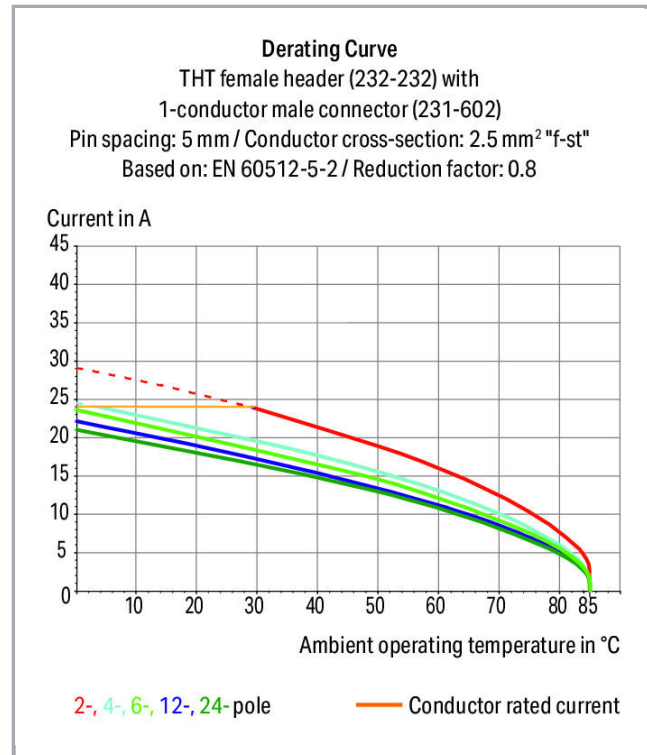
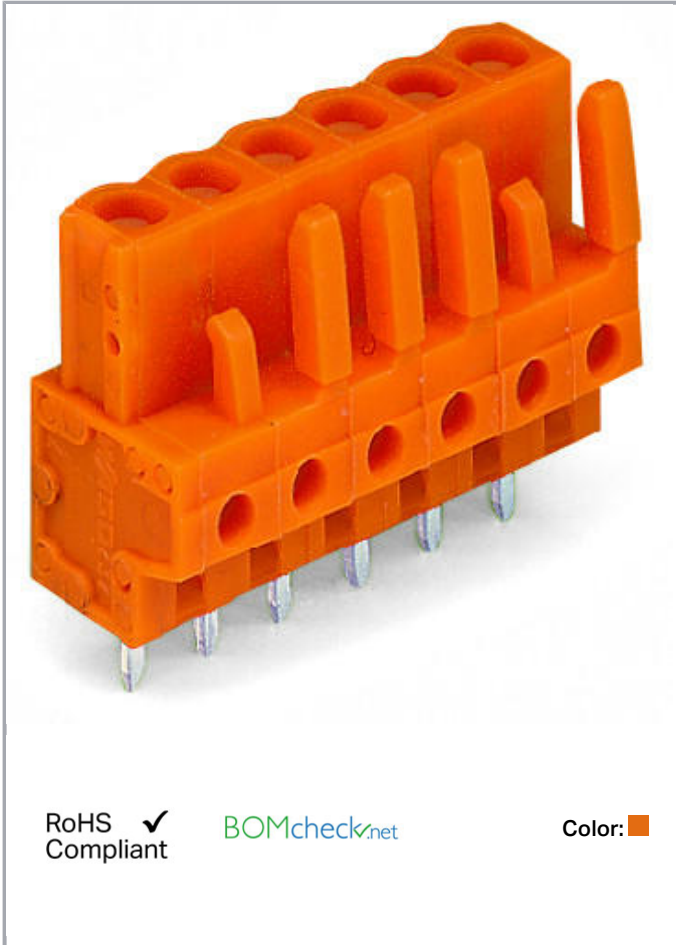


Data sheet | Item number: 232-176

THT female header; 0.6 x 1.0 mm solder pin; straight; Pin spacing 5.08 mm;
16-pole; orange

