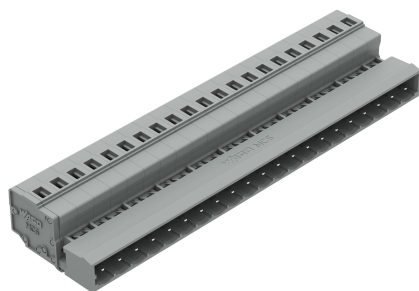


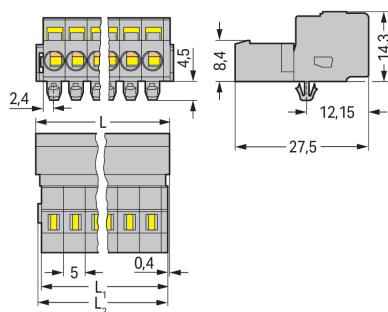
## Data Sheet | Item Number: 231-621/018-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 21-pole;  
DIN-35 rail/panel mounting; Snap-in mounting feet; gray

<https://www.wago.com/231-621/018-000>

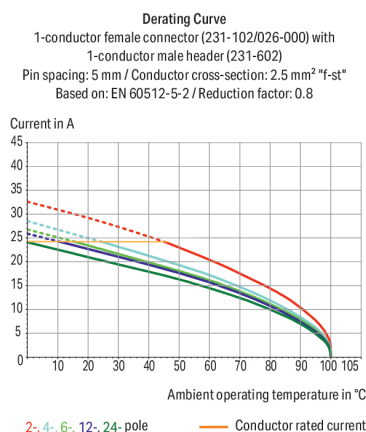


Color: ■ gray



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L1 = L - 1.7 \text{ mm}$   
 $L2 = L - 1.2 \text{ mm}$



### Male connector, 231 Series, with 5 mm pin spacing

Our male connector (item number 231-621/018-000) simplifies electrical installations. Conductors can only be connected to this male connector if their strip length is between 8 and 9 mm. Featuring one conductor terminal along with CAGE CLAMP®, this product is highly versatile. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's dimensions are (108.2 x 18.8 x 27.5) mm (width x height x depth). This male connector is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². Tin is used for coating the contact surfaces.



| 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<br>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                 |  | 320 V          | 320 V | 630 V |
| Rated impulse withstand voltage |  | 4 kV           | 4 kV  | 4 kV  |
| Rated current                   |  | 12 A           | 12 A  | 12 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                                   |                                            |  |
|---------------------------------------------------|--------------------------------------------|--|
| Clamping units                                    | 21                                         |  |
| Total number of potentials                        | 21                                         |  |
| 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                                       | 21                                         |  |
| Conductor entry direction to mating direction     | 0 °                                        |  |

| Physical data                                                  |                        |
|----------------------------------------------------------------|------------------------|
| Pin spacing                                                    | 5 mm / 0.197 inches    |
| Width                                                          | 108.2 mm / 4.26 inches |
| Height                                                         | 18.8 mm / 0.74 inches  |
| Height from the surface                                        | 14.3 mm / 0.563 inches |
| Depth                                                          | 27.5 mm / 1.083 inches |
| Drilled hole diameter for snap-in mounting foot with tolerance | 3.5 (+0.1) mm          |



| Mechanical data          |                                         |
|--------------------------|-----------------------------------------|
| Variable coding          | Yes                                     |
| Housing sheet thickness  | 0.6 ... 1.2 mm / 0.024 ... 0.047 inches |
| Mounting type            | Snap-in foot                            |
| Mounting type            | Panel mounting                          |
| Anti-rotation protection | Yes                                     |

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

| Material data                      |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| 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 <sub>Cu</sub> )                                   |
| Contact Plating                    | Tin                                                                      |
| Fire load                          | 0.541 MJ                                                                 |
| Weight                             | 32 g                                                                     |

