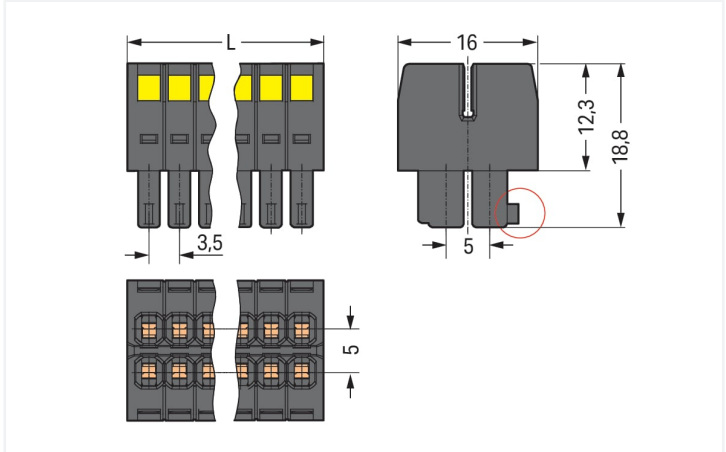


**Data Sheet | Item Number: 713-1118/000-047**  
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 36-pole; 100% protected against mismatching; direct marking; 1,50 mm²; black  
<https://www.wago.com/713-1118/000-047>

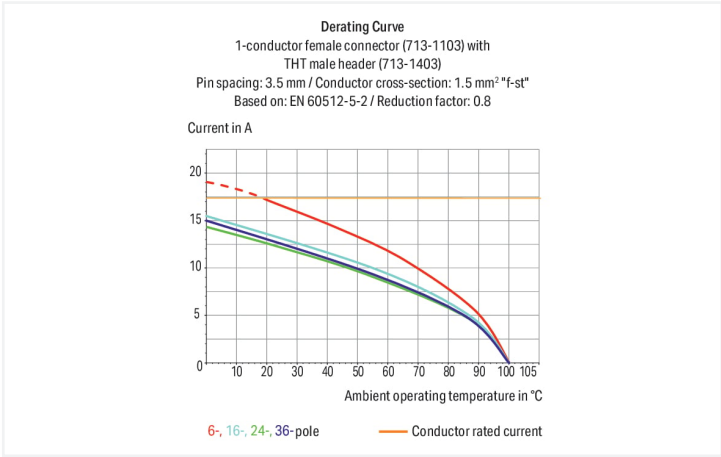


Color: ■ black

Similar to illustration



Dimensions in mm  
 $L = [(pole\ no./2) - 1] \times pin\ spacing + 5.2\ mm$   
Coding finger (red circle)



**Federleiste/Buchse Serie 713 mit 0 ° Leiterabgang zur Steckrichtung**

Die Federleiste/Buchse (Artikelnummer 713-1118/000-047) bietet eine saubere Elektroinstallation. Mit unseren Leiterplatten-Steckverbindern erhalten Sie ein ganzheitliches Steckverbindersystem, das vielseitig Verwendung finden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Bei dieser Federleiste/Buchse ist für den Leiteranschluss eine Abisolierlänge im Bereich von 6 bis 7 mm nötig. Dieses Produkt verwendet die CAGE CLAMP®-Technologie. Der zuverlässige und wartungsfreie CAGE CLAMP® Universalanschluss bietet die Möglichkeit, alle Arten von Leitern mit einer Käfigzugfeder anzuschließen, ohne, dass eine Vorbehandlung der Leiter erforderlich ist. Das Aufcrimpen von Aderendhülsen kann somit entfallen. In Breite x Höhe x Tiefe betragen die Maße (64,5 x 18,8 x 16) mm. Diese Federleiste/Buchse ist in Abhängigkeit von der Leiterart für Leiterquerschnitte von 0,08 mm² bis 1,5 mm² geeignet. Die Oberfläche der Kontakte ist aus Zinn. Durch ein Betätigungswerkzeug wird diese Federleiste/Buchse betätigt. Das MCS – "Multi Connection System" von WAGO umfasst insgesamt 7 Familien in den Rastermaßen 2,5 mm bis 10,16 mm und bietet mit dem Leiterquerschnittsbereich von 0,08 bis 25 mm² ein großes Portfolio an Einsatzmöglichkeiten.

| 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 |        |        |        | Approvals per UL 1059 |       |      |   |
|----------------------------|--------|--------|--------|-----------------------|-------|------|---|
| Overvoltage category       | III    | III    | II     | Use group             | B     | C    | D |
| Pollution degree           | 3      | 2      | 2      | Rated voltage         | 300 V | 50 V | - |
| Nominal voltage            | 80 V   | 160 V  | 250 V  | Rated current         | 10 A  | 10 A | - |
| Rated surge voltage        | 2.5 kV | 2.5 kV | 2.5 kV |                       |       |      |   |
| Rated current              | 10 A   | 10 A   | 10 A   |                       |       |      |   |

