

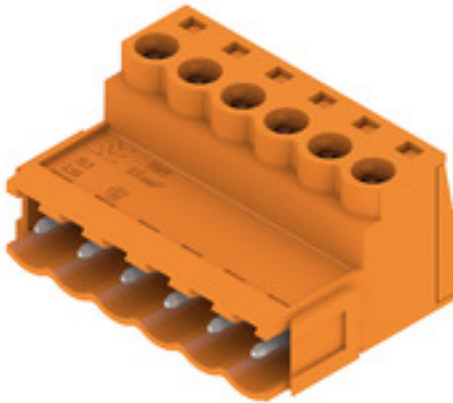
SLS 5.08/06/180B SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

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

General ordering data

| | |
|--------------|---|
| Version | PCB plug-in connector, male plug, 5.08 mm, Number of poles: 6, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box |
| Order No. | 1627280000 |
| Type | SLS 5.08/06/180B SN OR BX |
| GTIN (EAN) | 4008190199791 |
| Qty. | 54 pc(s). |
| Product data | IEC: 400 V / 21.5 A / 0.2 - 2.5 mm² UL: 300 V / 14 A / AWG 26 - AWG 12 |
| Packaging | Box |

Creation date July 7, 2024 7:54:16 PM CEST

Catalogue status 29.06.2024 / We reserve the right to make technical changes.

SLS 5.08/06/180B SN OR BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

| | | | |
|------------|---------|-----------------|------------|
| Depth | 22.2 mm | Depth (inches) | 0.874 inch |
| Height | 15.3 mm | Height (inches) | 0.602 inch |
| Net weight | 8.93 g | | |

System Parameters

| | | | |
|--|--|-------------------|----------------------------|
| Product family | OMNIMATE Signal - series BL/SL 5.08 | | |
| Type of connection | Field connection | | |
| Wire connection method | Clamping yoke 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 | | |
| Touch-safe protection acc. to DIN VDE 57 106 | finger-safe plugged/ back-of-hand-safe unplugged | | |
| Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10 unplugged | | |
| Protection degree | IP20, when fully mounted | | |
| Volume resistance | ≤5 mΩ | | |
| Can be coded | Yes | | |
| Stripping length | 7 mm | | |
| Clamping screw | M 2.5 | | |
| Screwdriver blade | 0.6 x 3.5 | | |
| Screwdriver blade standard | DIN 5264-A | | |
| Plugging cycles | 25 | | |
| Plugging force/pole, max. | 4 N | | |
| Pulling force/pole, max. | 3 N | | |
| Tightening torque | Torque type | Wire connection | |
| | Usage information | Tightening torque | min. 0.4 Nm max. 0.5 Nm |

Material data

| | | | |
|---------------------------------------|----------------------------|---------------------------------------|--------|
| Insulating material | PBT | Colour | orange |
| Colour chart (similar) | RAL 2000 | 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. | 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 |

Creation date July 7, 2024 7:54:16 PM CEST

SLS 5.08/06/180B SN OR BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

| | | | | |
|---|--|------------------|-------------------------|------------|
| Solid, max. H05(07) V-U | 2.5 mm ² | | | |
| Stranded, min. H07V-R | 0.2 mm ² | | | |
| Stranded, max. H07V-R | 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, 2.5 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. | 2.5 mm ² | | | |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.0 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 |
| | Recommended wire-end ferrule | | H0.5/6 | |
| | Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 1 mm ² | |
| | | wire end ferrule | Stripping length | nominal |
| | Recommended wire-end ferrule | | H1.0/6 | |
| | Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 1.5 mm ² | |
| | | wire end ferrule | Stripping length | nominal |
| | Recommended wire-end ferrule | | H1.5/7 | |
| | Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 2.5 mm ² | |
| | | wire end ferrule | Stripping length | nominal |
| | Recommended wire-end ferrule | | H2.5/7 | |
| | Cross-section for conductor connection | | Type | fine-wired |
| | | nominal | 0.75 mm ² | |
| | | wire end ferrule | Stripping length | nominal |
| | Recommended wire-end ferrule | | H0.75/6 | |

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) | 21.5 A |
| Rated current, max. number of poles (Tu=20°C) | 16 A | Rated current, min. number of poles (Tu=40°C) | 18 A |
| 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 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 120 A |

SLS 5.08/06/180B SN OR BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

| | |
|-----------------------------------|--|
| Rated voltage (Use group B / CSA) | 300 V |
| Rated current (Use group B / CSA) | 15 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 / CSA) | 300 V |
| Rated current (Use group D / CSA) | 10 A |
| Wire cross-section, AWG, max. | AWG 12 |

Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

| | |
|---------------------------------------|--|
| Rated voltage (Use group B / UL 1059) | 300 V |
| Rated current (Use group B / UL 1059) | 14 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 | 350 mm |
| VPE width | 135 mm | VPE height | 31 mm |

Type tests

| | | |
|-------------------------------|----------------|---|
| Test: Durability of markings | Standard | VDE 0627 Tab. 7 item 3/6.86 |
| | Test | durability |
| | Evaluation | passed |
| Test: Clampable cross section | Standard | VDE 0609 part 1 06.83, EN 60947-1 03.91 |
| | Conductor type | Type of conductor and H05V-U0.5 conductor cross-section |
| | | Type of conductor and H05V-K0.5 conductor cross-section |
| | | Type of conductor and H05V-U2.5 conductor cross-section |
| | | Type of conductor and H05V-K2.5 conductor cross-section |
| | | Type of conductor and AWG 28 conductor cross-section |
| | | Type of conductor and AWG 14 conductor cross-section |
| | Evaluation | passed |

SLS 5.08/06/180B SN OR 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 | EN 60947-1/1991 section 8.2.4.3 |
| | Requirement | 0.3 kg |
| | Conductor type | Type of conductor and H05V-U0.5 conductor cross-section |
| | | Type of conductor and H05V-K0.5 conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.7 kg |
| | Conductor type | Type of conductor and H07V-U2.5 conductor cross-section |
| | | Type of conductor and H07V-K2.5 conductor cross-section |
| | Evaluation | passed |
| Pull-out test | Standard | EN 60947-1/1991 section 8.2.4.4 |
| | Requirement | ≥5 N |
| | Conductor type | Type of conductor and AWG 28/1 conductor cross-section |
| | | Type of conductor and AWG 28/7 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥50 N |
| | Conductor type | Type of conductor and H07V-U2.5 conductor cross-section |
| | | Type of conductor and H07V-K2.5 conductor cross-section |
| | | Type of conductor and AWG 14/19 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

/

SLS 5.08/06/180B SN OR 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 • 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 • 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. (UR) | E60693 |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| 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 |

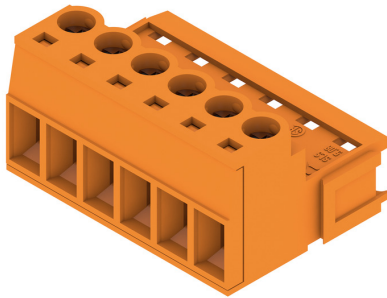
SLS 5.08/06/180B SN OR BX

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

www.weidmueller.com

Drawings

Product image



Dimensional drawing



Graph



Graph



Graph



Product benefits



Lower assembly costs
Secure in a matter of seconds

SLS 5.08/06/180B SN OR BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

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 | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No. | 1545710000 | PCB plug-in connector, Accessories, Coding element, black, Number | | Box |
| GTIN (EAN) | 4008190087142 | of poles: 1 | | |
| Qty. | 50 pc(s). | | | |
| Type | BLZ/SL KO OR BX | Version | Product data | Packaging |
| Order No. | 1573010000 | PCB plug-in connector, Accessories, Coding element, orange, Number | | Box |
| GTIN (EAN) | 4008190048396 | of poles: 1 | | |
| Qty. | 100 pc(s). | | | |

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 BB6R OR | Version | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No. | 1723470000 | PCB plug-in connector, Accessories, Mounting block, orange, Number | | Box |
| GTIN (EAN) | 4008190366025 | of poles: 1 | | |
| Qty. | 20 pc(s). | | | |