| Environmental requirements                                                                          |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------------|-----------|--------------------------------------------------|--------------|-----------------------------------------------|------------------------|---------|-----------------|-----------------|------------------------------------------------|--------|-----------------------------------------------------|--------|---------------------------------------------------------------------------------|----------------------------------------------------|-----------|--------------------------------------------------|--------------|-----------------------------------------------|------------------------|-----|-----------------|-----------------|------------------------------------------------------------------|--------|-----------------------------------------------------------------------|--------|
| Limit temperature range                                                                             | -60 ... +100 °C                                    | <table><tr><th colspan="2">Environmental Testing</th></tr><tr><td>Test specification:<br/>Railway applications –<br/>Rolling stock –<br/>Electronic equipment</td><td>DIN EN 50155 (VDE 0115-200):2022-06</td></tr><tr><td>Test procedure:<br/>Railway applications –<br/>Rolling stock equipment –<br/>Vibration and shock tests</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td>Spectrum/Mounting location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Functional test with noise-like oscillations</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f<sub>1</sub> = 5 Hz to f<sub>2</sub> = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.101g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>10 min.</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Monitoring of contact faults and interruptions</td><td>Passed</td></tr><tr><td>Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Simulated service life test through increased levels of noise-like oscillations</td><td>Test passed according to Section 9 of the standard</td></tr><tr><td>Frequency</td><td>f<sub>1</sub> = 5 Hz to f<sub>2</sub> = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.572g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>5 h</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Extended testing: Monitoring of contact faults and interruptions</td><td>Passed</td></tr><tr><td>Extended testing: Voltage drop measurement before and after each axis</td><td>Passed</td></tr></table> | Environmental Testing |  | Test specification:<br>Railway applications –<br>Rolling stock –<br>Electronic equipment | DIN EN 50155 (VDE 0115-200):2022-06 | Test procedure:<br>Railway applications –<br>Rolling stock equipment –<br>Vibration and shock tests | DIN EN 61373 (VDE 0115-0106):2011-04 | Spectrum/Mounting location | Service life test, Category 1, Class A/B | Functional test with noise-like oscillations | Test passed according to Section 8 of the standard | Frequency | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz | Acceleration | 0.101g (highest test level used for all axes) | Test duration per axis | 10 min. | Test directions | X, Y and Z axes | Monitoring of contact faults and interruptions | Passed | Voltage drop measurement before and after each axis | Passed | Simulated service life test through increased levels of noise-like oscillations | Test passed according to Section 9 of the standard | Frequency | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz | Acceleration | 0.572g (highest test level used for all axes) | Test duration per axis | 5 h | Test directions | X, Y and Z axes | Extended testing: Monitoring of contact faults and interruptions | Passed | Extended testing: Voltage drop measurement before and after each axis | Passed |
| Environmental Testing                                                                               |                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Test specification:<br>Railway applications –<br>Rolling stock –<br>Electronic equipment            | DIN EN 50155 (VDE 0115-200):2022-06                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Test procedure:<br>Railway applications –<br>Rolling stock equipment –<br>Vibration and shock tests | DIN EN 61373 (VDE 0115-0106):2011-04               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Spectrum/Mounting location                                                                          | Service life test, Category 1, Class A/B           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Functional test with noise-like oscillations                                                        | Test passed according to Section 8 of the standard |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Frequency                                                                                           | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Acceleration                                                                                        | 0.101g (highest test level used for all axes)      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Test duration per axis                                                                              | 10 min.                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Test directions                                                                                     | X, Y and Z axes                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Monitoring of contact faults and interruptions                                                      | Passed                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Voltage drop measurement before and after each axis                                                 | Passed                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Simulated service life test through increased levels of noise-like oscillations                     | Test passed according to Section 9 of the standard |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Frequency                                                                                           | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Acceleration                                                                                        | 0.572g (highest test level used for all axes)      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Test duration per axis                                                                              | 5 h                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Test directions                                                                                     | X, Y and Z axes                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Extended testing: Monitoring of contact faults and interruptions                                    | Passed                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Extended testing: Voltage drop measurement before and after each axis                               | Passed                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |
| Processing temperature                                                                              | -35 ... +60 °C                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |  |                                                                                          |                                     |                                                                                                     |                                      |                            |                                          |                                              |                                                    |           |                                                  |              |                                               |                        |         |                 |                 |                                                |        |                                                     |        |                                                                                 |                                                    |           |                                                  |              |                                               |                        |     |                 |                 |                                                                  |        |                                                                       |        |



