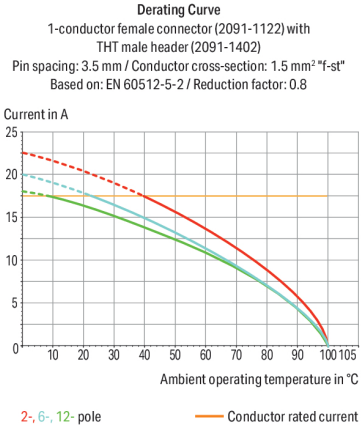
# Data Sheet | Item Number: 2091-1123

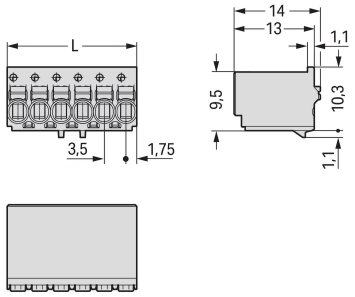
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 1,50 mm²; light gray

https://www.wago.com/2091-1123






Color: light gray




Dimensions in mm
L = pole no. x pin spacing

Female connector, 2091 Series, light gray

This female connector (item number 2091-1123) is designed for fault-free electrical installations. Conductors should only be connected to this female connector if their strip length is between 8 and 9 mm . This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The item's dimensions are (10.5 x 14 x 11.4) mm (width x height x depth). Depending on the type of conductor, this female connector is suitable for conductor cross sections ranging from 0.2 mm² to 1.5 mm².

The contact surface is coated with tin.

## Notes

| | |
|---|---|
| Safety Information | 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.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. |
| Safety information 2 | The use of ferrules is recommended for applications with higher requirements.<br><br>To prevent excessive force on the clamping point, effective cable strain relief must be used. |
| Variants: | Direct marking<br>Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/. |

## 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 impulse withstand 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

| | |
|---|---|
| Clamping units | 3 |
| Total number of potentials | 3 |
| 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 | 3 |

## Physical data

| | |
|---|---|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 10.5 mm / 0.413 inches |
| Height | 14 mm / 0.551 inches |
| Depth | 11.4 mm / 0.449 inches |

## Mechanical data

| | |
|---|---|
| Variable coding | Yes |
| Anti-rotation protection | Yes |


Continued on next page

## 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) | Information on material specifications can be found here |
| Color | light gray |
| Material group | I |
| Insulation material (main housing) | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Electrolytic copper ($E_{Cu}$) |
| Contact Plating | Tin |
| Fire load | 0.017 MJ |
| Weight | 1.4 g |

## Environmental requirements

| | |
|---|---|
| Limit temperature range | -60 … +100 °C |
| Processing temperature | -35 … +60 °C |

## Commercial data

| | |
|---|---|
| Product Group | 26 (picoMAX Connectors) |
| PU (SPU) | 200 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4050821160762 |
| Customs tariff number | 85366990990 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-14-11-06 |
| eCl@ss 9.0 | 27-14-11-06 |
| ETIM 9.0 | EC001284 |
| ETIM 10.0 | EC001284 |
| ECCN | NO US CLASSIFICATION |

## Environmental Product Compliance

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


Continued on next page

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CB<br>DEKRA Certification B.V. | IEC 61984 | NL-89884 |
| CSA<br>CSA Group | C22.2 | 2362521 |
| CSA<br>DEKRA Certification B.V. | C22.2 No. 158 | 2362521 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984 | 71-129873 |
| UR<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 2091-1123

## Documentation

**Additional Information**

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

## CAD/CAE-Data

**CAD data**

2D/3D Models 2091-1123

**CAE data**

ZUKEN Portal 2091-1123

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Male connector/plug



Item No.: 2091-1523/020-3000
1-conductor male connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; DIN-35 rail/panel mounting; Snap-in mounting feet; Integrated release lever; direct marking; 1,50 mm²; light gray



Item No.: 2091-1503/002-000
1-conductor male connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Gripping plate; 1,50 mm²; light gray



Item No.: 2091-1503/002-3000
1-conductor male connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Gripping plate; direct marking; 1,50 mm²; light gray



Item No.: 2091-1523/002-000
1-conductor male connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Integrated release lever; 1,50 mm²; light gray


Continued on next page

### 1.1.1 Male connector/plug



Item No.: 2091-1523/002-3000
1-conductor male connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Integrated release lever; direct marking; 1,50 mm²; light gray



Item No.: 2091-1524/020-000
1-conductor male connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; DIN-35 rail/panel mounting; Snap-in mounting feet; Integrated release lever; 1,50 mm²; light gray



Item No.: 2091-1423/205-000
THR male header; 1.0 mm Ø solder pin; angled; clamping collar; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1423/200-000/997-406
THR male header; 1.0 mm Ø solder pin; angled; in tape-and-reel packaging; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1423/200-000
THR male header; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1403/205-000
THR male header; 1.0 mm Ø solder pin; straight; clamping collar; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1403/200-000
THR male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1723/200-000
THR pin strip; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 3-pole; black



Item No.: 2091-1703/200-000
THR pin strip; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 3-pole; black



Item No.: 2091-1423/005-000
THT male header; 1.0 mm Ø solder pin; angled; clamping collar; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1423
THT male header; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1403/005-000
THT male header; 1.0 mm Ø solder pin; straight; clamping collar; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1403
THT male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1723
THT pin strip; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 3-pole; black



Item No.: 2091-1703
THT pin strip; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 3-pole; black

## 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 Ferrule

#### 1.2.2.1 Ferrule



Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-131
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-132
Ferrule; Sleeve for 0.34 mm² / 22 AWG; uninsulated; electro-tin plated



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



Item No.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored

### 1.2.3 Strain relief

#### 1.2.3.1 Gripping plate



Item No.: 2091-1601/002-000
Gripping plate with sliding connector release; for female and male connectors; 2 parts; Pin spacing 3.5 mm; 3- to 4-pole; light gray



Item No.: 2091-1601
Gripping plate; for female and male connectors; 1 part; Pin spacing 3.5 mm; 3- to 4-pole; light gray

### 1.2.4 Test and measurement

#### 1.2.4.1 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

### 1.2.5 Tool

#### 1.2.5.1 Operating tool



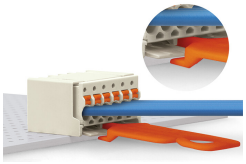
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



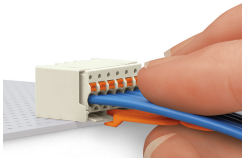
Item No.: 2092-1630
Unlocking tool; orange

## Installation Notes

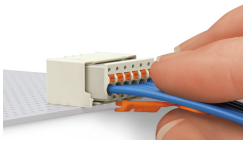
### Locking system



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

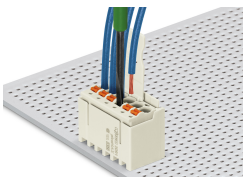


Insert unlocking tool until it hits the backstop. Wedge opens locking latches.

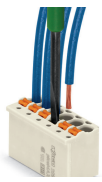


Pull on both unlocking tool and conductors to remove female connector from male header.

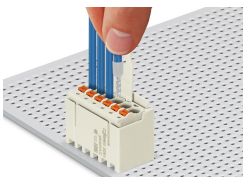
### Conductor termination



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.


Continued on next page

## 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.