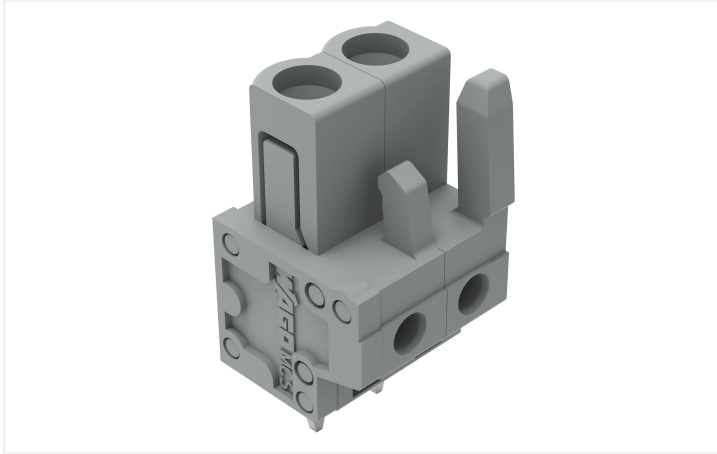


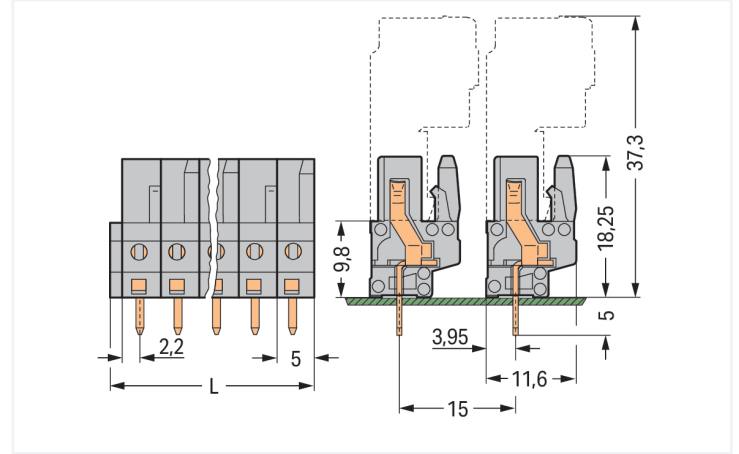
## Data Sheet | Item Number: 232-132

THT female header; straight; Pin spacing 5 mm; 2-pole; 0.6 x 1.0 mm solder pin; gray

<https://www.wago.com/232-132>



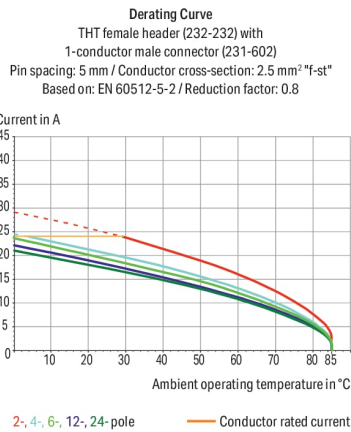
Color: ■ gray



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

2- to 3-pole female connectors – one latch only



- Horizontal or vertical PCB mounting via straight or angled solder pins
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify PCB inputs and outputs
- With coding fingers

### Notes

#### Safety Information

The MCS – MULTI 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.

#### Variants:

#### Other pole numbers

3.8 mm pin projection for male headers with straight solder pins

Gold-plated or partially gold-plated contact surfaces

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      | 320 V          | 320 V | 630 V |
| Rated surge voltage  | 4 kV           | 4 kV  | 4 kV  |
| Rated current        | 12 A           | 12 A  | 12 A  |

| Approvals per | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 15 A    | - | 10 A  |

| Approvals per | UL 1977 |
|---------------|---------|
| Rated voltage | 600 V   |
| Rated current | 15 A    |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A  | - | 10 A  |

## Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 2 |
| Total number of potentials | 2 |
| Number of connection types | 1 |
| Number of levels           | 1 |

| Connection 1 |   |
|--------------|---|
| Pole number  | 2 |

## Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 5 mm / 0.197 inches      |
| Width                                | 11.5 mm / 0.453 inches   |
| Height                               | 23.25 mm / 0.915 inches  |
| Height from the surface              | 18.25 mm / 0.719 inches  |
| Depth                                | 11.6 mm / 0.457 inches   |
| Solder pin length                    | 5 mm                     |
| Solder pin dimensions                | 0.6 x 1 mm               |
| Drilled hole diameter with tolerance | 1.3 <sup>(+0.1)</sup> mm |

## Mechanical data

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

## 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  |
| Solder pin arrangement              | over the entire female connector (in-line) |
| Number of solder pins per potential | 1  |

## Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Contact material                   | Copper alloy   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.05 MJ  |
| Weight                             | 1.9 g  |

