

Data Sheet | Item Number: 713-1108/037-9037/033-000

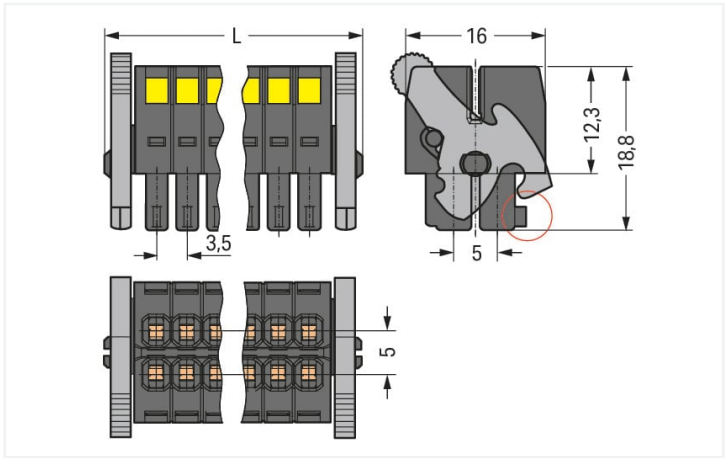
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Levers; Strain relief plate; direct marking; 1,50 mm²; black



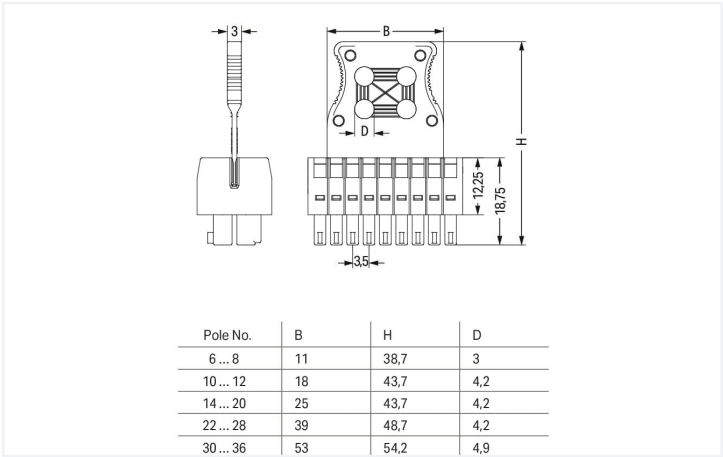
<https://www.wago.com/713-1108/037-9037/033-000>



Color: ■ black



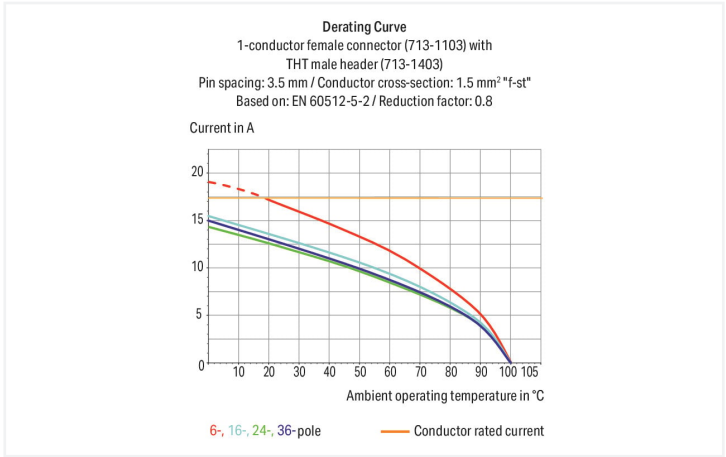
Dimensions in mm
 $L = [(pole\ no./2) - 1] \times pin\ spacing + 12.2\ mm$
Coding finger (red circle)



Dimensions in mm
The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

Cable ties and binding tools are not offered by WAGO.

- Universal connection for all conductor types
- Unique, compact, double-row connector system for conductor cross-sections up to 1.5 mm²
- High-density, wire-to-board connections in very confined spaces
- Centered strain relief plate anchors conductors, while acting as convenient connection and disconnection handle. It also provides easy access to operating slots – even when wired.
- Coding fingers provide 100% protection against mismatching





| 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 | | |
| Overvoltage category | | III | III | II |
| Pollution degree | | 3 | 2 | 2 |
| Nominal voltage | | 80 V | 160 V | 250 V |
| Rated surge 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 | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|-----------------------|-------------|----------------|----------------|-----------------------|--|-----------------|----------------------------------|-------------------------|----------------------------------|---|----------------|---|----------------|--------------|-----------------------------------|-------------|----|---|-----|
| Connection points | 16 | <div>Connection 1</div> <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Actuation direction 1</td><td>Operation perpendicular to conductor entry</td></tr><tr><td>Solid conductor</td><td>0.08 ... 1.5 mm² / 28 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 1.5 mm² / 28 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 1 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 1 mm²</td></tr><tr><td>Strip length</td><td>6 ... 7 mm / 0.24 ... 0.28 inches</td></tr><tr><td>Pole number</td><td>16</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0 °</td></tr></table> | 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 | 16 | Conductor entry direction to mating direction | 0 ° |
| 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 | 16 | | | | | | | | | | | | | | | | | | | | | |
| Conductor entry direction to mating direction | 0 ° | | | | | | | | | | | | | | | | | | | | | |
| Total number of potentials | 16 | | | | | | | | | | | | | | | | | | | | | |
| Number of connection types | 1 | | | | | | | | | | | | | | | | | | | | | |
| Number of levels | 2 | | | | | | | | | | | | | | | | | | | | | |

