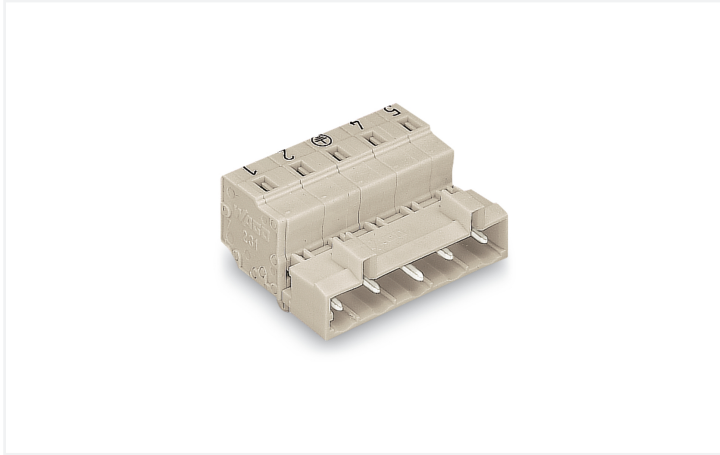


**Data Sheet | Item Number: 723-603/018-042**

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 3-pole; Preceding ground contact; 100% protected against mismatching; DIN-35 rail/panel mounting; Snap-in mounting feet; direct marking; 2,50 mm²; light gray

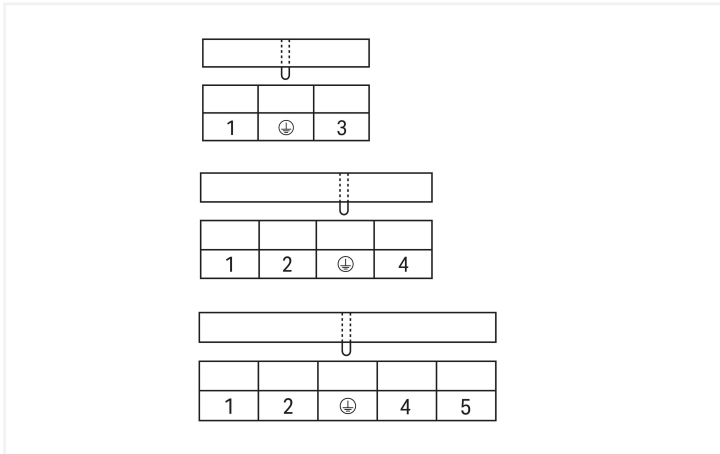
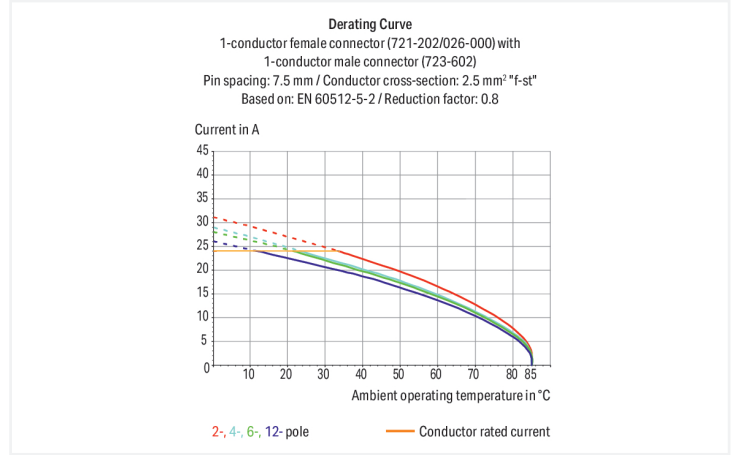


<https://www.wago.com/723-603/018-042>

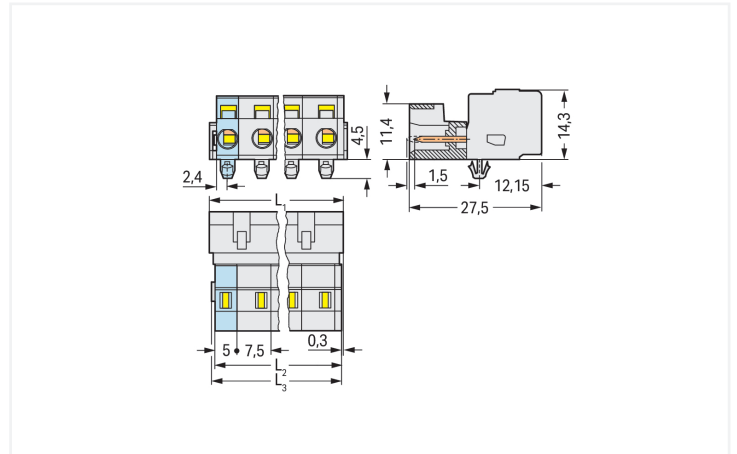


Color: ■ light gray

Similar to illustration



Preceding PE contact position



Dimensions in mm

$L1 = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L2 = L1 - 1.7 \text{ mm}$   
 $L3 = L1 - 1.2 \text{ mm}$

**Male connector, 723 Series, CAGE CLAMP®**

This male connector (item number 723-603/018-042) simplifies electrical installations. Strip lengths must be between 8 and 9 mm when connecting conductors to this male connector. This product features one conductor terminal and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. The dimensions are (23.2 x 18.8 x 27.5) mm (width x height x depth). Depending on the conductor type, this male connector is ideal for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin.

