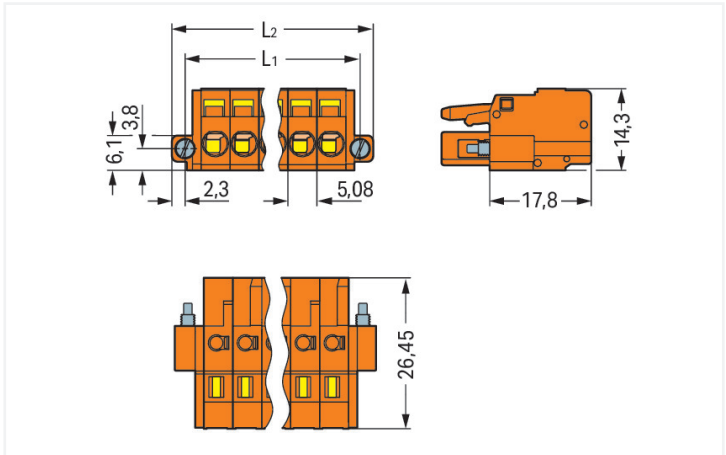


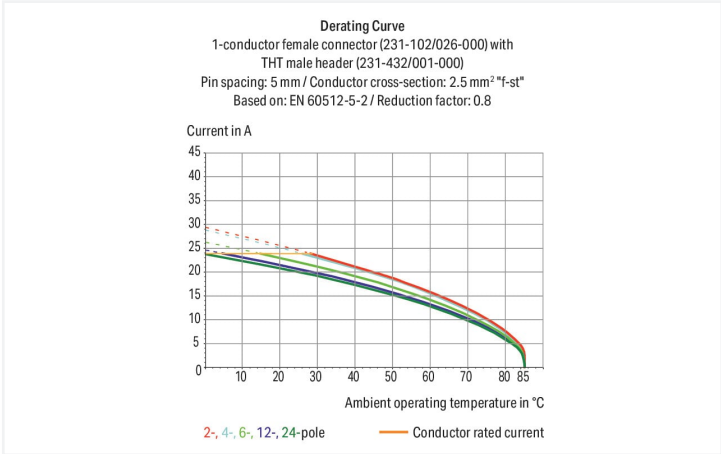
**Data Sheet | Item Number: 231-305/107-000**  
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 5-pole; Screw flange; 2,50 mm²; orange  
<https://www.wago.com/231-305/107-000>



Color: ■ orange



Dimensions in mm  
L1 = (pole no. x pin spacing) + 5.4 mm  
L2 = (pole no. x pin spacing) + 10 mm  
2- to 3-pole female connectors – one latch only



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Integrated test ports
- 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:          | Gold-plated or partially gold-plated contact surfaces<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .   |



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 surge voltage        | 4 kV  | 4 kV  | 4 kV  |                       |       |   |       |
| Rated current              | 16 A  | 16 A  | 16 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

| Connection points          | 5 | Connection 1                                      |  |
|----------------------------|---|---|--|
| Total number of potentials | 5 | 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 mm² / 28 ... 12 AWG           |
|                            |   | Fine-stranded conductor                           | 0.08 ... 2.5 mm² / 28 ... 12 AWG           |
|                            |   | Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm²                           |
|                            |   | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm²                           |
|                            |   | Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches          |
|                            |   | Pole number                                       | 5  |
|                            |   | Conductor entry direction to mating direction     | 0°   |

Physical data

|             |                         |
|-------------|-------------------------|
| Pin spacing | 5.08 mm / 0.2 inches    |
| Width       | 35.3 mm / 1.39 inches   |
| Height      | 14.3 mm / 0.563 inches  |
| Depth       | 26.45 mm / 1.041 inches |

Mechanical data

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

Plug-in connection

|                                    |                         |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type)        | for conductor           |
| Mismating protection               | No                      |
| Locking of plug-in connection      | Screw flange            |








| Material data               |                                   |  |
|-----------------------------|-----------------------------------|--|
| Note (material data)        |                                   | <a href="#">Information on material specifications can be found here</a> |
| Color                       | orange                            |  |
| Material group              | I                                 |  |
| Insulation material         | Polyamide (PA66)                  |  |
| Flammability class per UL94 | V0                                |  |
| Clamping spring material    | Chrome-nickel spring steel (CrNi) |  |
| Contact material            | Copper alloy                      |  |
| Contact plating             | Tin                               |  |
| Fire load                   | 0.149 MJ                          |  |
| Weight                      | 10.3 g                            |  |

| Environmental requirements |                |  |
|----------------------------|----------------|--|
| Limit temperature range    | -60 ... +85 °C |  |
| Processing temperature     | -35 ... +60 °C |  |

| Commercial data       |                        |  |
|-----------------------|------------------------|--|
| Product Group         | 3 (Multi Conn. System) |  |
| eCl@ss 10.0           | 27-44-03-09            |  |
| eCl@ss 9.0            | 27-44-03-09            |  |
| ETIM 8.0              | EC002638               |  |
| ETIM 7.0              | EC002638               |  |
| PU (SPU)              | 50 pcs                 |  |
| Packaging type        | Box                    |  |
| Country of origin     | DE                     |  |
| GTIN                  | 4044918370431          |  |
| Customs tariff number | 85366990990            |  |

