

Data Sheet | Item Number: 231-607/019-000/034-000

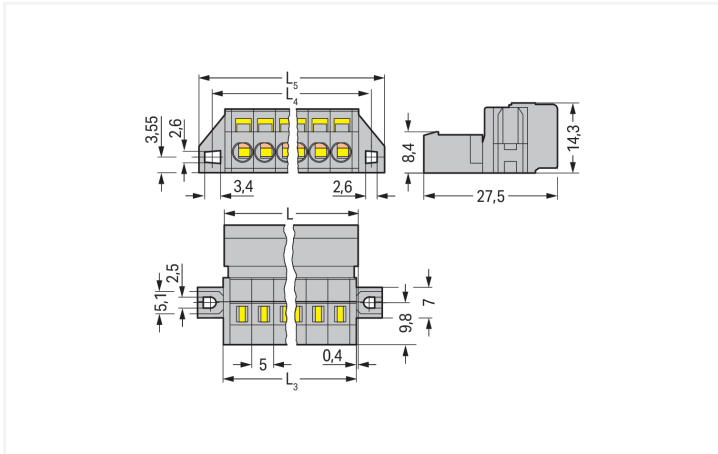
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 7-pole;
clamping collar; Strain relief plate; gray

<https://www.wago.com/231-607/019-000/034-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$
 $L_3 = L - 0.2 \text{ mm}$
 $L_4 = L_3 + 5.8 \text{ mm}$
 $L_5 = L_3 + 11.8 \text{ mm}$

Male connector, 231 Series, operating tool

This male connector (item number 231-607/019-000/034-000) provides hassle-free electrical installations. Strip lengths must be between 8 and 9 mm when connecting conductors to this male connector. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a secure and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The item's dimensions are (49.8 x 14.3 x 62.5) mm (width x height x depth). Depending on the conductor type, this male connector is ideal for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin. You can secure connected conductors using the strain relief plate to make cables more manageable..

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
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 | | | Approvals per | | UL 1059 | | |
|---------------------------------|--|----------------|-------|-------|---------------|-------|---------|-------|--|
| Overvoltage category | | III | III | II | Use group | B | C | D | |
| Pollution degree | | 3 | 2 | 2 | Rated voltage | 300 V | - | 300 V | |
| Nominal voltage | | 320 V | 320 V | 630 V | Rated current | 15 A | - | 10 A | |
| Rated impulse withstand voltage | | 4 kV | 4 kV | 4 kV | | | | | |
| Rated current | | 12 A | 12 A | 12 A | | | | | |

| Approvals per | | UL 1977 | | | Approvals per | | CSA | | |
|---------------|--|---------|--|--|---------------|-------|-----|-------|--|
| Rated voltage | | 600 V | | | Use group | B | C | D | |
| Rated current | | 15 A | | | Rated voltage | 300 V | - | 300 V | |
| | | | | | Rated current | 15 A | - | 10 A | |

Connection Data

| | | | |
|----------------------------|---|---|--|
| Clamping units | 7 | Connection 1 | |
| Total number of potentials | 7 | Connection technology | CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Operating tool |
| Number of levels | 1 | Actuation direction 1 | Operation parallel to conductor entry |
| | | Actuation direction 2 | Operation perpendicular to conductor entry |
| | | Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| | | Fine-stranded conductor | 0.08 ... 2.5 mm ² / 28 ... 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 | 8 ... 9 mm / 0.31 ... 0.35 inches |
| | | Pole number | 7 |
| | | Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 5 mm / 0.197 inches |
| Width | 49.8 mm / 1.961 inches |
| Height | 14.3 mm / 0.563 inches |
| Depth | 62.5 mm / 2.461 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) | Male connector/plug |
| Connector (connection type) | for conductor |
| Mismating protection | No |
| Strain relief | Strain relief plate |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact Plating | Tin |
| Fire load | 0.255 MJ |
| Weight | 13.1 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 | DE |
| GTIN | 4044918257701 |
| Customs tariff number | 85366930000 |

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 | | | Approvals for marine applications | | |
|---|----------|------------------|---|----------|-------------------|
| | | | | | |
| Approval | Standard | Certificate Name | Approval | Standard | Certificate Name |
| CSA DEKRA Certification B.V. | C22.2 | 1466354 | ABS American Bureau of Ship- ping | - | 24-0095975-PDA |
| UL Underwriters Laboratories Inc. | UL 1977 | E45171 | DNV DNV GL SE | - | TAE000016Z |
| | | | PRS Polski Rejestr Statków | - | TE/1095/880590/23 |