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

Connection data

|                            |    |                                                   |                                            |
|----------------------------|----|---------------------------------------------------|--------------------------------------------|
| Clamping units             | 36 | Connection 1                                      |                                            |
| Total number of potentials | 36 | Connection technology                             | CAGE CLAMP®                                |
| Number of connection types | 1  | Actuation type                                    | Operating tool                             |
| Number of levels           | 2  | 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                                       | 36                                         |
|                            |    | Conductor entry direction to mating direction     | 0°                                         |

Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 3.5 mm / 0.138 inches  |
| Width       | 64.5 mm / 2.539 inches |
| Height      | 18.8 mm / 0.74 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                     |



| 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                          | 0.261 MJ                                                                 |
| Weight                             | 18.1 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 9.0              | EC001284               |
| ETIM 8.0              | EC001284               |
| PU (SPU)              | 20 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | PL                     |
| GTIN                  | 4050821176572          |
| Customs tariff number | 85366990990            |

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

### Approvals / Certificates

| General approvals                                                                                                                                                                                                                                          |           |                                 | Declarations of conformity and manufacturer's declarations                          |          |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------|-------------------------------------------------------------------------------------|----------|------------------|
|    |           |                                 |  |          |                  |
| Approval                                                                                                                                                                                                                                                   | Standard  | Certificate Name                | Approval                                                                            | Standard | Certificate Name |
| CB<br>DEKRA Certification B.V.                                                                                                                                                                                                                             | IEC 61984 | NL-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                                                                                                                                                        | 713-1118/000-047                                                                                                                                                                        |                                                                                                                                                                       |                                                                                                                                                                                         |
| 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                                                                                                                                                               |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| <div></div> <div></div>                                                                                                                                                                 |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| <a href="#">Item No.: 713-1438</a><br>THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 36-pole; black                   | <a href="#">Item No.: 713-1418</a><br>THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 36-pole; black                 |                                                                                                                                                                       |                                                                                                                                                                                         |
| 1.2 Optional Accessories                                                                                                                                                                |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| 1.2.1 Ferrule                                                                                                                                                                           |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| 1.2.1.1 Ferrule                                                                                                                                                                         |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
|                                                                                                                                                                                         |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| <a href="#">Item No.: 216-301</a><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                       | <a href="#">Item No.: 216-321</a><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                       | <a href="#">Item No.: 216-131</a><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored                                           | <a href="#">Item No.: 216-302</a><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                              |
|                                                                                                                                                                                         |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| <a href="#">Item No.: 216-322</a><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                              | <a href="#">Item No.: 216-132</a><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                             | <a href="#">Item No.: 216-201</a><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white | <a href="#">Item No.: 216-241</a><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 |
|                                                                                                                                                                                         |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| <a href="#">Item No.: 216-221</a><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white                                                                         | <a href="#">Item No.: 216-141</a><br>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     | <a href="#">Item No.: 216-101</a><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored                                           | <a href="#">Item No.: 216-121</a><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored                                                             |
|                                                                                                                                                                                         |                                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                         |
| <a href="#">Item No.: 216-242</a><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 | <a href="#">Item No.: 216-262</a><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 | <a href="#">Item No.: 216-202</a><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                       | <a href="#">Item No.: 216-222</a><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                                         |



1.2.1.1 Ferrule



**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.: 713-129**  
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



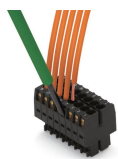
**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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

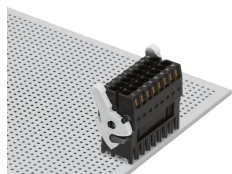
## Installation Notes

### Conductor termination

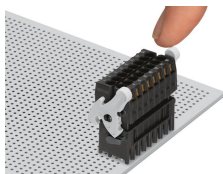


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

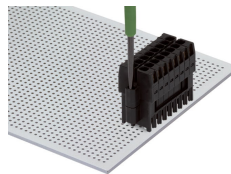
### Locking system



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

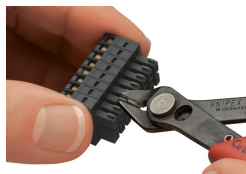


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



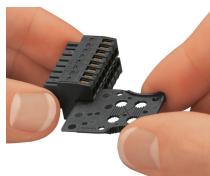
Screw interlock can only be disconnected using a tool.

### Coding

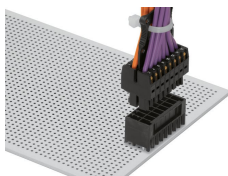


Coding a female connector by removing coding finger(s).

### Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.