

## Data Sheet | Item Number: 713-1117/037-9037

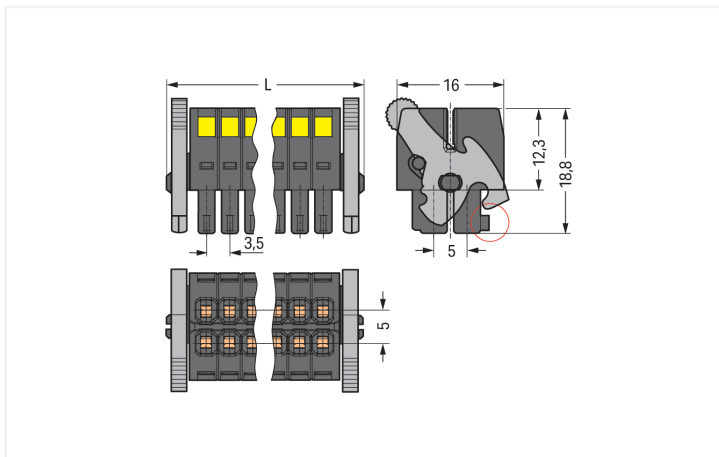
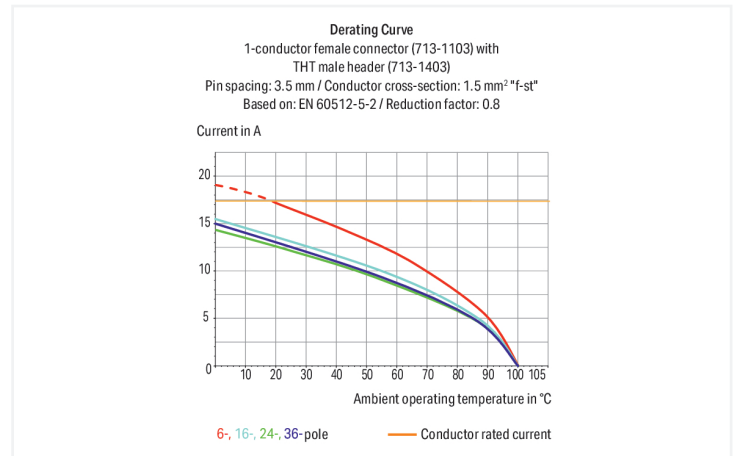
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; direct marking; 1,50 mm²; black

<https://www.wago.com/713-1117/037-9037>



Color: ■ black

Similar to illustration



Dimensions in mm

$L = [(pole\ no./2) - 1] \times pin\ spacing + 12.2\ mm$  Coding finger (red circle)

Female connector, 713 Series, 0° conductor exit to connection direction

Effortless electrical installations are guaranteed with this female connector (item number 713-1117/037-9037). Ensure that the strip lengths are between 6 and 7 mm when connecting conductors to this female connector. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's dimensions are (68 x 18.8 x 16) mm (width x height x depth). Depending on the type of conductor, this female connector is suitable for conductor cross sections ranging from 0.08 mm² to 1.5 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<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                 | 80 V   | 160 V          | 250 V  |   |
| Rated impulse withstand voltage | 2.5 kV | 2.5 kV         | 2.5 kV |   |
| Rated current                   | 10 A   | 10 A           | 10 A   |   |
| Approvals per                   |        | UL 1059        |        |   |
| Use group                       |        | B              | C      | D |
| Rated voltage                   |        | 300 V          | 50 V   | - |
| Rated current                   |        | 10 A           | 10 A   | - |
| Approvals per                   |        | CSA            |        |   |
| Use group                       | B      | C              | D      |   |
| Rated voltage                   | 300 V  | -              | -      |   |
| Rated current                   | 10 A   | -              | -      |   |

| Connection Data                                   |                                            |  |
|---------------------------------------------------|--------------------------------------------|--|
| Clamping units                                    | 34                                         |  |
| Total number of potentials                        | 34                                         |  |
| Number of connection types                        | 1                                          |  |
| Number of levels                                  | 2                                          |  |
| Connection 1                                      |                                            |  |
| Connection technology                             | CAGE CLAMP®                                |  |
| Actuation type                                    | Operating tool                             |  |
| Actuation direction 1                             | Operation perpendicular to conductor entry |  |
| Solid conductor                                   | 0.08 ... 1.5 mm² / 28 ... 16 AWG           |  |
| Fine-stranded conductor                           | 0.08 ... 1.5 mm² / 28 ... 16 AWG           |  |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1 mm²                             |  |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1 mm²                             |  |
| Strip length                                      | 6 ... 7 mm / 0.24 ... 0.28 inches          |  |
| Pole number                                       | 34                                         |  |
| Conductor entry direction to mating direction     | 0°                                         |  |

| Physical data |                        |
|---------------|------------------------|
| Pin spacing   | 3.5 mm / 0.138 inches  |
| Width         | 68.2 mm / 2.685 inches |
| Height        | 16.5 mm / 0.65 inches  |
| Depth         | 22.3 mm / 0.878 inches |

### Mechanical data

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

### Plug-in connection

|                                    |                         |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type)        | for conductor           |
| Mismating protection               | Yes                     |
| Locking of plug-in connection      | Locking lever           |

