

Data Sheet | Item Number: 2091-1105

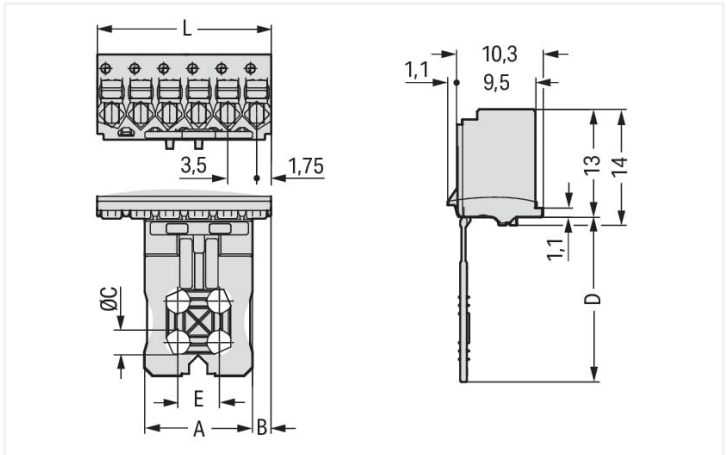
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 5-pole; Gripping plate; 1,50 mm²; light gray

<https://www.wago.com/2091-1105>



Color: ■ light gray

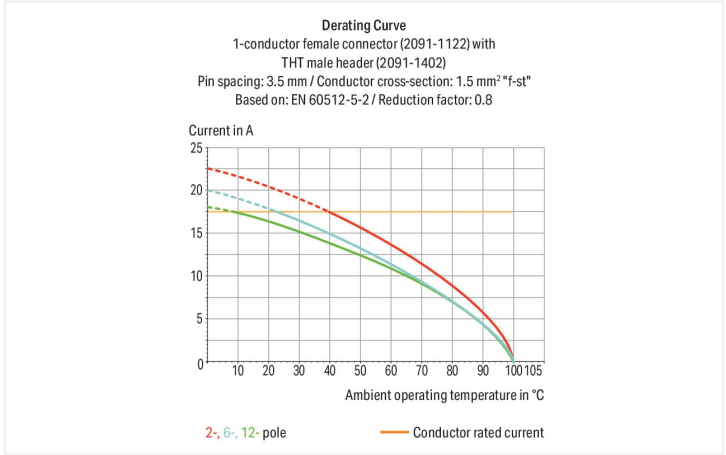
Similar to illustration



Dimensions in mm

L = (pole no. – 1) x pin spacing

| Gripping plate Dimensions (in mm): |    |      |     |    |   |
|------------------------------------|----|------|-----|----|---|
| Polzahl                            | A  | B    | C   | D  | E |
| 2                                  | 6  | 0.45 | –   | 17 | – |
| 3                                  | 6  | 2.20 | –   | 17 | – |
| 4                                  | 6  | 2.20 | –   | 17 | – |
| 5                                  | 13 | 2.25 | 3.0 | 20 | 5 |
| 6                                  | 13 | 2.25 | 3.0 | 20 | 5 |
| 7                                  | 13 | 5.75 | 3.0 | 20 | 5 |
| 8                                  | 13 | 5.75 | 3.0 | 20 | 5 |
| 10                                 | 27 | 2.25 | 4.2 | 25 | 8 |
| 12                                 | 27 | 5.75 | 4.2 | 25 | 8 |



- Universal connection for all conductor types
- Simple, push-in termination of solid and ferruled conductors
- Easy-to-use design does not require specialty tools
- Ability to wire while mated or unmated
- Test port parallel to conductor entry – touch contact
- Integrated locking latches prevent accidental disconnection

| Notes              |                                                                                                                                                                                                                                                                                                                                   |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety information | The <b>picoMAX® Pluggable Connection System</b> 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. |
| Variants:          | Direct marking<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .                                                                                                                                                    |



| Electrical data      |  |  |  |                |        |        |  |
|----------------------|--|--|--|----------------|--------|--------|--|
| Ratings per          |  |  |  | IEC/EN 60664-1 |        |        |  |
| Overvoltage category |  |  |  | III            | III    | II     |  |
| Pollution degree     |  |  |  | 3              | 2      | 2      |  |
| Nominal voltage      |  |  |  | 160 V          | 160 V  | 320 V  |  |
| Rated surge voltage  |  |  |  | 2.5 kV         | 2.5 kV | 2.5 kV |  |
| Rated current        |  |  |  | 10 A           | 10 A   | 10 A   |  |

| Approvals per |  |  |  | UL 1059 |   |       |  |
|---------------|--|--|--|---------|---|-------|--|
| Use group     |  |  |  | B       | C | D     |  |
| Rated voltage |  |  |  | 300 V   | - | 300 V |  |
| Rated current |  |  |  | 10 A    | - | 10 A  |  |

| Connection data            |  |  |  |   |  |  |  |
|----------------------------|--|--|--|---|--|--|--|
| Connection points          |  |  |  | 5 |  |  |  |
| Total number of potentials |  |  |  | 5 |  |  |  |
| Number of connection types |  |  |  | 1 |  |  |  |
| Number of levels           |  |  |  | 1 |  |  |  |

