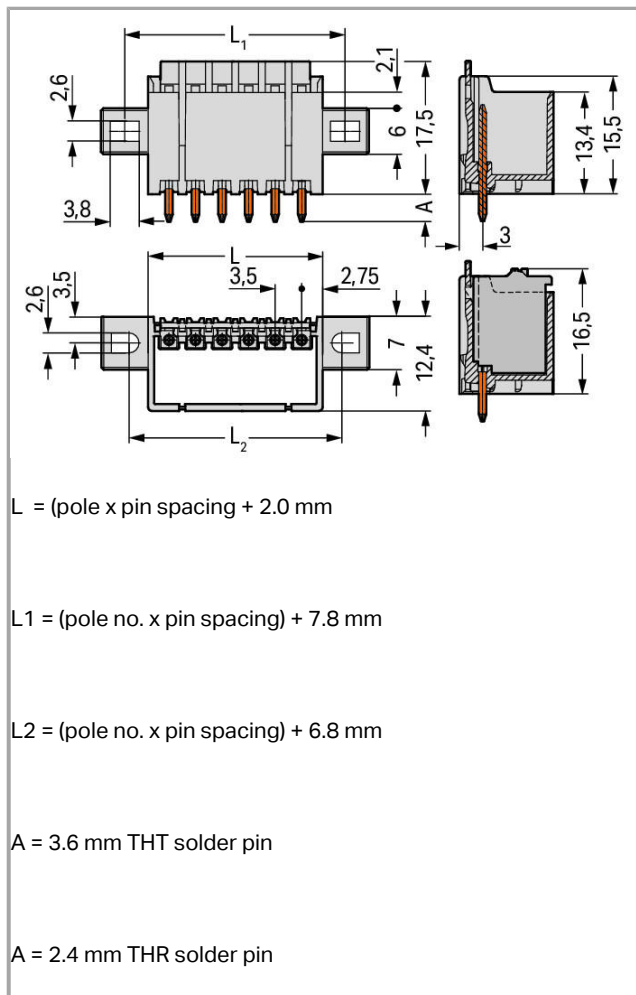
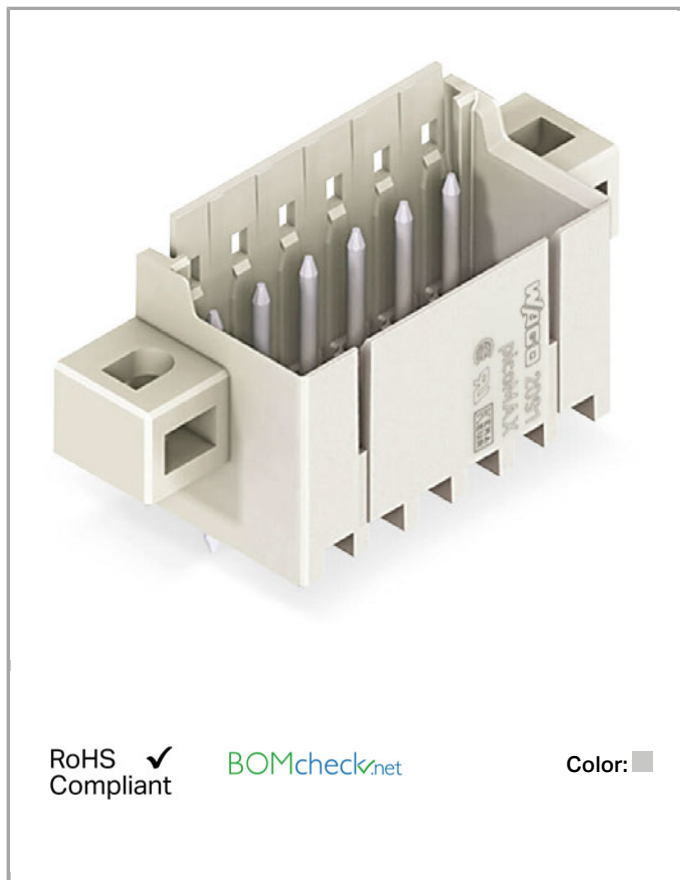


## Data sheet | Item number: 2091-1410/205-000

THR male header; 1.0 mm Ø solder pin; straight; clamping collar; Pin spacing 3.5 mm; 10-pole; light gray



2091-1410\_205-000



### Item description

- Assembly of female connectors without loss of poles, allowing different functions to be divided within one male header
- Coding pins inserted into the header interface prevent mismating, allowing subsequent coding in panel feedthrough applications
- The female connector is fully shrouded by the male header's housing, providing vibration resistance up to 20 g

### Safety information 1:

The **picoMAX® pluggable connection system** is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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

#### Ratings per IEC/EN 60664-1

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 160 V  |
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2)         | 160 V  |
| Rated impulse voltage (III / 2) | 2.5 kV |
| Rated voltage (II / 2)          | 320 V  |
| Rated impulse voltage (II / 2)  | 2.5 kV |
| Rated current                   | 10 A   |

#### 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 |

### Connection data

|                            |    |
|----------------------------|----|
| Total number of potentials | 10 |
| Number of connection types | 1  |
| Number of levels           | 1  |
| No. of poles               | 10 |

### Geometrical Data

|                         |                      |
|-------------------------|----------------------|
| Pin spacing             | 3.5 mm / 0.138 inch  |
| Width                   | 49 mm / 1.929 inch   |
| Height                  | 19.9 mm / 0.783 inch |
| Height from the surface | 17.5 mm / 0.689 inch |
| Depth                   | 12.4 mm / 0.488 inch |
| Solder pin length       | 2.4 mm               |
| Solder pin diameter     | 1 mm                 |

### Mechanical data

|                  |                                         |
|------------------|-----------------------------------------|
| Mounting type    | Mounting flange                         |
| Type of mounting | Feed-through mounting<br>Panel mounting |

## Plug connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type          | for PCBs            |
| Mismating protection               | No                  |
| Mating direction to the PCB        | 90°                 |
| Locking of plug-in connection      | Male locking latch  |

## PCB contact

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

## Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | light gray                             |
| Material group              | I                                      |
| Insulating material         | Polyphthalamide (PPA GF)               |
| Flammability class per UL94 | V0                                     |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.084 MJ                               |
| Weight                      | 3.69 g                                 |

## Environmental Requirements

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

## Commercial data

|                    |               |
|--------------------|---------------|
| Country of origin  | DE            |
| GTIN               | 4050821412106 |
| Customs Tariff No. | 85366990990   |

## Approvals / Certificates

### Other Approvals

| Logo                                                                               | Approval                             | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | UR<br>Underwriters Laboratories Inc. | UL 1977                  | E45171           |

### UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|----------|--------------------------|------------------|
|------|----------|--------------------------|------------------|



|                                                                                  |                                |         |           |
|----------------------------------------------------------------------------------|--------------------------------|---------|-----------|
|  | UR                             | UL 1977 | 20170428- |
|                                                                                  | Underwriters Laboratories Inc. |         | E45171    |

Compatible products

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

Downloads  
Documentation

|                        |             |               |          |
|------------------------|-------------|---------------|----------|
| Additional Information |             |               |          |
| Technical explanations | Apr 3, 2019 | pdf<br>3.6 MB | Download |

CAD/CAE - Smart Data

|                               |  |     |          |
|-------------------------------|--|-----|----------|
| CAD data                      |  |     |          |
| 3D Download 2091-1410/205-000 |  | URL | Download |

Product family

picoMAX  
Show all products from the family

Subject to changes.