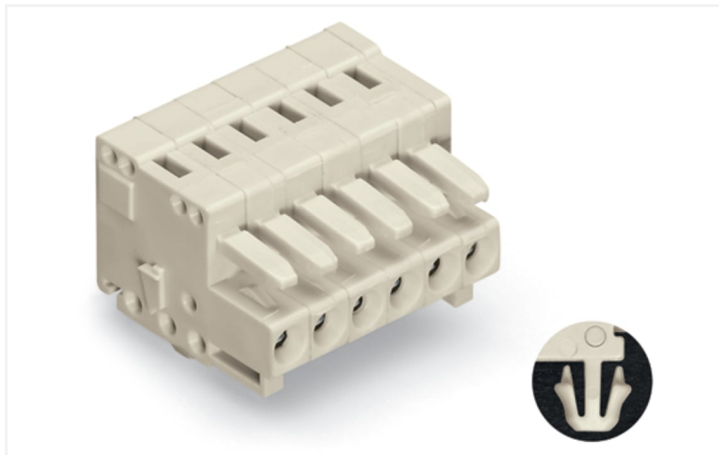


## Data Sheet | Item Number: 734-104/008-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 4-pole; 100% protected against mismating; Snap-in mounting feet; 1,50 mm<sup>2</sup>; light gray

<https://www.wago.com/734-104/008-000>

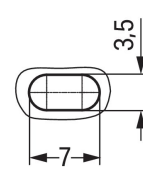


Color: ■ light gray

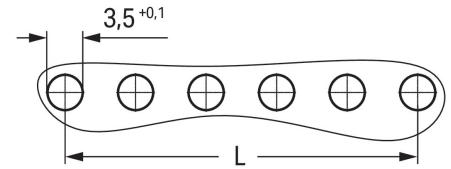
Similar to illustration

### Drilled hole pattern for panel mounting

2-pole



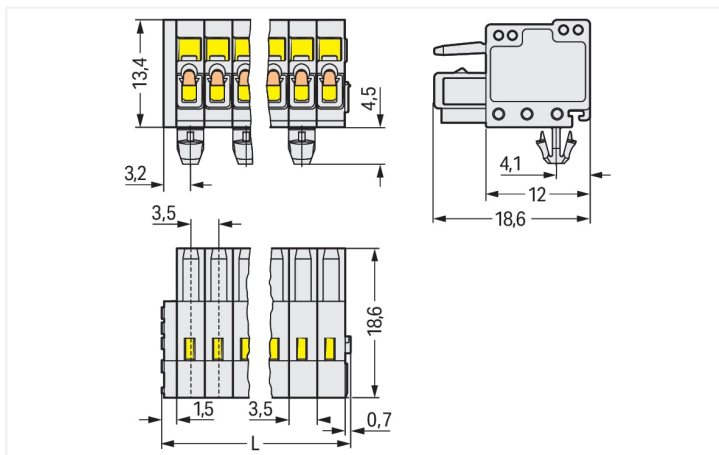
from 3-pole



Dimensions in mm

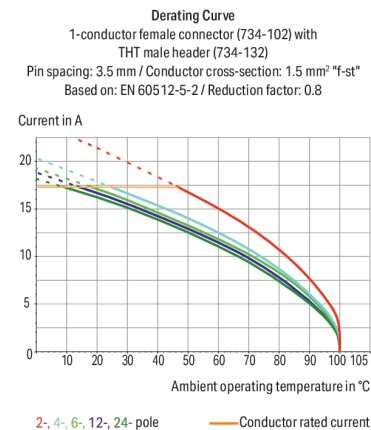
Even pole number:  $L = (\text{pole no.} - 2) \times \text{pin spacing}$

Odd pole number:  $L = (\text{pole no.} - 1) \times \text{pin spacing}$



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 2.2 \text{ mm}$



### Federleiste/Buchse Serie 734 mit Betätigungswerkzeug

Die Federleiste/Buchse mit der Artikelnummer 734-104/008-000 verspricht eine reibungslose Elektroinstallation. Mit unseren Leiterplatten-Steckverbindern bekommen Sie ein universelles Steckverbindersystem, das vielseitig Verwendung finden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Diese Federleiste/Buchse benötigt für den Leiteranschluss eine Abisolierlänge zwischen 6 und 7 mm. Dieses Produkt verwendet die CAGE CLAMP®-Technologie. Der zuverlässige und wartungsfreie CAGE CLAMP® Universalanschluss ermöglicht den Anschluss aller Leiterarten mit einer Käfigzugfeder. Eine Vorbehandlung der Leiter, z.B. durch das Aufcrimpen von Aderendhülsen, ist nicht erforderlich. Die Maße sind in Breite x Höhe x Tiefe (16,2 x 18,9 x 18,6) mm. Diese Federleiste/Buchse ist in Abhängigkeit von der Leiterart für Leiterquerschnitte von 0,08 mm<sup>2</sup> bis 1,5 mm<sup>2</sup> geeignet. Die Kontaktoberfläche ist aus Zinn. Für diese Federleiste/Buchse erfolgt die Betätigung per Betätigungswerkzeug. 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 mm<sup>2</sup> 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 |        |        |
| Overvoltage category |  | III            | III    | II     |
| Pollution degree     |  | 3              | 2      | 2      |
| Nominal voltage      |  | 160 V          | 160 V  | 320 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          | -      | 300 V  |
| Rated current        |  | 10 A           | -      | 10 A   |
| Approvals per        |  | CSA            |        |        |
| Use group            |  | B              | C      | D      |
| Rated voltage        |  | 300 V          | -      | 300 V  |
| Rated current        |  | 10 A           | -      | 10 A   |