## Environmental requirements

|                         |                |   |
|-------------------------|----------------|---|
| Limit temperature range | -60 ... +85 °C | <b>Environmental Testing (Environmental Conditions)</b>   |
| Processing temperature  | -35 ... +60 °C |   |
|                         |                | Test specification<br>Railway applications –<br>Rolling stock –<br>Electronic equipment   |
|                         |                | DIN EN 50155 (VDE 0115-200):2022-06   |
|                         |                | Test procedure<br>Railway applications –<br>Rolling stock equipment –<br>Shock and vibration tests  |
|                         |                | DIN EN 61373 (VDE 0115-0106):2011-04  |
|                         |                | Spectrum/Installation location  |
|                         |                | Service life test, Category 1, Class A/B  |
|                         |                | Function test with noise-like vibration   |
|                         |                | Test passed according to Section 8 of the standard  |
|                         |                | Frequency   |
|                         |                | $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$<br>$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$  |
|                         |                | Acceleration  |
|                         |                | 0.101g (highest test level used for all axes)<br>0.572g (highest test level used for all axes)<br>5g (highest test level used for all axes) |
|                         |                | Test duration per axis  |
|                         |                | 10 min.<br>5 h  |
|                         |                | Test directions   |
|                         |                | X, Y and Z axes<br>X, Y and Z axes<br>X, Y and Z axes   |
|                         |                | Monitoring for contact faults/interruptions   |
|                         |                | Passed  |
|                         |                | Voltage drop measurement before and after each axis   |
|                         |                | Passed  |
|                         |                | Simulated service life test through increased levels of noise-like vibration  |
|                         |                | Test passed according to Section 9 of the standard  |
|                         |                | Extended test scope: Monitoring for contact faults/interruptions  |
|                         |                | Passed<br>Passed  |
|                         |                | Extended test scope: Voltage drop measurement before and after each axis  |
|                         |                | Passed<br>Passed  |
|                         |                | Shock test  |
|                         |                | Test passed according to Section 10 of the standard   |
|                         |                | Shock form  |
|                         |                | Half sine   |
|                         |                | Shock duration  |
|                         |                | 30 ms   |
|                         |                | Number of shocks per axis   |
|                         |                | 3 pos. und 3 neg.   |
|                         |                | Vibration and shock stress for rolling stock equipment  |
|                         |                | Passed  |

### Commercial data

|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| eCl@ss 10.0           | 27-44-04-02            |
| eCl@ss 9.0            | 27-44-04-02            |
| ETIM 9.0              | EC002637               |
| ETIM 8.0              | EC002637               |
| PU (SPU)              | 100 pcs                |
| Packaging type        | Box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918578264          |
| 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-39756/A1      |
| CSA<br>DEKRA Certification B.V.       | C22.2     | 1466354          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-121453        |
| UL<br>Underwriters Laboratories Inc.  | UL 1059   | E45172           |
| UR<br>Underwriters Laboratories Inc.  | UL 1977   | E45171           |

#### Declarations of conformity and manufacturer's declarations



| Approval                      | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway<br>WAGO GmbH & Co. KG | -        | Railway Ready    |

### Approvals for marine applications



| Approval                           | Standard  | Certificate Name  |
|------------------------------------|-----------|-------------------|
| ABS<br>American Bureau of Shipping | -         | 19-HG15869876-PDA |
| DNV<br>DNV GL SE                   | -         | TAE000016Z        |
| LR<br>Lloyds Register              | IEC 61984 | 96/20035 (E5)     |

**Downloads**

**Environmental Product Compliance**

|  |  |  |   |
|--|--|--|---|
| <b>Compliance Search</b>                 |  |  |   |
| Environmental Product Compliance 232-132 |  |  | ↓ |

**Documentation**

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

**CAD/CAE-Data**

|                      |  |  |   |
|----------------------|--|--|---|
| <b>CAD data</b>      |  |  |   |
| 2D/3D Models 232-132 |  |  | ↓ |

|                           |   |
|---------------------------|---|
| <b>CAE data</b>           |   |
| EPLAN Data Portal 232-132 | ↓ |
| ZUKEN Portal 232-132      | ↓ |

|  |   |
|--|---|
| <b>PCB Design</b>                                |   |
| Symbol and Footprint via SamacSys 232-132        | ↓ |
| Symbol and Footprint via Ultra Librarian 232-132 | ↓ |

**1 Compatible Products**

**1.1 System counterpart**

**1.1.1 Male connector/plug**



**Item No.: [231-602](#)**  
 1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 2-pole; 2,50 mm<sup>2</sup>; gray

**Item No.: [231-602/019-000](#)**  
 1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 2-pole; clamping collar; 2,50 mm<sup>2</sup>; gray

## 1.2 Optional Accessories

### 1.2.1 Test and measurement

#### 1.2.1.1 Testing accessories



**Item No.: [231-661](#)**

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm<sup>2</sup>; light gray