### Material data

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | black                                                                    |
| Material group                     | II                                                                       |
| Insulation material (main housing) | Glass fiber-reinforced polyamide (PA66 GF)                               |
| Flammability class per UL94        | V0                                                                       |
| Clamping spring material           | Chrome-nickel spring steel (CrNi)                                        |
| Contact material                   | Copper alloy                                                             |
| Contact Plating                    | Tin                                                                      |
| Fire load                          | 0.25 MJ                                                                  |
| Weight                             | 18 g                                                                     |

### Environmental requirements

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

### Commercial data

|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| PU (SPU)              | 10 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | PL                     |
| GTIN                  | 4050821177326          |
| Customs tariff number | 85366990990            |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-14-11-06          |
| eCl@ss 9.0  | 27-14-11-06          |
| ETIM 9.0    | EC001284             |
| ETIM 10.0   | EC001284             |
| ECCN        | NO US CLASSIFICATION |



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

Approvals / Certificates

| General approvals                                                                                                                                                                                                                                    |           |                                 | Declarations of conformity and manufacturer's declarations                        |          |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------|-----------------------------------------------------------------------------------|----------|------------------|
|    |           |                                 |  |          |                  |
| Approval                                                                                                                                                                                                                                             | Standard  | Certificate Name                | Approval                                                                          | Standard | Certificate Name |
| CB<br>DEKRA Certification B.V.                                                                                                                                                                                                                       | IEC 61984 | NL-102427                       | Railway<br>WAGO GmbH & Co. KG                                                     | -        | Z00004423.000    |
| CSA<br>CSA Group                                                                                                                                                                                                                                     | C22.2     | 2315087                         |                                                                                   |          |                  |
| KEMA/KEUR<br>DEKRA Certification B.V.                                                                                                                                                                                                                | EN 61984  | 71-133740                       |                                                                                   |          |                  |
| UL<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                 | UL 1059   | UL-US-L45172-6187124-22905991-1 |                                                                                   |          |                  |

Downloads

| Environmental Product Compliance                      |                                                                                     |
|-------------------------------------------------------|-------------------------------------------------------------------------------------|
| Compliance Search                                     |                                                                                     |
| Environmental Product Compliance<br>713-1117/037-9037 |  |

Documentation

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

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug

|                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 713-1437/116-000/997-409</b><br>THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 34-pole; black | <br><b>Item No.: 713-1437/116-000</b><br>THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 34-pole; black   | <br><b>Item No.: 713-1417/116-000/997-409</b><br>THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 34-pole; black | <br><b>Item No.: 713-1417/116-000</b><br>THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 34-pole; black |
| <br><b>Item No.: 713-1437/037-000</b><br>THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 34-pole; black                                     | <br><b>Item No.: 713-1417/037-000</b><br>THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 34-pole; black |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                         |



1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule

|                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                       | <br><b>Item No.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                       | <br><b>Item No.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored                                           | <br><b>Item No.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                              |
| <br><b>Item No.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                              | <br><b>Item No.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                             | <br><b>Item No.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white | <br><b>Item No.: 216-241</b><br>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 |
| <br><b>Item No.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white                                                                         | <br><b>Item No.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92      | <br><b>Item No.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored                                            | <br><b>Item No.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored                                                              |
| <br><b>Item No.: 216-242</b><br>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 | <br><b>Item No.: 216-262</b><br>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 | <br><b>Item No.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                       | <br><b>Item No.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                                         |
| <br><b>Item No.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92   | <br><b>Item No.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                                           | <br><b>Item No.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                         | <br><b>Item No.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red   |
| <br><b>Item No.: 216-263</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red   | <br><b>Item No.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                           | <br><b>Item No.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                         | <br><b>Item No.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                              |
| <br><b>Item No.: 216-143</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92      | <br><b>Item No.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored                                                              |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                       |

1.2.2 Stickers with operating instructions

1.2.2.1 Stickers with operating instructions



**Item No.: 210-493**  
Stickers for operating instructions

1.2.3 Strain relief

1.2.3.1 Strain relief plate



**Item No.: 713-129**  
Strain relief plate; for female connectors;  
53 mm wide; 1 part; Pin spacing 3.5 mm;  
black

1.2.4 Tool

1.2.4.1 Operating tool



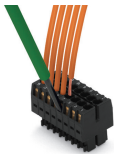
**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a  
partially insulated shaft



**Item No.: 210-647**  
Operating tool; Blade: 2.5 x 0.4 mm; with a  
partially insulated shaft; multicoloured

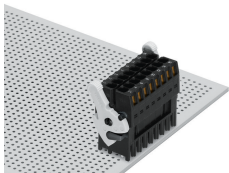
Installation Notes

Conductor termination



Inserting a conductor via (2.5 x 0.4) mm  
screwdriver.

Locking system



Lever as a lock – when closed, female  
connector is locked.

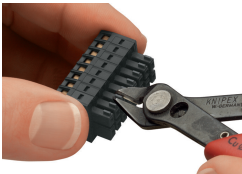


Lever as a disconnection aid – when ope-  
ned, female connector is disconnected.  
Rotating the lever lifts the female  
connector out of the male header.



Screw interlock can only be disconnected  
using a tool.

Coding



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

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.