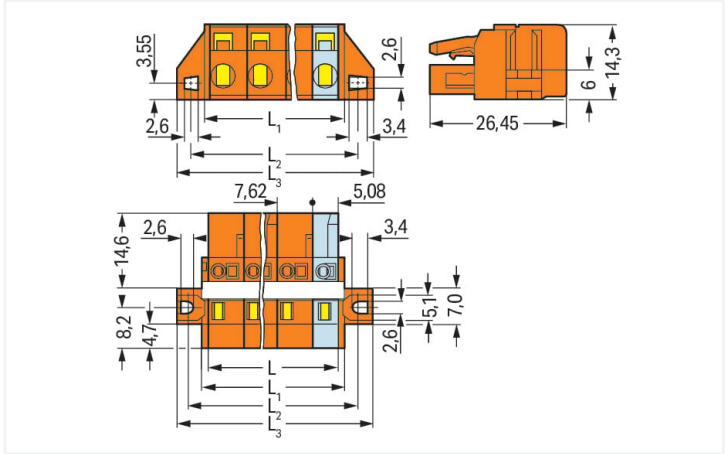
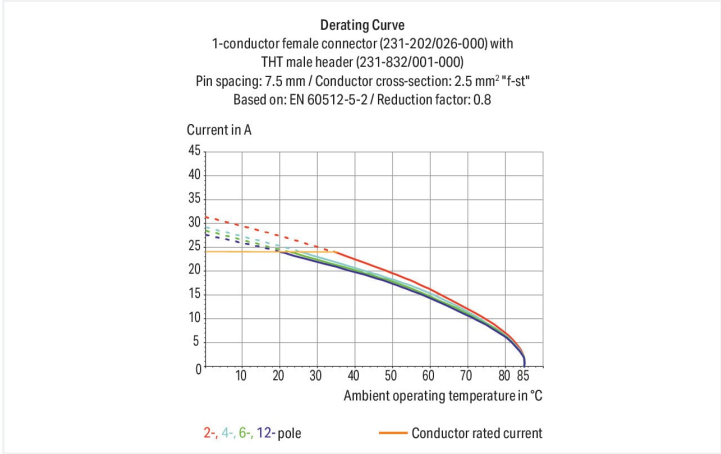




Color: ■ orange



Dimensions in mm  
L = (pole no. – 1) x pin spacing + 5.08 mm  
L1 = L + 3 mm  
L2 = L + 8.8 mm  
L3 = L + 14.8 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 |       |        |
|----------------------|----------------|-------|--------|
| Overvoltage category | III            | III   | II     |
| Pollution degree     | 3              | 2     | 2      |
| Nominal voltage      | 500 V          | 630 V | 1000 V |
| Rated surge 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 |
| 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

|                            |    |
|----------------------------|----|
| Connection points          | 11 |
| Total number of potentials | 11 |
| Number of connection types | 1  |
| Number of levels           | 1  |

| Connection 1                                      |                                            |
|---------------------------------------------------|--------------------------------------------|
| Connection technology                             | CAGE CLAMP®                                |
| Actuation type                                    | Operating tool                             |
| 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                                       | 11                                         |
| Conductor entry direction to mating direction     | 0°                                         |

Physical data

|             |                         |
|-------------|-------------------------|
| Pin spacing | 7.62 mm / 0.3 inches    |
| Width       | 96.08 mm / 3.783 inches |
| Height      | 14.3 mm / 0.563 inches  |
| Depth       | 26.45 mm / 1.041 inches |

Mechanical data

|                          |                                                            |
|--------------------------|------------------------------------------------------------|
| Variable coding          | Yes                                                        |
| Mounting type            | Mounting flange<br>Feed-through mounting<br>Panel mounting |
| with reinforcing strips  | 1                                                          |
| Anti-rotation protection | Yes                                                        |



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

| Material data               |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| Note (material data)        | <a href="https://www.wago.com/us/material-specifications">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                   | 0.422 MJ                                                                                                               |
| Weight                      | 24.4 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)              | 10 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918376822          |
| 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          |                                                            |          |                  |
| UR<br>Underwriters Laboratories Inc. | UL 1977   | E45171           |                                                            |          |                  |
| UR<br>Underwriters Laboratories Inc. | UL 1059   | E45172           |                                                            |          |                  |



Approvals for marine applications



| Approval                                | Standard  | Certificate Name |
|-----------------------------------------|-----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping | -         | 19-HG1869876-PDA |
| BV<br>Bureau Veritas S.A.               | IEC 60998 | 11915/D0 BV      |

Downloads

Environmental Product Compliance

| Compliance Search                                      |
|--------------------------------------------------------|
| Environmental Product<br>Compliance<br>231-711/027-000 |
|                                                        |

Documentation

| Additional Information |
|------------------------|
| Technical Section      |
| 03.04.2019             |
| pdf<br>2010.85 KB      |
|                        |