Downloads

Environmental Product Compliance

Compliance Search

[↓](#)

Documentation

Additional Information

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

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

| | | |
|--|---|---|
| | | |
| <p>Item No.: 231-107/026-000</p> <p>1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 7-pole; gray</p> | <p>Item No.: 232-237</p> <p>THT female header; angled; Pin spacing 5 mm; 7-pole; 0.6 x 1.0 mm solder pin; gray</p> | <p>Item No.: 232-137</p> <p>THT female header; straight; Pin spacing 5 mm; 7-pole; 0.6 x 1.0 mm solder pin; gray</p> |

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 231-129

Coding key; snap-on type; light gray

1.2.2 Cover

1.2.2.1 Cover



Item No.: 231-668

Lockout caps; for covering unused clamping units; gray

1.2.3 Ferrule

1.2.3.1 Ferrule



Item No.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201

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



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.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



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; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; 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.: 216-102

Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored



Item No.: 216-243

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



Item No.: 216-203

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



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.: 216-204

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; 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; 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; 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.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored



Item No.: 216-106

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

1.2.4 Installation

1.2.4.1 Mounting accessories



Item No.: 231-295

Screw with nut



Item No.: 231-195

Screw with nut; M2x12; for fixing element



Item No.: 209-147

Self-tapping screw



Item No.: 231-194

Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

1.2.5 Insulation stop

1.2.5.1 Insulation stop



Item No.: 231-670

Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white



Item No.: 231-671

Insulation stop; 0.25 - 0.5 mm²; light gray



Item No.: 231-672

Insulation stop; 0.75 - 1 mm²; dark gray

1.2.6 Jumper

1.2.6.1 Jumper



Item No.: 231-902

Jumper; for conductor entry; 2-way; insulated; gray



Item No.: 231-903

Jumper; for conductor entry; 3-way; insulated; gray



Item No.: 231-905

Jumper; for conductor entry; 5-way; insulated; gray



Item No.: 231-907

Jumper; for conductor entry; 7-way; insulated; gray

1.2.7 Marking

1.2.7.1 Marking strip



Item No.: 210-331/500-103

Marking strips; as a DIN A4 sheet; MARKED; 1-12 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-205

Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/500-104

Marking strips; as a DIN A4 sheet; MARKED; 13-24 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.8 Strain relief

1.2.8.1 Strain relief housing



Item No.: 232-607

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 7-pole; gray

1.2.9 Tool

1.2.9.1 Operating tool



Item No.: 231-231

Combination operating tool; red



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



Item No.: 209-132

Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



Item No.: 210-250

Operating tool; for MCS MINI and MIDI with CAGE CLAMP® connection; red



Item No.: 209-130

Operating tool; made of insulating material; 1-way; for 264 Series (1-1/2-way), 280, 281 Series (up to 3-way); natural



Item No.: 231-291

Operating tool; made of insulating material; 1-way; loose; red



Item No.: 231-131

Operating tool; made of insulating material; 1-way; loose; white



Item No.: 280-432

Operating tool; made of insulating material; 2-way; white



Item No.: 280-433

Operating tool; made of insulating material; 3-way; white



Item No.: 280-434

Operating tool; made of insulating material; 4-way; white



Item No.: 280-435

Operating tool; made of insulating material; 5-way; gray



Item No.: 280-436

Operating tool; made of insulating material; 6-way; white



Item No.: 280-437

Operating tool; made of insulating material; 7-way; white

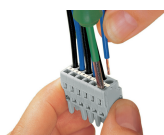


Item No.: 231-159

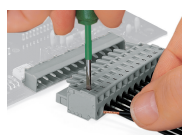
Operating tool; natural

Installation Notes

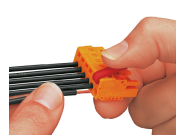
Conductor termination



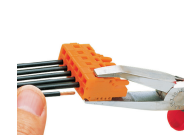
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.

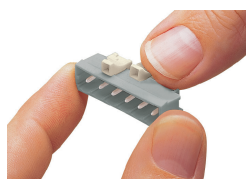


Inserting a conductor into CAGE CLAMP® unit via operating tool (231-291).



Inserting a conductor via operating tool.

Coding



Coding a male header – fitting coding key(s).

Testing



Testing – female connector with CAGE CLAMP®
Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

Installation

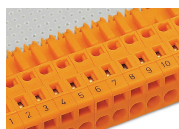


Male connector with strain relief plate



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

Marking



Labeling via direct marking or self-adhesive strips.