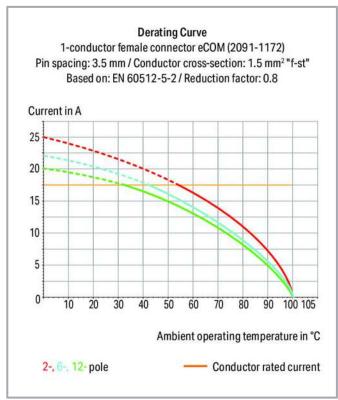
1-conductor female plug; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 7-pole;

1,50 mm<sup>2</sup>; light gray

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 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

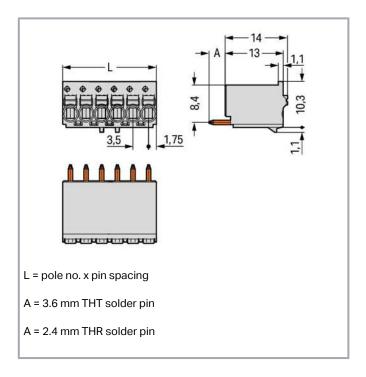
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#### Item description

- Universal connection for all conductor types
- Simple, push-in termination of solid and ferruled conductors
- Easy-to-use design does not require special tools
- Ability to wire while mated or unmated
- Integrated test ports for testing parallel to conductor entry
- Custom-installed solder pins

#### Safety information 1:

The **picoMAX** Pluggable Connection System includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

### Data

#### Electrical data

# **IEC Approvals**

| Ratings per             | IEC/EN 60664-1 |
|-------------------------|----------------|
| Rated voltage (III / 3) | 160 V          |

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| Rated surge voltage (III/3) | 2.5 kV  |  |
|-----------------------------|---|--|
| Rated voltage (III/2)       | 160 V   |  |
| Rated surge voltage (III/2) | 2.5 kV  |  |
| Nominal voltage (II/2)      | 320 V   |  |
| Rated surge voltage (II/2)  | 2.5 kV  |  |
| Rated current               | 10 A  |  |
| Legend (ratings)            | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |  |

# **UL Approvals**

| Approvals per                  | UL 1059 |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V   |
| Rated current UL (Use Group B) | 10 A    |
| Rated voltage UL (Use Group D) | 300 V   |
| Rated current UL (Use Group D) | 10 A    |

# **CSA Approvals**

Approvals per CSA

# Connection data

| Connection technology                             | Push-in CAGE CLAMP®     |  |
|---|-------------------------|--|
| Actuation type                                    | Push-button             |  |
| Solid conductor                                   | 0.2 1.5 mm² / 24 14 AWG |  |
| Fine-stranded conductor                           | 0.2 1.5 mm² / 24 14 AWG |  |
| Fine-stranded conductor; with insulated ferrule   | 0.25 0.75 mm²           |  |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 1.5 mm²            |  |
| Strip length                                      | 8 9 mm / 0.31 0.35 inch |  |
| Pole No.  | 7                       |  |
| Total number of connection points                 | 7                       |  |
| Total number of potentials                        | 7                       |  |
| Number of connection types                        | 1                       |  |
| Number of levels                                  | 1                       |  |
|   |                         |  |

# Physical data

| Pin spacing | 3.5 mm / 0.138 inch  |
|-------------|----------------------|
| Width       | 24.5 mm / 0.965 inch |
| Height      | 14 mm / 0.551 inch   |

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| Depth                                | 11.4 mm / 0.449 inch     |
|--------------------------------------|--------------------------|
| Solder pin length                    | 3.6 mm                   |
| Solder pin diameter                  | 1 mm                     |
| Drilled hole diameter with tolerance | 1.2 <sup>(+0.1)</sup> mm |

# Plug-in connection

| Contact type (pluggable connector) Female connector/socket |         |
|--|---------|
| Connector (connection type)                                | for PCB |
| Mismating protection                                       | No      |
| Mating direction to the PCB                                | 90°     |

