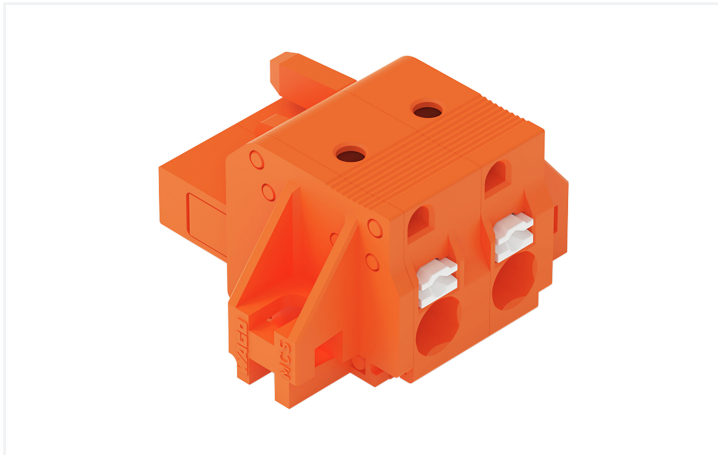


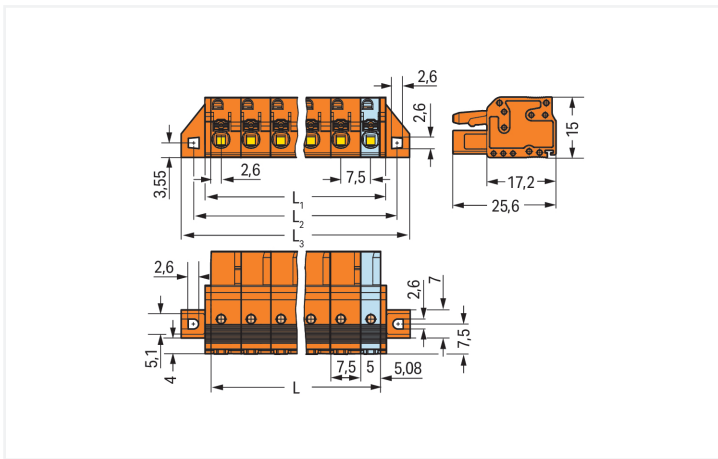
Data Sheet | Item Number: 2231-702/031-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 2-pole; clamping collar; 2,50 mm²; orange

<https://www.wago.com/2231-702/031-000>



Color: ■ orange



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.08 \text{ mm}$

$L_1 = L + 2.8 \text{ mm}$
 $L_2 = L + 8.8 \text{ mm}$
 $L_3 = L + 14.8 \text{ mm}$

mm2- to 3-pole female connectors – one latch only

Female connector, 2231 Series, 0° conductor exit to connection direction

Enjoy convenient electrical installations with this female connector (item number 2231-702/031-000). Ensure that the strip lengths are between 10 and 11 mm when connecting conductors to this female connector. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector is highly versatile. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. Dimensions: (27.42 x 15 x 25.6) mm (width x height x depth). Depending on the conductor type, this female connector is suitable for conductor cross sections ranging from 0.2 mm² to 2.5 mm².

The contact surface is coated with tin.

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:

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 | 500 V | 630 V | 1000 V |
| Rated impulse withstand voltage | 6 kV | 6 kV | 6 kV |
| Rated current | 16 A | 16 A | 16 A |

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

| | |
|---|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Push-button |
| Actuation direction 1 | Operation parallel to conductor entry |
| Solid conductor | 0.2 ... 2.5 mm ² / 24 ... 12 AWG |
| Fine-stranded conductor | 0.2 ... 2.5 mm ² / 24 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| Strip length | 10 ... 11 mm / 0.39 ... 0.43 inches |
| Pole number | 2 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 7.62 mm / 0.3 inches |
| Width | 27.42 mm / 1.08 inches |
| Height | 15 mm / 0.591 inches |
| Depth | 25.6 mm / 1.008 inches |

Mechanical data

| | |
|---|---|
| Variable coding | Yes |
| Mounting type | Mounting flange |
| Mounting type | Feed-through mounting Panel mounting |
| Anti-rotation protection | Yes |
| Suitable for through-panel applications | Yes |

Plug-in connection

| | |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type) | for conductor |
| Mismating protection | No |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | orange |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Copper alloy |
| Contact Plating | Tin |
| Fire load | 0.103 MJ |
| Weight | 4.3 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454811785 |
| Customs tariff number | 85366990990 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-44-03-09 |
| eCl@ss 9.0 | 27-44-03-09 |
| ETIM 9.0 | EC002638 |
| ETIM 10.0 | EC002638 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

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

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---------------------------------------|-----------|------------------|
| CB DEKRA Certification B.V. | IEC 61984 | NL-113351 |
| KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-130478 REV.1 |
| UR Underwriters Laboratories Inc. | UL 1977 | E45171 |
| UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Downloads

Environmental Product Compliance

| | |
|--|---|
| Compliance Search | |
| Environmental Product Compliance 2231-702/031-000 | ↓ |

Documentation

| | | | |
|------------------------|------------|-------------------|---|
| Additional Information | | | |
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 731-632
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 2-pole; 2,50 mm²; orange



Item No.: 231-932/001-000
THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 7.62 mm; 2-pole; orange



Item No.: 231-732/001-000
THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 7.62 mm; 2-pole; orange

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



Item No.: 216-241

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-141

Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-242

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262

Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-142

Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-143

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-284

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-144

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-246

Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-106

Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored

1.2.2 Installation

1.2.2.1 Mounting accessories



Item No.: 209-137

Mounting adapter; can be used as end stop; 6.5 mm wide; gray

1.2.3 Insulation stop

1.2.3.1 Insulation stop



Item No.: 231-674

Insulation stop; 0.25 - 0.5 mm²; light gray



Item No.: 231-675

Insulation stop; 0.75 - 1 mm²; dark gray

1.2.4 Strain relief

1.2.4.1 Strain relief plate

Item No.: 734-228

Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; Pin spacing 3.81 mm; orange

1.2.5 Test and measurement

1.2.5.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red



Item No.: 231-662

Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm²; light gray

1.2.6 Tool

1.2.6.1 Operating tool



Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

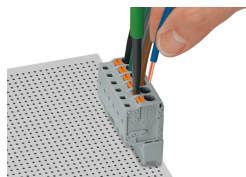


Item No.: 210-657

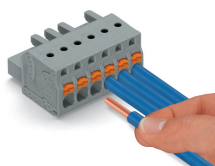
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Conductor termination

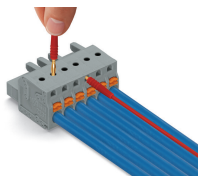


Inserting fine-stranded conductors into Push-in CAGE CLAMP® unit via push-buttons.



Push-in termination of solid conductors or fine-stranded conductors with ferrules

Testing



Testing parallel to conductor entry via integrated test ports – female connector with push-buttons and Push-in CAGE CLAMP® connection – touch contact perpendicular to conductor entry.

Installation



Male connector with strain relief plate

Strain relief housing shown with a male connector equipped with CAGE CLAMP®

Marking



Labeling via direct marking or self-adhesive strips.