| Environmental Testing                                                 |                                                     |
|-----------------------------------------------------------------------|-----------------------------------------------------|
| Shock test                                                            | Test passed according to Section 10 of the standard |
| Shock pulse form                                                      | Half sine                                           |
| Acceleration                                                          | 5g (highest test level used for all axes)           |
| Shock duration                                                        | 30 ms                                               |
| Number of shocks (per axis)                                           | 3 pos. und 3 neg.                                   |
| Test directions                                                       | X, Y and Z axes                                     |
| Extended testing: Monitoring of contact faults and interruptions      | Passed                                              |
| Extended testing: Voltage drop measurement before and after each axis | Passed                                              |
| Vibration and shock stress for rolling stock equipment                | Passed                                              |

| Commercial data       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| PU (SPU)              | 10 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918259224          |
| 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                                                                                                                                                                                                                                                                                                                              |           |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------|
|     |           |                  |
| Approval                                                                                                                                                                                                                                                                                                                                       | Standard  | Certificate Name |
| CB<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                 | IEC 61984 | NL-113351        |
| CSA<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                                | C22.2     | 1466354          |
| KEMA/KEUR<br>DEKRA Certification B.V.                                                                                                                                                                                                                                                                                                          | EN 61984  | 71-130478 REV.1  |
| UL<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                                                                                                           | UL 1977   | E45171           |
| UL<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                                                                                                           | UL 1059   | E45172           |

| Declarations of conformity and manufacturer's declarations                          |          |                  |
|-------------------------------------------------------------------------------------|----------|------------------|
|  |          |                  |
| Approval                                                                            | Standard | Certificate Name |
| Railway<br>WAGO GmbH & Co. KG                                                       | -        | Railway Ready    |



Approvals for marine applications



| Approval                                | Standard  | Certificate Name  |
|-----------------------------------------|-----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping | -         | 24-0095975-PDA    |
| BV<br>Bureau Veritas S.A.               | IEC 60998 | 11915/E0 BV       |
| DNV<br>DNV GL SE                        | -         | TAE000016Z        |
| PRS<br>Polski Rejestr Statków           | -         | TE/1095/880590/23 |

Downloads

Environmental Product Compliance

| Compliance Search                                      |
|--------------------------------------------------------|
| Environmental Product<br>Compliance<br>231-621/018-000 |



Documentation

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



CAD/CAE-Data

| CAD data                        |
|---------------------------------|
| 2D/3D Models<br>231-621/018-000 |



| CAE data                             |
|--------------------------------------|
| EPLAN Data Portal<br>231-621/018-000 |



|                                 |
|---------------------------------|
| ZUKEN Portal<br>231-621/018-000 |
|---------------------------------|



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 231-121/026-000  
1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5 mm; 21-  
pole; gray



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; black



[Item No.: 216-264](#)  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



[Item No.: 216-284](#)  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; 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.: 209-137**  
Mounting adapter; can be used as end stop; 6.5 mm wide; gray

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.: 231-910**  
Jumper; for conductor entry; 10-way; insulated; gray



**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 Mounting adapter

1.2.8.1 Mounting accessories



**Item No.: 209-148**  
Multi mounting adapter; for female and male connectors; 25 mm wide; 3 parts; 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.: 280-440**  
Operating tool; made of insulating material; 10-way; white



**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; 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



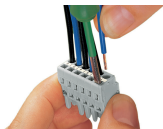
**Item No.: 280-438**  
Operating tool; made of insulating material; 8-way; white



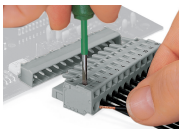
**Item No.: 231-159**  
Operating tool; natural

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.

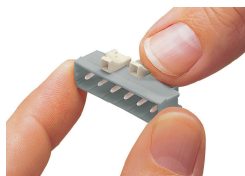


Inserting a conductor into CAGE CLAMP® unit via operating tool (231-291).



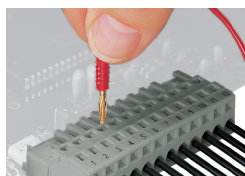
Inserting a conductor via operating tool.

## Coding



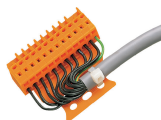
Coding a male header – fitting coding key(s).

## Testing

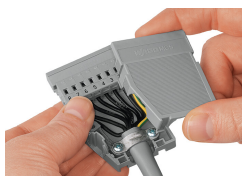


Testing – female connector with CAGE CLAMP®  
Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

## 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.