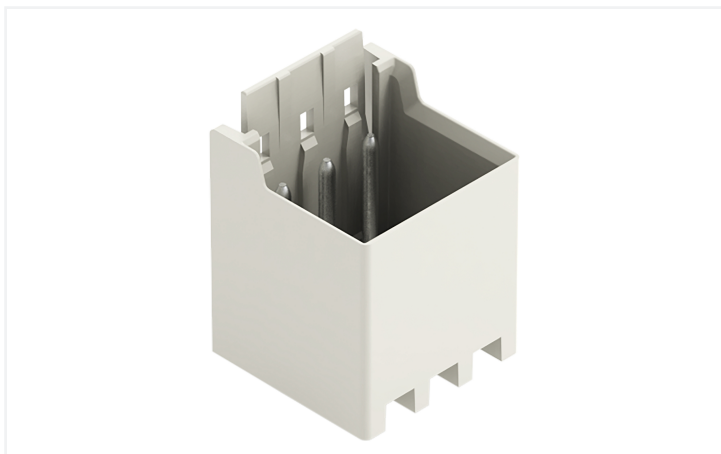


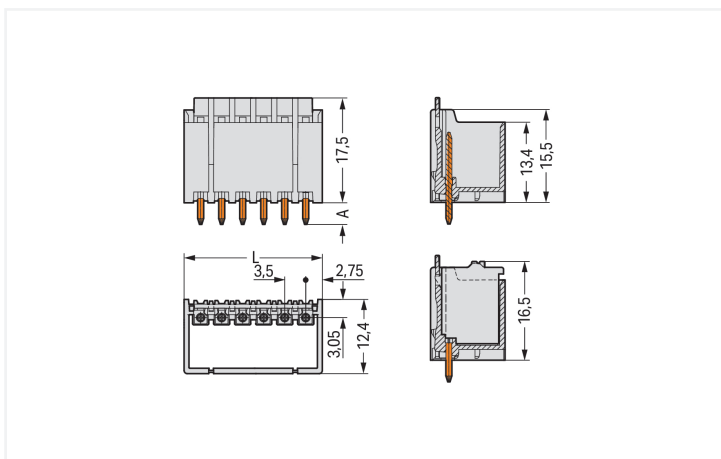
# Data Sheet | Item Number: 2091-1403/200-000

THR male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 3-pole; light gray

<https://www.wago.com/2091-1403/200-000>



Color: ■ light gray



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 2.0 \text{ mm} = 3.6 \text{ mm THT solder pin} + 2.4 \text{ mm THR solder pin}$

Male connector, 2091 Series, with 3.5 mm pin spacing

Our male connector (item number 2091-1403/200-000) simplifies electrical installations. The dimensions are (12.5 x 19.9 x 12.4) mm (width x height x depth).

Tin is used for coating the contact surfaces. The pcb connector is designed for THR soldering.

## 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 un-mated.

## Variants:

Direct marking  
Tape-and-reel packaging  
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 |        |        | Approvals per | UL 1059   |   |       |
|---------------------------------|----------------|--------|--------|---------------|-----------|---|-------|
|                                 | III            | III    | II     |               | Use group | B | C     |
| Overtoltage category            | III            | III    | II     | Use group     | B         | C | D     |
| Pollution degree                | 3              | 2      | 2      | Rated voltage | 300 V     | - | 300 V |
| Nominal voltage                 | 160 V          | 160 V  | 320 V  | Rated current | 10 A      | - | 10 A  |
| Rated impulse withstand voltage | 2.5 kV         | 2.5 kV | 2.5 kV |               |           |   |       |
| Rated current                   | 10 A           | 10 A   | 10 A   |               |           |   |       |

## Connection Data

|                            |   |                     |   |
|----------------------------|---|---------------------|---|
| Total number of potentials | 3 | <b>Connection 1</b> |   |
| Number of connection types | 1 |                     |   |
| Number of levels           | 1 |                     |   |
|                            |   | Pole number         | 3 |

## Physical data

|                                    |                          |
|------------------------------------|--------------------------|
| Pin spacing                        | 3.5 mm / 0.138 inches    |
| Width                              | 12.5 mm / 0.492 inches   |
| Height                             | 19.9 mm / 0.783 inches   |
| Height from the surface            | 17.5 mm / 0.689 inches   |
| Depth                              | 12.4 mm / 0.488 inches   |
| Solder pin length                  | 2.4 mm                   |
| Solder pin diameter                | 1 mm                     |
| Plated through-hole diameter (THR) | 1.2 <sup>(+0.1)</sup> mm |

## Mechanical data

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

## Plug-in connection

|                                      |                     |
|--------------------------------------|---------------------|
| Contact type (pluggable connector)   | Male connector/plug |
| Connector (connection type)          | for PCB             |
| Mismating protection                 | No                  |
| Plugging without loss of pin spacing | Yes                 |
| Mating direction to the PCB          | 90 °                |
| Locking of plug-in connection        | Locking latch       |

### PCB contact

|             |     |
|-------------|-----|
| PCB contact | THR |
|-------------|-----|

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | light gray   |
| Material group                     | I  |
| Insulation material (main housing) | Polyphthalamide (PPA GF)   |
| Flammability class per UL94        | V0   |
| Contact material                   | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.014 MJ   |
| Weight                             | 1.3 g  |
| MSL per J-STD 020D                 | 1  |

### Environmental requirements

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

### Commercial data

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 200 pcs       |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4050821396109 |
| Customs tariff number | 85366930000   |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-44-04-02          |
| eCl@ss 9.0  | 27-44-04-02          |
| ETIM 9.0    | EC002637             |
| ETIM 10.0   | EC002637             |
| ECCN        | NO US CLASSIFICATION |

### 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-89884         |
| CSA<br>CSA Group                      | C22.2     | 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  
2091-1403/200-000



## Documentation

### Additional Information

|                   |            |                   |  |
|-------------------|------------|-------------------|--|
| Technical Section | 03.04.2019 | pdf<br>2027.26 KB |  |
|                   |            | pdf<br>611.20 KB  |  |

## CAD/CAE-Data

### CAD data

2D/3D Models  
2091-1403/200-000



### CAE data

ZUKEN Portal  
2091-1403/200-000



## PCB Design

Symbol and Footprint  
via SamacSys  
2091-1403/200-000



Symbol and Footprint  
via Ultra Librarian  
2091-1403/200-000



## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



#### Item No.: [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

## 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

## Installation Notes

### Coding



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