| Connection 1                                      |                                       |
|---------------------------------------------------|---------------------------------------|
| Connection technology                             | Push-in CAGE CLAMP®                   |
| Actuation type                                    | Push-button                           |
| Actuation direction 1                             | Operation parallel to conductor entry |
| 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 inches     |
| Pole number                                       | 5                                     |

| Physical data |                        |
|---------------|------------------------|
| Pin spacing   | 3.5 mm / 0.138 inches  |
| Width         | 17.5 mm / 0.689 inches |
| Height        | 33 mm / 1.299 inches   |
| Depth         | 11.4 mm / 0.449 inches |

| Mechanical data          |                     |
|--------------------------|---------------------|
| Variable coding          | Yes                 |
| Design                   | with gripping plate |
| Anti-rotation protection | Yes                 |

| Plug-in connection                   |                         |
|--------------------------------------|-------------------------|
| Contact type (pluggable connector)   | Female connector/socket |
| Connector (connection type)          | for conductor           |
| Mismating protection                 | No                      |
| Plugging without loss of pin spacing | Yes                     |

| Material data               |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| Note (material data)        | <a href="#">Information on material specifications can be found here</a> |
| 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                                                                      |
| Fire load                   | 0.013 MJ                                                                 |
| Weight                      | 2.4 g                                                                    |



| Environmental requirements |                 |
|----------------------------|-----------------|
| Limit temperature range    | -60 ... +100 °C |
| Processing temperature     | -35 ... +60 °C  |

| Commercial data       |                         |
|-----------------------|-------------------------|
| Product Group         | 26 (picoMAX Connectors) |
| eCl@ss 10.0           | 27-14-11-06             |
| eCl@ss 9.0            | 27-14-11-06             |
| ETIM 8.0              | EC001284                |
| ETIM 7.0              | EC001284                |
| PU (SPU)              | 50 pcs                  |
| Packaging type        | Box                     |
| Country of origin     | DE                      |
| GTIN                  | 4050821160700           |
| Customs tariff number | 85366990990             |

| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |

Approvals / Certificates

General approvals



| Approval                              | Standard      | Certificate Name |
|---------------------------------------|---------------|------------------|
| CB<br>DEKRA Certification B.V.        | IEC 61984     | NL-49736/A1      |
| CSA<br>DEKRA Certification B.V.       | C22.2         | 2362521          |
| CSA<br>DEKRA Certification B.V.       | C22.2 No. 158 | 2362521          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984      | 71-102260 REV.1  |
| UL<br>Underwriters Laboratories Inc.  | UL 1977       | E45171           |
| UR<br>Underwriters Laboratories Inc.  | UL 1059       | E45172           |

Downloads

Environmental Product Compliance

| Compliance Search                          |  |
|--------------------------------------------|--|
| Environmental Product Compliance 2091-1105 |  |



Documentation

| Additional Information |            |                   |  |
|------------------------|------------|-------------------|--|
| Technical Section      | 03.04.2019 | pdf<br>2027.26 KB |  |

CAD/CAE-Data

| CAD data                  | CAE data                  |
|---------------------------|---------------------------|
| 2D/3D Models<br>2091-1105 | ZUKEN Portal<br>2091-1105 |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



**Item No.: 2091-1525/002-000**  
1-conductor male connector; Push-in CA-GE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 5-pole; Integrated release lever; 1,50 mm²; light gray



**Item No.: 2091-1425**  
THT male header; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 5-pole; light gray



**Item No.: 2091-1405**  
THT male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 5-pole; light gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



**Item No.: 2091-1610**  
Coding key carrier; suitable for 3.5 mm pin spacing; orange

1.2.2 Test and measurement

1.2.2.1 Testing accessories



**Item No.: 735-500**  
WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

1.2.3 Tool

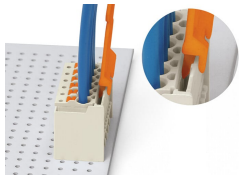
1.2.3.1 Operating tool



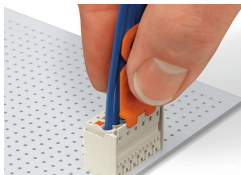
Item No.: 210-719  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

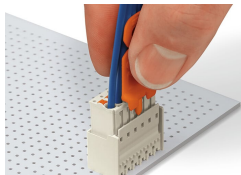
Locking system



Disconnecting a female connector via unlocking tool. Plug unlocking tool into the male header's locking latch.

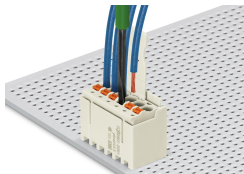


Insert unlocking tool until it hits the back-stop. Wedge opens locking latches.



Pull on both unlocking tool and conductors to remove female connector from male header.

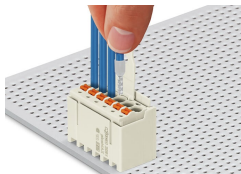
Conductor termination



Inserting fine-stranded conductor into mated female connector via push-button.



Inserting a fine-stranded conductor into an unmated female connector via push-button.



Inserting solid and ferruled conductors via push-in termination.

Marking



Pole marking via factory direct marking.

Coding



Coding a female connector (via coding key carrier and two keys for female connector, see symbol).

Testing



Testing via 1 mm Ø test pin – touch contact.