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

### Approvals / Certificates

| General approvals  |           |                  | Declarations of conformity and manufacturer's declarations                          |          |                  |
|--|-----------|------------------|---|----------|------------------|
|     |           |                  |  |          |                  |
| Approval   | Standard  | Certificate Name | Approval  | Standard | Certificate Name |
| CB<br>DEKRA Certification B.V.   | IEC 61984 | NL-39756/A1      | Railway<br>WAGO GmbH & Co. KG   | -        | Railway Ready    |
| CSA<br>DEKRA Certification B.V.  | C22.2     | 1466354          |   |          |                  |
| KEMA/KEUR<br>DEKRA Certification B.V.  | EN 61984  | 71-121453        |   |          |                  |
| UL<br>UL International Germany GmbH  | UL 1977   | E45171           |   |          |                  |
| UR<br>Underwriters Laboratories Inc.   | UL 1059   | E45172           |   |          |                  |



Downloads

Environmental Product Compliance

|   |
|---|
| Compliance Search                                   |
| Environmental Product Compliance<br>231-305/107-000 |
|   |

Documentation

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

CAD/CAE-Data

|                                 |
|---------------------------------|
| CAD data                        |
| 2D/3D Models<br>231-305/107-000 |
|                                 |

|                                      |
|--------------------------------------|
| CAE data                             |
| EPLAN Data Portal<br>231-305/107-000 |
|                                      |
| ZUKEN Portal<br>231-305/107-000      |
|                                      |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



[Item No.: 231-635/129-000](#)  
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 5-pole; Snap-in flange; 2,50 mm²; orange



[Item No.: 231-635/109-000](#)  
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 5-pole; Threaded flange; 2,50 mm²; orange



[Item No.: 231-535/108-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; angled; Threaded flange; Pin spacing 5.08 mm; 5-pole; orange



[Item No.: 231-335/108-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 5-pole; orange



[Item No.: 231-565/108-000](#)  
THT male header; 1.2 x 1.2 mm solder pin; angled; Threaded flange; Pin spacing 5.08 mm; 5-pole; orange



[Item No.: 231-365/108-000](#)  
THT male header; 1.2 x 1.2 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 5-pole; orange

1.2 Optional Accessories

1.2.1 Cover

1.2.1.1 Cover



[Item No.: 231-669](#)  
Lockout caps; for covering unused clamping units; orange



1.2.2 Ferrule

1.2.2.1 Ferrule



**Item No.: 216-301**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-321**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-151**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-131**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-302**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-322**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-132**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-152**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-241**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-201**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-221**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-141**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-121**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-242**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-222**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-142**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-102**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-122**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-243**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-223**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated



**Item No.: 216-143**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-123**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-204**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-224**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-244**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-124**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated



**Item No.: 216-144**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-106**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored



1.2.3 Insulation stop

1.2.3.1 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

1.2.4 Jumper

1.2.4.1 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

1.2.5 Marking

1.2.5.1 Marking strip



**Item No.: 210-331/508-103**  
Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-202**  
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.: 210-332/508-205**  
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.: 210-331/508-104**  
Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-204**  
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.: 210-332/508-206**  
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

1.2.6 Strain relief

1.2.6.1 Strain relief housing



**Item No.: 232-635**  
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5.08 mm; 5-pole; orange



1.2.7 Test and measurement

1.2.7.1 Testing accessories



**Item No.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red



**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

1.2.8 Tool

1.2.8.1 Operating tool



**Item No.: 231-231**  
Combination operating tool; red



**Item No.: 209-132**  
Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



**Item No.: 209-130**  
Operating tool; made of insulating material; 1-way; for 264 Series (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



**Item No.: 280-434**  
Operating tool; made of insulating material; 4-way



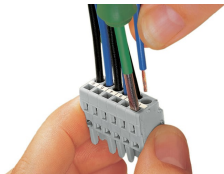
**Item No.: 280-435**  
Operating tool; made of insulating material; 5-way; gray



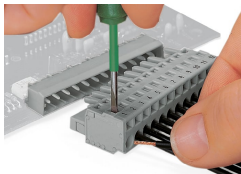
**Item No.: 231-159**  
Operating tool; natural

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).



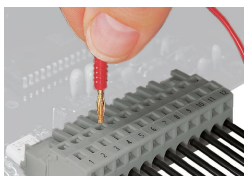
Inserting a conductor via operating tool.

Coding



Coding a female connector by removing coding finger(s).

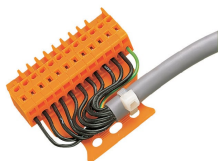
## Testing



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

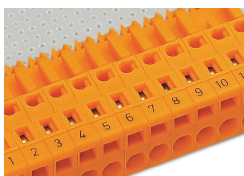


Male connector with strain relief plate



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

## Marking



Labeling via direct marking or self-adhesive strips.