SLS 5.08/06/180B SN OR BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

| Type | SLA BB1R OR | Version | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No. | 1723430000 | PCB plug-in connector, Accessories, Mounting block, orange, Number | | Box |
| GTIN (EAN) | 4008190365981 | of poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB2R OR | Version | Product data | Packaging |
| Order No. | 1723440000 | PCB plug-in connector, Accessories, Mounting block, orange, Number | | Box |
| GTIN (EAN) | 4008190365998 | of poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB5R SW | Version | Product data | Packaging |
| Order No. | 1723510000 | PCB plug-in connector, Accessories, Mounting block, black, Number of | | Box |
| GTIN (EAN) | 4008190366063 | poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB11R OR | Version | Product data | Packaging |
| Order No. | 1604120000 | PCB plug-in connector, Accessories, Mounting block, orange, Number | | Box |
| GTIN (EAN) | 4008190182977 | of poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB6R SW | Version | Product data | Packaging |
| Order No. | 1723520000 | PCB plug-in connector, Accessories, Mounting block, black, Number of | | Box |
| GTIN (EAN) | 4008190366070 | poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB1R SW | Version | Product data | Packaging |
| Order No. | 1723480000 | PCB plug-in connector, Accessories, Mounting block, black, Number of | | Box |
| GTIN (EAN) | 4008190366032 | poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB11R SW | Version | Product data | Packaging |
| Order No. | 1692340000 | PCB plug-in connector, Accessories, Mounting block, black, Number of | | Box |
| GTIN (EAN) | 4008190864965 | poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB12R SW | Version | Product data | Packaging |
| Order No. | 1626880000 | PCB plug-in connector, Accessories, Mounting block, black, Number of | | Box |
| GTIN (EAN) | 4008190198213 | poles: 1 | | |
| Qty. | 100 pc(s). | | | |
| Type | SLA BB2R SW | Version | Product data | Packaging |
| Order No. | 1723490000 | PCB plug-in connector, Accessories, Mounting block, black, Number of | | Box |
| GTIN (EAN) | 4008190366049 | poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB5R OR | Version | Product data | Packaging |
| Order No. | 1723460000 | PCB plug-in connector, Accessories, Mounting block, orange, Number | | Box |
| GTIN (EAN) | 4008190366018 | of poles: 1 | | |
| Qty. | 20 pc(s). | | | |
| Type | SLA BB12R OR | Version | Product data | Packaging |
| Order No. | 1593450000 | PCB plug-in connector, Accessories, Mounting block, orange, Number | | Box |
| GTIN (EAN) | 4008190122164 | of poles: 1 | | |
| Qty. | 100 pc(s). | | | |

SLS 5.08/06/180B SN OR BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Drawings

Product benefits



Flexible application options
For 3 connection systems

WEIDMÜLLER INTERFAC GmbH & Co.KG
WEITERGABE SOWIE VERVIELFÄLTIGUNG DIESER DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINER INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATET.
ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTERREINTRAGUNG 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 PATENTS, UTILITY MODELS OR DESIGNS.

MASS E OHNE TOLERANZ SIND KEINE PRUEFFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

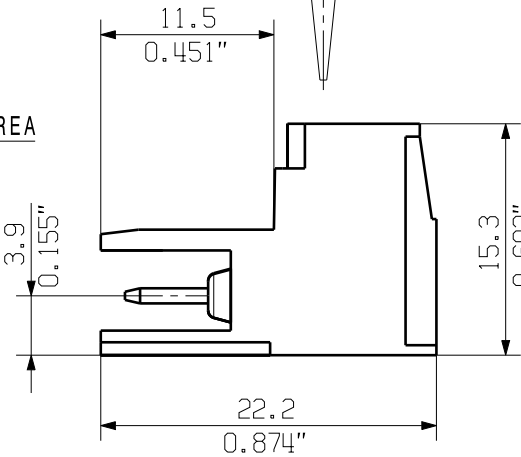
ALLGEMEINGUELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