# **PCB** contact

| PCB Contact | THT |
|-------------|-----|
|-------------|-----|

#### Material data

| Color                       | light gray                             |
|-----------------------------|--|
| Material group              | I                                      |
| Insulation material         | Polyphthalamide (PPA GF)               |
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Chrome nickel spring steel (CrNi)      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.009 MJ                               |
| Weight                      | 4.1 g                                  |

# **Environmental requirements**

| Limit temperature range | -60 +100 °C |  |
|-------------------------|-------------|--|
|-------------------------|-------------|--|

# Commercial data

| Packaging type        | BOX           |
|-----------------------|---------------|
| Country of origin     | DE            |
| GTIN                  | 4055143428637 |
| Customs tariff number | 8536694040    |

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Certificate

# Approvals / Certificates

### **Country specific Approvals**

| Logo          | Approval                       | Additional Approval Text | name        |
|---------------|--------------------------------|--------------------------|-------------|
|               | СВ                             | IEC 61984                | NL-49736    |
|               | DEKRA Certification B.V.       |                          | /A1         |
|               | CSA                            | C22.2                    | 2362521     |
| SA            | DEKRA Certification B.V.       |                          |             |
|               | KEMA/KEUR                      | EN 61984                 | 71-         |
| KEMA          | DEKRA Certification B.V.       |                          | 102260      |
| <b>N</b> EUR  |                                |                          | REV.1       |
| JL-Approvals  | 5                              |                          |             |
|               |                                |                          | Certificate |
| Logo          | Approval                       | Additional Approval Text | name        |
|               | UL                             | UL 1977                  | 20190909-   |
| $\mathcal{R}$ | Underwriters Laboratories Inc. |                          | E45171      |
|               | UR                             | UL 1059                  | E45172-     |
| AI.           | Underwriters Laboratories Inc. |                          | 20100415    |
|               |                                |                          |             |

# Downloads

# Documentation

# Additional Information

| Technical explanations | 2019 Apr 3 | pdf    | Download |
|------------------------|------------|--------|----------|
|                        |            | 2.0 MB |          |

### **CAD files**

# **PCB** Design

Symbol and Footprint 2091-1177 URL Download

CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

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WAGO Corporation Do you have any questions about our products? Germantown, WI 53022 We are always happy to take your call at {0}.

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### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

### CAD data

| 2D/3D Models 2091-1177 | URL | Download |
|------------------------|-----|----------|
| CAE data               |     |          |
| ZUKEN Portal 2091-1177 | URL | Download |

# **Environmental Product Compliance**

# Compliance Search

Environmental Product Compliance 2091-1177 URL Download

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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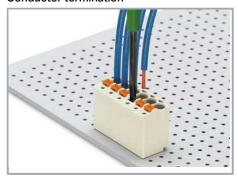
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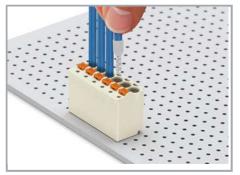
1-conductor female plug; push-button; 1.5 mm $^2$ ; Pin spacing 3.5 mm; 7-pole; 1,50 mm $^2$ ; light gray

#### **Installation Notes**

#### Conductor termination



Terminating fine-stranded conductors and removing all conductor types via push-buttons.



Solid and ferruled conductors are terminated by simply pushing them into unit.

#### Marking



Pole marking via direct marking perpendicular to conductor entry.



Pole marking via factory direct marking.

### Testing

Subject to changes. Please also observe the further product documentation!

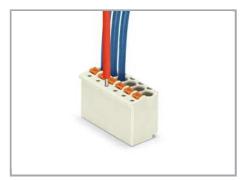
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Testing via 1 mm Ø test pin – touch contact.

# **Product family**

<i>picoMAX</i><sup>®</sup> <i>eCOM</i>> 3.5 Show all products from the family

Subject to changes. Please also observe the further product documentation!