

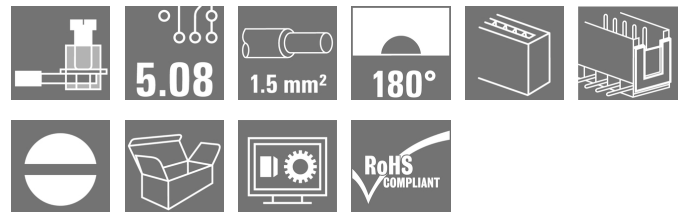
**SLS 5.08/18/180B SN OR BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

Similar to illustration

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,<br>Number of poles: 18, 180°, Clamping yoke<br>connection, Clamping range, max. : 3.31 mm²,<br>Box |
| Order No.    | <a href="#">1645160000</a>                                                                                                                    |
| Type         | SLS 5.08/18/180B SN OR BX                                                                                                                     |
| GTIN (EAN)   | 4008190284374                                                                                                                                 |
| Qty.         | 18 pc(s).                                                                                                                                     |
| Product data | IEC: 400 V / 21.5 A / 0.2 - 2.5 mm²<br>UL: 300 V / 14 A / AWG 26 - AWG 12                                                                     |
| Packaging    | Box                                                                                                                                           |

Creation date March 24, 2021 5:49:51 PM CET

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## Technical data

## Dimensions and weights

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Depth      | 22.3 mm | Depth (inches)  | 0.878 inch |
| Height     | 15.2 mm | Height (inches) | 0.598 inch |
| Net weight | 27.03 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 inch                                         |                   |                            |
| Conductor outlet direction                   | 180°                                             |                   |                            |
| Number of poles                              | 18                                               |                   |                            |
| L1 in mm                                     | 86.36 mm                                         |                   |                            |
| L1 in inches                                 | 3.4 inch                                         |                   |                            |
| 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 |                   |                            |
| 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<br>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    | Insulation strength                   | ≥ 10 <sup>8</sup> Ω        |
| UL 94 flammability rating             | V-0      | Contact material                      | CuSn                       |
| 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 <sup>2</sup> |
| Clamping range, max.                    | 3.31 mm <sup>2</sup> |
| 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 <sup>2</sup>  |
| Solid, max. H05(07) V-U                 | 2.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K              | 0.2 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K              | 2.5 mm <sup>2</sup>  |

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w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm<sup>2</sup> min.w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm<sup>2</sup> max.w. wire end ferrule, DIN 46228 pt 1, 0.2 mm<sup>2</sup> min.w. wire end ferrule, DIN 46228 pt 1, 2.5 mm<sup>2</sup> max.

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 <sup>2</sup>     |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 6 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H0.5/6</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 1 mm <sup>2</sup>       |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 6 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H1.0/6</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 1.5 mm <sup>2</sup>     |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 7 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H1.5/7</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 2.5 mm <sup>2</sup>     |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 7 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H2.5/7</a>  |      |
|                     | Cross-section for conductor connection | Type                         | fine-wired              |      |
|                     |                                        | nominal                      | 0.75 mm <sup>2</sup>    |      |
|                     | wire end ferrule                       | Stripping length             | nominal                 | 6 mm |
|                     |                                        | Recommended wire-end ferrule | <a href="#">H0.75/6</a> |      |

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 |

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## 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 | 30 mm  |
| VPE width | 135 mm | VPE height | 350 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 conductor cross-section | H05V-U0.5 |
|                               |                | Type of conductor and conductor cross-section | H05V-K0.5 |
|                               |                | Type of conductor and conductor cross-section | H05V-U2.5 |
|                               |                | Type of conductor and conductor cross-section | H05V-K2.5 |
|                               |                | Type of conductor and conductor cross-section | AWG 28    |
|                               |                | Type of conductor and conductor cross-section | AWG 14    |
|                               | Evaluation     | passed                                        |           |

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

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0    | 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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## 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"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• 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.</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul> |

## Approvals

Approvals



|                       |         |
|-----------------------|---------|
| ROHS                  | Conform |
| UL File Number Search | E60693  |