SHOWN: SLS 5.08/04/180



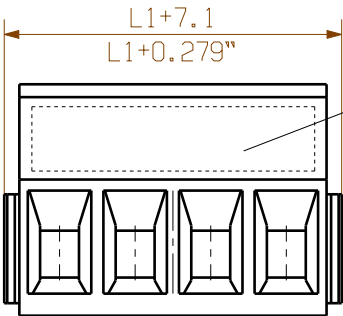
SCREWDRIVER



CONDUCTOR



SHOWN: SLS 5.08/04/180B



SCREWDRIVER



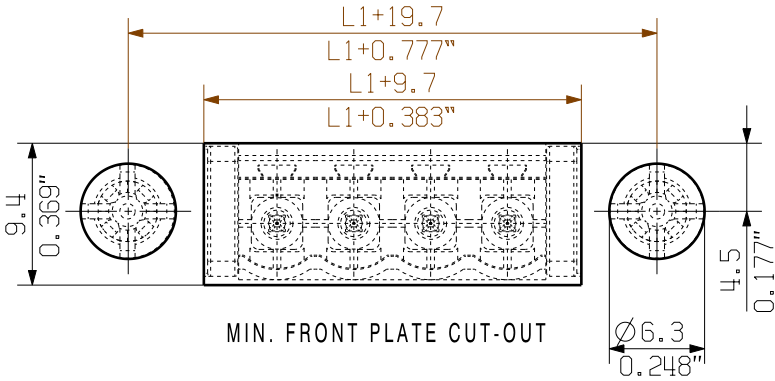
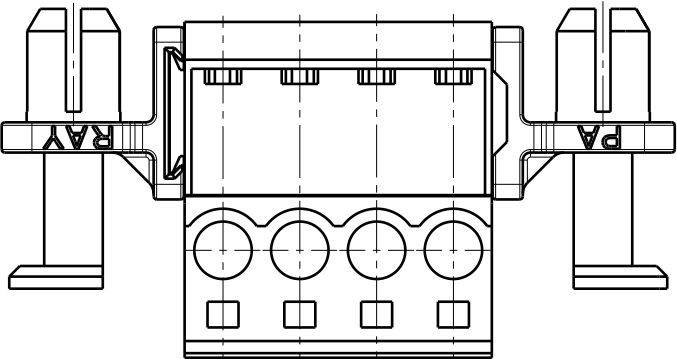
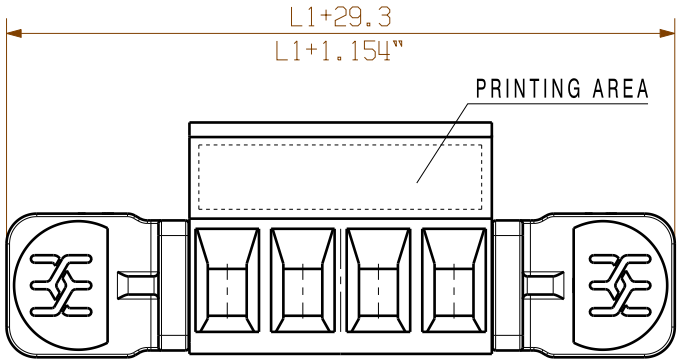
CONDUCTOR



For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 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.

SHOWN: SLS 5.08/04/180DF



| | | | |
|----------------------------------|------------------------------------|--------|----------|
| 0.5-0.8 | 0.019-0.031 | 6.3 | 0.248 |
| 1.00 | 0.039 | 6.4 | 0.252 |
| 1.5 | 0.059 | 6.5 | 0.256 |
| 2.00 | 0.079 | 6.7 | 0.264 |
| WANDDICKE WALL THICKNESS [mm] | WANDDICKE WALL THICKNESS [inch] | d [mm] | d [inch] |

SCREWDRIVER



| | | |
|----|------------------|----------------------|
| 24 | 106.84 | 4.600 |
| 23 | 111.76 | 4.400 |
| 22 | 106.68 | 4.200 |
| 21 | 101.60 | 4.000 |
| 20 | 96.52 | 3.800 |
| 19 | 91.44 | 3.600 |
| 18 | 86.36 | 3.400 |
| 17 | 81.28 | 3.200 |
| 16 | 76.20 | 3.000 |
| 15 | 71.12 | 2.800 |
| 14 | 66.04 | 2.600 |
| 13 | 60.96 | 2.400 |
| 12 | 55.88 | 2.200 |
| 11 | 50.80 | 2.000 |
| 10 | 45.72 | 1.800 |
| 9 | 40.64 | 1.600 |
| 8 | 35.56 | 1.400 |
| 7 | 30.48 | 1.200 |
| 6 | 25.40 | 1.000 |
| 5 | 20.32 | 0.800 |
| 4 | 15.24 | 0.600 |
| 3 | 10.16 | 0.400 |
| 2 | 5.08 | 0.200 |
| n | POLZAHL POLES | L1 [mm] L1 [inch] |

P=5.08 RASTER
PITCH

METRIC TOLERANCES
X. = ±0.3
X.X = ±0.1
X.XX = ±0.05

70327/5
22.05.13 HELIS_MA

01

MODIFICATION

DRAWN

27.08.2003

RESPONSIBLE

CHECKED

27.05.2013

APPROVED

DATE

NAME

HECKERT_M

HECKERT_M

SCALE: 2/1
SUPERSEDES: .

PRODUCT FILE: SLS 5.08

CAT.NO.: .

C 21277 **18**

DRAWING NO. SHEET 01 OF 01 SHEETS

ISSUE NO.

Weidmüller

SLS 5.08/././180...
STIFTSTECKER
MALE PLUG