## Notes

## Safety Information

The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

## Variants:

Other pole numbers  
Gold-plated or partially gold-plated contact surfaces  
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

| Ratings per IEC/EN 60664-1      |       |       |        | Approvals per UL 1059 |       |   |       |
|---------------------------------|-------|-------|--------|-----------------------|-------|---|-------|
|                                 | III   | III   | II     | Use group             | B     | C | D     |
| Overvoltage category            | III   | III   | II     | Rated voltage         | 300 V | - | 300 V |
| Pollution degree                | 3     | 2     | 2      | Rated current         | 15 A  | - | 10 A  |
| Nominal voltage                 | 500 V | 630 V | 1000 V |                       |       |   |       |
| Rated impulse withstand voltage | 6 kV  | 6 kV  | 6 kV   |                       |       |   |       |
| Rated current                   | 12 A  | 12 A  | 12 A   |                       |       |   |       |

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

## Connection Data

|                            |                      |   |  |  |
|----------------------------|----------------------|---|--|--|
| Clamping units             | 3                    | <b>Connection 1</b>                               |  |  |
| Total number of potentials | 3                    | Connection technology                             | CAGE CLAMP®                                  |  |
| Number of connection types | 1                    | Actuation type                                    | Operating tool                               |  |
| Number of levels           | 1                    | Actuation direction 1                             | Operation parallel to conductor entry        |  |
| PE function                | Preceding PE contact | Actuation direction 2                             | Operation perpendicular to conductor entry   |  |
|                            |                      | Solid conductor                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |  |
|                            |                      | Fine-stranded conductor                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |  |
|                            |                      | Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                 |  |
|                            |                      | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm <sup>2</sup>                 |  |
|                            |                      | Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches            |  |
|                            |                      | Pole number                                       | 3  |  |
|                            |                      | Conductor entry direction to mating direction     | 0°   |  |

## Physical data

|                         |                        |
|-------------------------|------------------------|
| Pin spacing             | 7.5 mm / 0.295 inches  |
| Width                   | 23.2 mm / 0.913 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 |

### 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               | Yes                 |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | light 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                          | 0.114 MJ   |
| Weight                             | 5.8 g  |

### Environmental requirements

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

### 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   | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$     |
| 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   | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$     |
| 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

|   |   |
|---|---|
| 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)              | 100 pcs                |
| Packaging type        | Box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918265225          |
| 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        |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-130478 REV.1  |
| UR<br>Underwriters Laboratories Inc.  | UL 1059   | E45172           |
| UR<br>Underwriters Laboratories Inc.  | UL 1977   | E 45171          |

#### 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>723-603/018-042 |

Documentation

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

CAD/CAE-Data

| CAD data                        |
|---------------------------------|
| 2D/3D Models<br>723-603/018-042 |

| CAE data                             |
|--------------------------------------|
| EPLAN Data Portal<br>723-603/018-042 |
| ZUKEN Portal<br>723-603/018-042      |

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



**Item No.: 721-203/026-000**  
 1-conductor female connector; CAGE  
 CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 3-  
 pole; 100% protected against mismatching;  
 2,50 mm<sup>2</sup>; light gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



**Item No.: 231-130**

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 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-141**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-242**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-262**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-142**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-243**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-263**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated



**Item No.: 216-143**

Ferrule; Sleeve for 1 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-264**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-284**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-144**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



**Item No.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-106**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored

## 1.2.4 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.: 231-673**

Insulation stop; 0.08-0.2 mm<sup>2</sup> / 0.2 mm<sup>2</sup> "s"; white



**Item No.: 231-674**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; light gray



**Item No.: 231-675**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray

## 1.2.6 Marking

### 1.2.6.1 Marking strip



**Item No.: 210-833**

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



**Item No.: 210-834**

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

## 1.2.7 Mounting adapter

### 1.2.7.1 Mounting accessories



**Item No.: 209-148**

Multi mounting adapter; for female and male connectors; 25 mm wide; 3 parts; gray

## 1.2.8 Strain relief

### 1.2.8.1 Strain relief housing



**Item No.: 232-663**

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 7.5 mm; 3-pole; gray

## 1.2.9 Tool

### 1.2.9.1 Operating tool



**Item No.: 231-231**

Combination operating tool; red



**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

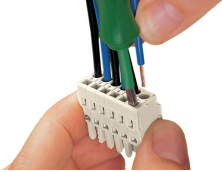


**Item No.: 231-159**

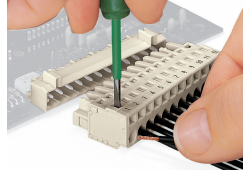
Operating tool; natural

## Installation Notes

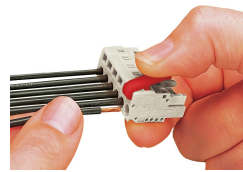
### Conductor termination



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



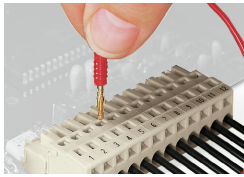
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor via operating tool.



## Testing

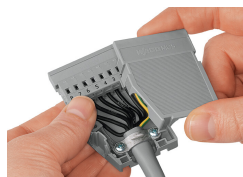


Testing perpendicular to conductor entry with 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP® – via integrated test ports

## Installation

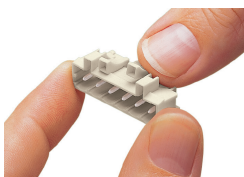


Male connector with strain relief plate



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

## Coding



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