## Downloads

|                                             |                                                 |
|---------------------------------------------|-------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a> |
| Engineering Data                            | <a href="#">STEP</a>                            |
| Engineering Data                            | <a href="#">WSCAD</a>                           |

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# Drawings

## Dimensional drawing



## Graph



## Graph



## Graph



## Product benefits



Lower assembly costs  
Secure in a matter of seconds

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## Drawings

### Product benefits



Flexible application options  
For 3 connection systems

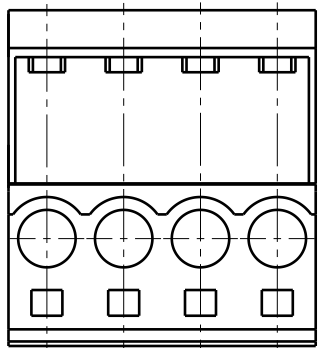
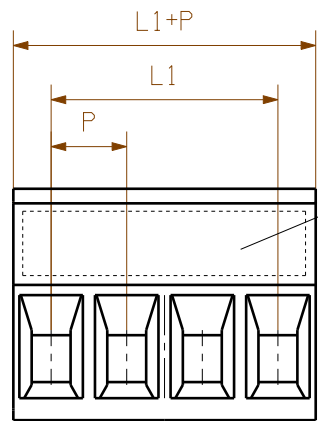
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MASS E OHNE TOLERANZ SIND KEINE PRUEFMASS E  
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

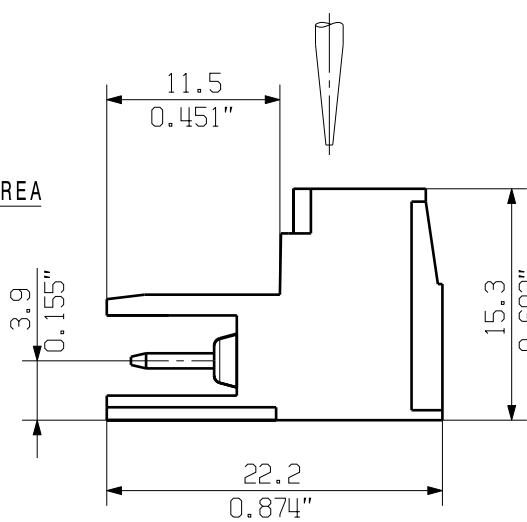
ALLGEMEINGUELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE  
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

DIE DEUTSCHE VERSION IST VERBINDLICH  
THE GERMAN VERSION IS BINDING

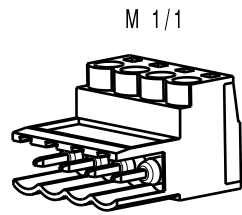
SHOWN: SLS 5.08/04/180



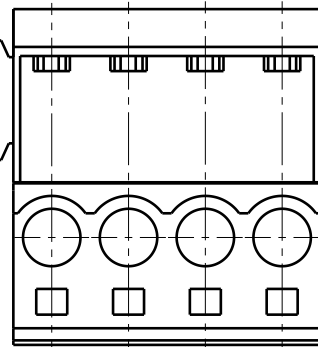
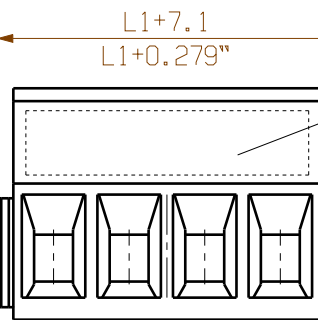
SCREWDRIVER