| Physical data | |
|---------------|------------------------|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 36.5 mm / 1.437 inches |
| Height | 43.7 mm / 1.72 inches |
| Depth | 16 mm / 0.63 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 |
| Strain relief | | Strain relief plate |
| Material data | | |
| Note (material data) | | Information on material specifications can be found here |
| Color | | black |
| Material group | | II |
| Insulation material | | 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 | | 0.151 MJ |
| Weight | | 10 g |
| Environmental requirements | | |
| Limit temperature range | | -60 ... +100 °C |
| Processing temperature | | -35 ... +60 °C |
| Commercial data | | |
| Product Group | | 3 (Multi Conn. System) |
| eCl@ss 10.0 | | 27-14-11-06 |
| eCl@ss 9.0 | | 27-14-11-06 |
| ETIM 8.0 | | EC001284 |
| ETIM 7.0 | | EC001284 |
| PU (SPU) | | 25 pcs |
| Packaging type | | Box |
| Country of origin | | PL |
| GTIN | | 4050821177630 |
| Customs tariff number | | 85366990990 |
| Environmental Product Compliance | | |
| REACH Candidate List Substance | | Perfluorobutane sulfonic acid (PFBS) and its salts |
| RoHS Compliance Status | | Compliant, No Exemption |
| SCIP notification number (Austria) | | aebd4750-9d97-4202-931f-d9dcafb87fea |
| SCIP notification number (Belgium) | | ca420085-225b-4e1e-a856-a2c4e3397be1 |
| SCIP notification number (Bulgaria) | | 5a4035e0-e2be-4f99-a447-e746c612d440 |
| SCIP notification number (Czech Republic) | | 8893a00a-3595-4e63-a8db-4385b5b71c8f |
| SCIP notification number (Denmark) | | 1644bed3-6dc4-4e31-8591-559e4aaee745 |
| SCIP notification number (Finland) | | 6910a937-e41c-430d-a653-fa6c241dc389 |
| SCIP notification number (France) | | aff19595-0073-4631-bee5-248bc3dd40c0 |
| SCIP notification number (Germany) | | 16319dbe-af94-4d3b-a173-ded3d80d3dff |
| SCIP notification number (Hungary) | | ee285df4-a932-4a36-990e-9ffa0596375b |
| SCIP notification number (Italy) | | 2838c134-ebb2-4bb4-a907-34507e4af8c8 |



Environmental Product Compliance

| | |
|--|--------------------------------------|
| SCIP notification number (Netherlands) | 7395acd1-4505-4a25-9735-f6315608d0c4 |
| SCIP notification number (Poland) | 966c794f-c419-4c63-b30b-4d4493b610fb |
| SCIP notification number (Romania) | a2e604bf-a149-4da0-aa6f-03c84d2a7697 |
| SCIP notification number (Sweden) | 6b458de3-5a99-4604-8c83-15ba0e088c36 |

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---------------------------------------|-----------|---------------------------------|
| CB DEKRA Certification B.V. | IEC 61984 | NL-102427 |
| CSA CSA Group | C22.2 | 2315087 |
| KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-133740 |
| UL Underwriters Laboratories Inc. | UL 1059 | UL-US-L45172-6187124-22905991-1 |

Downloads

Environmental Product Compliance

| |
|-------------------|
| Compliance Search |
| |

Documentation

| | | | |
|------------------------|------------|-------------------|--|
| Additional Information | | | |
| Technical Section | 03.04.2019 | pdf 2027.26 KB | |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: [713-1428/037-000](#)
THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 16-pole; black













Item No.: [713-1408/037-000](#)
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 16-pole; black



1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule

| | | | |
|---|---|---|---|
|  Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow |  Item No.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow |  Item No.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated |  Item No.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored |
|  Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise |  Item No.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise |  Item No.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated |  Item No.: 216-152 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated |
|  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.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white |  Item No.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white |  Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; 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; uninsulated; electro-tin plated; silver-colored |  Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; 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.: 216-222 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; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 |  Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored |
|  Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; 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.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red |  Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated |  Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 |  Item No.: 216-123 Ferrule; Sleeve for 1 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.: 713-127
Strain relief plate; for female connectors;
25 mm wide; 1 part; Pin spacing 3.5 mm;
black

1.2.4 Tool

1.2.4.1 Operating tool



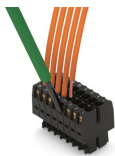
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft



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

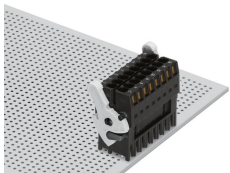
Installation Notes

Conductor termination

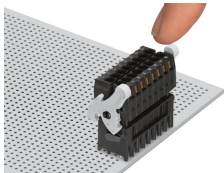


Inserting a conductor via (2.5 x 0.4) mm
screwdriver.

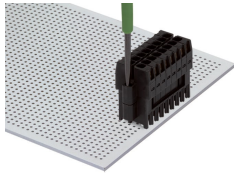
Locking system



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

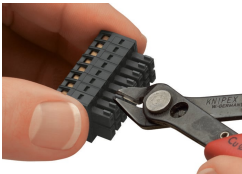


Lever as a disconnection aid – when open-
ed, female connector is disconnected.
Rotating the lever lifts the female
connector out of the male header.



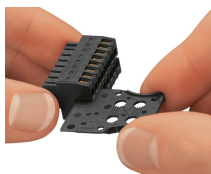
Screw interlock can only be disconnected
using a tool.

Coding

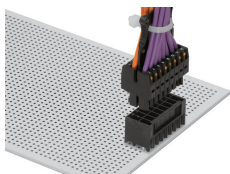


Coding a female connector by removing
coding finger(s).

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.