 19 A | (Tu=40°C) | 21 A |
| Rated current, max. number of poles | | Rated voltage for surge voltage class / | |
| (Tu=40°C) | 16.5 A | pollution degree II/2 | 400 V |
| Rated voltage for surge voltage class / | | Rated voltage for surge voltage class / | |
| pollution degree III/2 | 320 V | pollution degree III/3 | 250 V |
| Rated impulse voltage for surge voltage | | Rated impulse voltage for surge voltage | |
| class/ pollution degree II/2 | 4 kV | class/ pollution degree III/2 | 4 kV |
| Rated impulse voltage for surge voltage | | Short-time withstand current resistance | |
| class/ contamination degree III/3 | 4 kV | | 3 x 1s with 120 A |

is to be chosen depending on the product and the rated voltage.



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E60693

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Technical data

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 D / CSA) | 10 A | Wire cross-section, AWG, min. | AWG 26 |
| Wire cross-section, AWG, max. | AWG 12 | | |

Rated data acc. to UL 1059

Institute (cURus)

Certificate No. (cURus)

| Rated voltage (Use group B / UL 1059) | 300 V |
|---------------------------------------|------------------------------------------------------------------------|
| Rated current (Use group B / UL 1059) | 18.5 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 12 |
| | |

Packing

| Packaging | Box | VPE length | 352 mm |
|-----------|--------|------------|--------|
| VPE width | 136 mm | VPE height | 36 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 identification, pitch, 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 / 11.08 |
| | Test | 180° turned with coding elements |
| | Evaluation | passed |
| | Test | visual examination |
| | Evaluation | passed |



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| Test: Clampable cross section | Standard | DIN EN 60999-1 section 7 and 9.1 / 12.00, D EN 60947-1 section 8.2.4.5.1 / 04.08 |
|----------------------------------|----------------|-------------------------------------------------------------------------------------|
| | Conductor type | Type of conductor solid 0.2 mm ² and conductor cross-section |
| | | Type of conductor stranded 0.2 mm ² and conductor cross-section |
| | | Type of conductor solid 2.5 mm ² and conductor cross-section |
| | | Type of conductor stranded 2.5 mm ² and conductor cross-section |
| | | Type of conductor AWG 26/1 and conductor cross-section |
| | | Type of conductor AWG 26/19 and conductor cross-section |
| | | Type of conductor AWG 14/1 and conductor cross-section |
| | | Type of conductor AWG 14/19 and conductor cross-section |
| | Evaluation | passed |
| est for damage to and accidental | Standard | DIN EN 60999-1 section 9.4 / 12.00 |
| osening of conductors | Requirement | 0.2 kg |
| | Conductor type | Type of conductor AWG 26/1 and conductor cross-section |
| | | Type of conductor AWG 26/19 and conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.3 kg |
| | Conductor type | Type of conductor H05V-U0.5 and conductor cross-section |
| | | Type of conductor H05V-K0.5 and conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.7 kg |
| | Conductor type | Type of conductor H07V-U2.5 and conductor cross-section |
| | | Type of conductor H07V-K2.5 and conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.9 kg |
| | Conductor type | Type of conductor AWG 12/1 and conductor cross-section |
| | | Type of conductor AWG 12/19 and conductor cross-section |



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| Pull-out test | Standard | DIN EN 60999-1 section 9.5 / 12.00 |
|---------------|----------------|---------------------------------------------------------|
| | Requirement | ≥10 N |
| | Conductor type | Type of conductor AWG 26/1 and conductor cross-section |
| | | Type of conductor AWG 26/19 and conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥20 N |
| | Conductor type | Type of conductor H05V-K0.5 and conductor cross-section |
| | | Type of conductor H05V-U0.5 and conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥50 N |
| | Conductor type | Type of conductor H07V-U2.5 and conductor cross-section |
| | | Type of conductor H07V-K2.5 and conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥60 N |
| | Conductor type | Type of conductor AWG 12/1 and conductor cross-section |
| | | Type of conductor AWG 12/19 and conductor cross-section |
| | Evaluation | passed |

Classifications

| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | 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 | | |



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Technical data

| Imp | orta | nt n | ote |
|-----|------|------|-----|
|-----|------|------|-----|

| 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 colours 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 |
| | |
| | • P on drawing = pitch |
| | Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended. |
| | |
| | The test point can only be used as potential-pickup point |

Approvals

| Approvals | c SN us III | |
|-----------------------|--------------------|--|
| ROHS | Conform | |
| UL File Number Search | E60693 | |

Downloads

| Engineering Data | CAD data – STEP |
|------------------|------------------------------|
| Catalogues | Catalogues in PDF-format |
| Brochures | FL DRIVES EN FL DRIVES DE |



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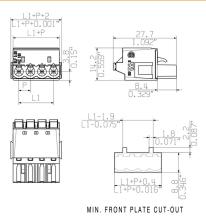
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Drawings

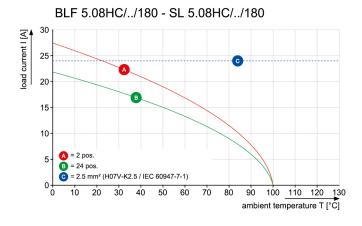
Product image



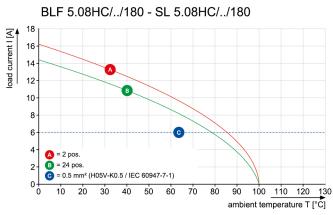
Dimensional drawing



Graph



Graph





Uncompromising functionality High vibration resistance



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Drawings

Product benefits



Solid PUSH IN contact
Safe and durable

Product benefits



Cost-effective wiring
Quick and intuitive operation



Wide clamping range Tool-free wire connection

TOP

Drawings Assembly

Product file: 7379 BLF 5.08 180

Mouser Electronics

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<u>Weidmuller</u>: 1368850000