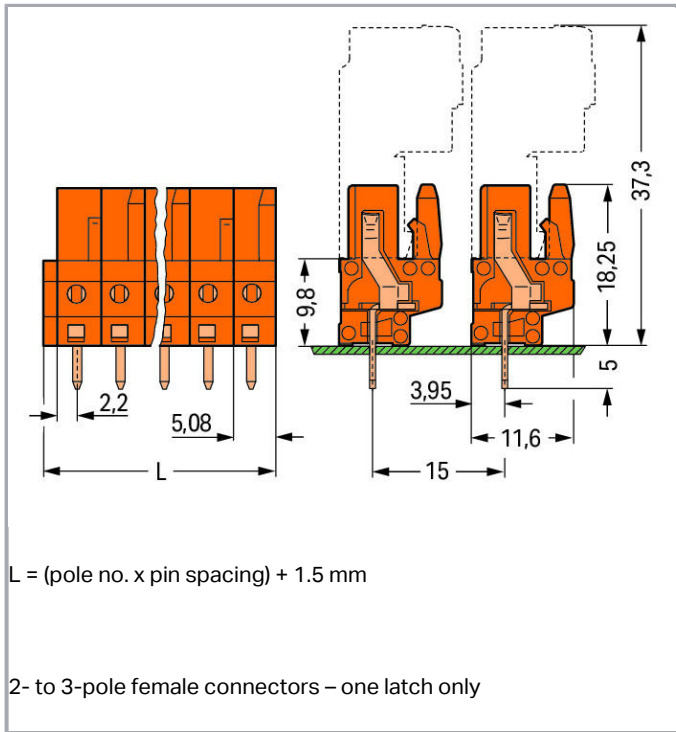
www.wago.com/232-176



Subject to changes. Please also observe the further product documentation!

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Item description

- 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

Safety information 1:

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. 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

| Ratings per | IEC/EN 60664-1 |
|---------------------------------|----------------|
| Rated voltage (III / 3) | 320 V |
| Rated impulse voltage (III / 3) | 4 kV |

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| | |
|---------------------------------|---|
| Rated voltage (III / 2) | 320 V |
| Rated impulse voltage (III / 2) | 4 kV |
| Rated voltage (II / 2) | 630 V |
| Rated impulse voltage (II / 2) | 4 kV |
| Rated current | 12 A |
| Legend (ratings) | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

Approvals per UL 1059

| | |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 15 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A |
| Approvals per | UL 1059 |

Approvals per UL 1977

| | |
|---|-------|
| Rated voltage per UL 1977 (factory wiring only) | 600 V |
| Rated current per UL 1977 (factory wiring only) | 15 A |

Approvals per CSA

| | |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A |

Connection data

| | |
|-----------------------------------|----|
| No. of poles | 16 |
| Total number of connection points | 16 |
| Total number of potentials | 16 |
| Number of connection types | 1 |
| Number of levels | 1 |

Geometrical Data

| | |
|-------------------------|-----------------------|
| Pin spacing | 5,08 mm / 0.2 inch |
| Width | 82,78 mm / 3.259 inch |
| Height | 23,25 mm / 0.915 inch |
| Height from the surface | 18,25 mm / 0.719 inch |

Subject to changes. Please also observe the further product documentation!



| | |
|-----------------------------------|--------------------------|
| Depth | 11,6 mm / 0.457 inch |
| Solder pin length | 5 mm |
| Solder pin dimensions | 0,6 x 1 mm |
| Drilled hole diameter (tolerance) | 1,3 ^(+0,1) mm |

Plug 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

| | |
|-----------------------------|----------------------|
| Color | orange |
| Material group | I |
| Insulating material | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0 |
| Contact material | Copper alloy |
| Contact plating | tin-plated |
| Fire load | 0.229 MJ |
| Weight | 13.9 g |

Environmental Requirements

| | |
|-------------------------|----------------|
| Limit temperature range | -60 ... +85 °C |
|-------------------------|----------------|

Commercial data

| | |
|--------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| Packaging type | BOX |
| Country of origin | DE |
| GTIN | 4044918578929 |
| Customs Tariff No. | 85366990990 |


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Approvals / Certificates



Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
| | CB DEKRA Certification B.V. | IEC 61984 | NL-39756 |
|  | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 2190761.01 |

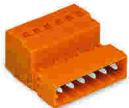
Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|--------------------------|---------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG15869876- PDA |
|  | LR Lloyds Register | IEC 61984 | 96/20035 (E5) |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|-------------------|
|  | UL UL International Germany GmbH | UL 1977 | E45171 |
|  | UR Underwriters Laboratories Inc. | UL 1059 | E45172 sec. 18 |

Counterpart



Item no.231-646

1-conductor male connector; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; 2,50 mm²; orangewww.wago.com/231-646

Item no.231-646/019-000

Subject to changes. Please also observe the further product documentation!

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1-conductor male connector; clamping collar; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; 2,50 mm²; orange

www.wago.com/231-646/019-000

Compatible products

Test Accessories



Item no.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

www.wago.com/231-661

Downloads

Documentation

Additional Information

| | | | |
|------------------------|-------------|---------------|----------|
| Technical explanations | Apr 3, 2019 | pdf 3.6 MB | Download |
|------------------------|-------------|---------------|----------|

CAD/CAE-Data

CAD data

| | | |
|----------------------|-----|----------|
| 2D/3D Models 232-176 | URL | Download |
|----------------------|-----|----------|

CAE data

| | | |
|---------------------------|-----|----------|
| EPLAN Data Portal 232-176 | URL | Download |
|---------------------------|-----|----------|

PCB Design

| | | |
|------------------------------|-----|----------|
| Symbol and Footprint 232-176 | URL | Download |
|------------------------------|-----|----------|

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation

Subject to changes. Please also observe the further product documentation!



- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Installation Notes

Product family

<i>MCS</i> MIDI Classic

[Learn more about the product family.](#)

[Show all products from the family](#)

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