CAD/CAE-Data

| CAD data                        |
|---------------------------------|
| 2D/3D Models<br>231-711/027-000 |
|                                 |

| CAE data                             |
|--------------------------------------|
| EPLAN Data Portal<br>231-711/027-000 |
|                                      |
| ZUKEN Portal<br>231-711/027-000      |
|                                      |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



|                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 731-641</a><br>1-conductor male connector; CAGE<br>CLAMP®; 2.5 mm²; Pin spacing 7.62 mm;<br>11-pole; 2,50 mm²; orange |
|---------------------------------------------------------------------------------------------------------------------------------------------|



|                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 231-941/001-000</a><br>THT male header; 1.0 x 1.0 mm solder pin;<br>angled; Pin spacing 7.62 mm; 11-pole;<br>orange |
|-------------------------------------------------------------------------------------------------------------------------------------------|



|                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 231-741/001-000</a><br>THT male header; 1.0 x 1.0 mm solder pin;<br>straight; Pin spacing 7.62 mm; 11-pole;<br>orange |
|---------------------------------------------------------------------------------------------------------------------------------------------|



| 1.2 Optional Accessories                                                                                                                                                                          |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.2.1 Cover                                                                                                                                                                                       |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
| 1.2.1.1 Cover                                                                                                                                                                                     |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
|                                                                                                                  |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
| <p><b>Item No.: 231-669</b><br/>Lockout caps; for covering unused clamping units; orange</p>                                                                                                      |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
| 1.2.2 Ferrule                                                                                                                                                                                     |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
| 1.2.2.1 Ferrule                                                                                                                                                                                   |                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                   |
|                                                                                                                  |                                                                                                              |                                                                                                                  |                                                                                                                |
| <p><b>Item No.: 216-301</b><br/>Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow</p>                                                                       | <p><b>Item No.: 216-321</b><br/>Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow</p>                                                                   | <p><b>Item No.: 216-151</b><br/>Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>                                                                             | <p><b>Item No.: 216-131</b><br/>Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored</p>                                                             |
|                                                                                                                  |                                                                                                              |                                                                                                                  |                                                                                                                |
| <p><b>Item No.: 216-302</b><br/>Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise</p>                                                              | <p><b>Item No.: 216-322</b><br/>Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise</p>                                                          | <p><b>Item No.: 216-132</b><br/>Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>                                                                             | <p><b>Item No.: 216-152</b><br/>Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>                                                                             |
|                                                                                                                 |                                                                                                             |                                                                                                                 |                                                                                                               |
| <p><b>Item No.: 216-241</b><br/>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</p> | <p><b>Item No.: 216-201</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white</p>                                                                     | <p><b>Item No.: 216-221</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white</p>                                                                         | <p><b>Item No.: 216-141</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>      |
|                                                                                                                |                                                                                                            |                                                                                                                |                                                                                                              |
| <p><b>Item No.: 216-101</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored</p>                                                              | <p><b>Item No.: 216-121</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored</p>                                                          | <p><b>Item No.: 216-242</b><br/>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</p> | <p><b>Item No.: 216-262</b><br/>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</p> |
|                                                                                                                |                                                                                                            |                                                                                                                |                                                                                                              |
| <p><b>Item No.: 216-202</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>                                                                         | <p><b>Item No.: 216-222</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>                                                                     | <p><b>Item No.: 216-142</b><br/>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</p>     | <p><b>Item No.: 216-102</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>                                                             |
|                                                                                                                |                                                                                                            |                                                                                                                |                                                                                                              |
| <p><b>Item No.: 216-122</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>                                                             | <p><b>Item No.: 216-243</b><br/>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</p> | <p><b>Item No.: 216-263</b><br/>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</p>     | <p><b>Item No.: 216-203</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>                                                                             |
|                                                                                                                |                                                                                                            |                                                                                                                |                                                                                                              |
| <p><b>Item No.: 216-223</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>                                                                             | <p><b>Item No.: 216-103</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated</p>                                                                            | <p><b>Item No.: 216-143</b><br/>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</p>        | <p><b>Item No.: 216-123</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored</p>                                                                |
|                                                                                                                |                                                                                                            |                                                                                                                |                                                                                                              |
| <p><b>Item No.: 216-204</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>                                                                         | <p><b>Item No.: 216-224</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>                                                                     | <p><b>Item No.: 216-244</b><br/>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</p> | <p><b>Item No.: 216-264</b><br/>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</p> |



1.2.2.1 Ferrule



**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.: 216-124**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated



**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

1.2.3 Insulation stop

1.2.3.1 Insulation stop



**Item No.: 231-673**  
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white



**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 Marking

1.2.4.1 Marking strip



**Item No.: 210-331/762-202**  
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/762-020**  
Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

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



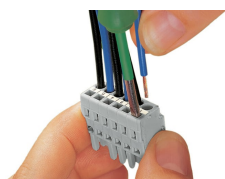
**Item No.: 231-291**  
Operating tool; made of insulating material; 1-way; loose; red



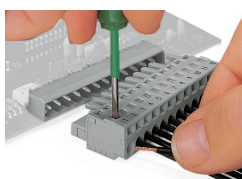
**Item No.: 231-131**  
Operating tool; made of insulating material; 1-way; loose; white

## Installation Notes

### Conductor termination



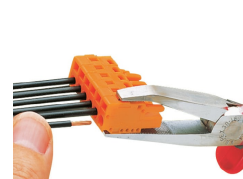
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



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).



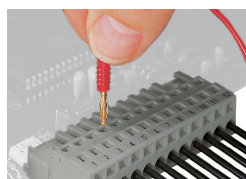
Inserting a conductor via operating tool.

### Coding



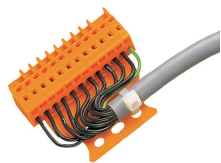
Coding a female connector by removing coding finger(s).

### 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

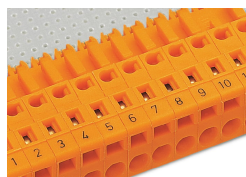


Male connector with strain relief plate



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

### Marking



Labeling via direct marking or self-adhesive strips.