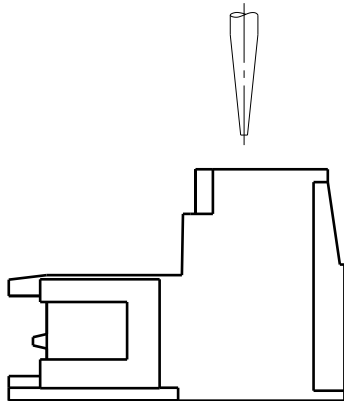
CONDUCTOR



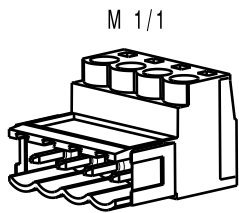
SHOWN: SLS 5.08/04/180B



SCREWDRIVER



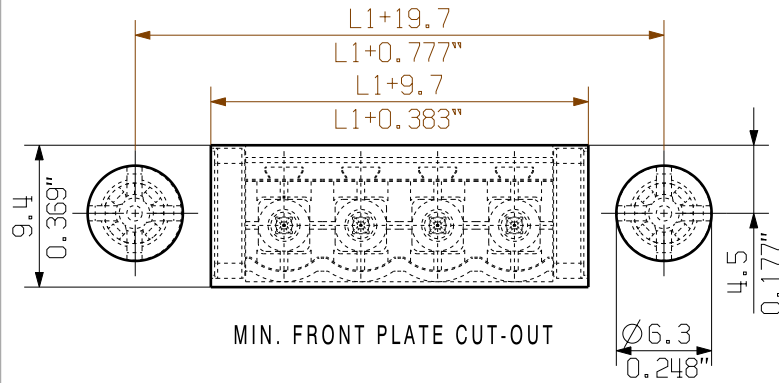
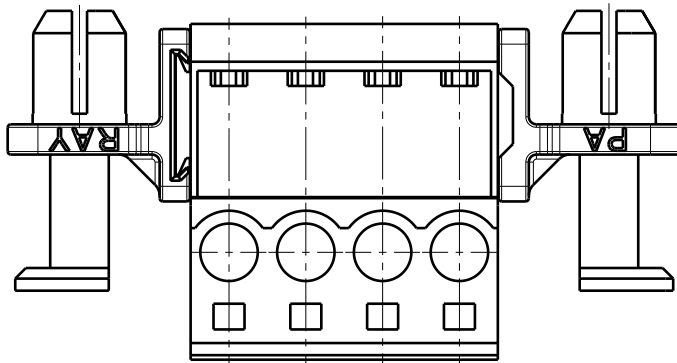
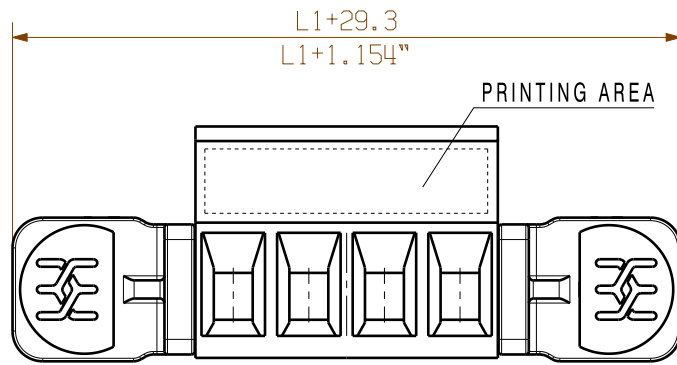
CONDUCTOR



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.

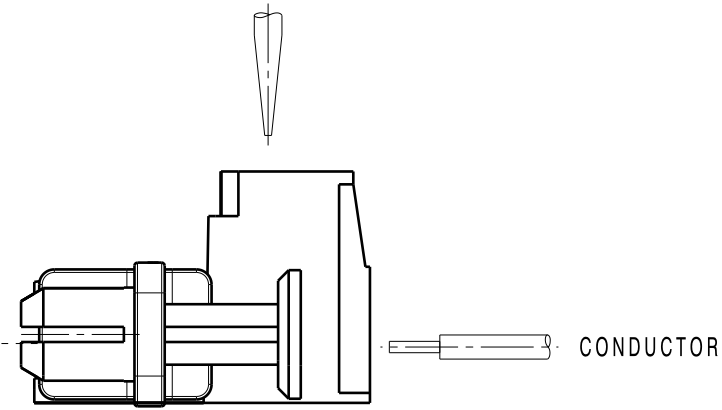
Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

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<br>WALL THICKNESS [mm] | WANDDICKE<br>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<br>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