| Connection data |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clamping units  | 4 | <div>Connection 1</div> <div>Connection technology</div> CAGE CLAMP® <div>Actuation type</div> Operating tool <div>Actuation direction 1</div> Operation parallel to conductor entry <div>Actuation direction 2</div> Operation perpendicular to conductor entry <div>Solid conductor</div> 0.08 ... 1.5 mm² / 28 ... 14 AWG <div>Fine-stranded conductor</div> 0.08 ... 1.5 mm² / 28 ... 14 AWG <div>Fine-stranded conductor; with insulated ferrule</div> 0.25 ... 1.5 mm² <div>Fine-stranded conductor; with uninsulated ferrule</div> 0.25 ... 1.5 mm² <div>Note (conductor cross-section)</div> Terminating 1.5 mm² conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row. <div>Strip length</div> 6 ... 7 mm / 0.24 ... 0.28 inches <div>Pole number</div> 4 <div>Conductor entry direction to mating direction</div> 0° |



| Physical data                                                  |                          |
|----------------------------------------------------------------|--------------------------|
| Pin spacing                                                    | 3.5 mm / 0.138 inches    |
| Width                                                          | 16.2 mm / 0.638 inches   |
| Height                                                         | 18.9 mm / 0.744 inches   |
| Height from the surface                                        | 13.4 mm / 0.528 inches   |
| Depth                                                          | 18.6 mm / 0.732 inches   |
| Drilled hole diameter for snap-in mounting foot with tolerance | 3.5 <sup>(+0.1)</sup> mm |

| Mechanical data          |                                         |
|--------------------------|-----------------------------------------|
| Variable coding          | Yes                                     |
| Housing sheet thickness  | 0.6 ... 1.2 mm / 0.024 ... 0.047 inches |
| Mounting type            | Snap-in foot<br>Panel mounting          |
| 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                              | 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                   | Copper alloy                                                             |
| Contact Plating                    | Tin                                                                      |
| Fire load                          | 0.055 MJ                                                                 |
| Weight                             | 3.3 g                                                                    |

| Environmental requirements                                                                         |                                                                                                                                             |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Limit temperature range                                                                            | -60 ... +100 °C                                                                                                                             |
| Processing temperature                                                                             | -35 ... +60 °C                                                                                                                              |
| Environmental Testing (Environmental Conditions)                                                   |                                                                                                                                             |
| 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>Shock and vibration tests | DIN EN 61373 (VDE 0115-0106):2011-04                                                                                                        |
| Spectrum/Installation location                                                                     | Service life test, Category 1, Class A/B                                                                                                    |
| Function test with noise-like vibration                                                            | Test passed according to Section 8 of the standard                                                                                          |
| Frequency                                                                                          | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz<br>f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz                                        |
| Acceleration                                                                                       | 0.101g (highest test level used for all axes)<br>0.572g (highest test level used for all axes)<br>5g (highest test level used for all axes) |
| Test duration per axis                                                                             | 10 min.<br>5 h                                                                                                                              |



| Environmental Testing (Environmental Conditions)                             |                                                       |
|------------------------------------------------------------------------------|-------------------------------------------------------|
| Test directions                                                              | X, Y and Z axes<br>X, Y and Z axes<br>X, Y and Z axes |
| Monitoring for contact faults/interruptions                                  | Passed                                                |
| Voltage drop measurement before and after each axis                          | Passed                                                |
| Simulated service life test through increased levels of noise-like vibration | Test passed according to Section 9 of the standard    |
| Extended test scope: Monitoring for contact faults/interruptions             | Passed<br>Passed                                      |
| Extended test scope: Voltage drop measurement before and after each axis     | Passed<br>Passed                                      |
| Shock test                                                                   | Test passed according to Section 10 of the standard   |
| Shock form                                                                   | Half sine                                             |
| Shock duration                                                               | 30 ms                                                 |
| Number of shocks per axis                                                    | 3 pos. und 3 neg.                                     |
| Vibration and shock stress for rolling stock equipment                       | Passed                                                |

| Commercial data       |                        |  |
|-----------------------|------------------------|--|
| Product Group         | 3 (Multi Conn. System) |  |
| eCl@ss 10.0           | 27-44-03-09            |  |
| eCl@ss 9.0            | 27-44-03-09            |  |
| ETIM 9.0              | EC002638               |  |
| ETIM 8.0              | EC002638               |  |
| PU (SPU)              | 100 pcs                |  |
| Packaging type        | Box                    |  |
| Country of origin     | DE                     |  |
| GTIN                  | 4045454930677          |  |
| 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.                                                     | EN 61984 | NL-54190         | Railway<br>WAGO GmbH & Co. KG                                                       | -        | Railway Ready    |
| KEMA/KEUR<br>DEKRA Certification B.V.                                              | EN 61984 | 71-105522        |                                                                                     |          |                  |
| UL<br>Underwriters Laboratories Inc.                                               | UL 1059  | E45172           |                                                                                     |          |                  |



Approvals for marine applications



| Approval                  | Standard  | Certificate Name |
|---------------------------|-----------|------------------|
| BV<br>Bureau Veritas S.A. | IEC 60998 | 11915/D0 BV      |
| DNV<br>DNV GL SE          | -         | TAE000016Z       |

Downloads

Environmental Product Compliance

| Compliance Search                                   |
|-----------------------------------------------------|
| Environmental Product Compliance<br>734-104/008-000 |



Documentation

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



CAD/CAE-Data

| CAD data                        |
|---------------------------------|
| 2D/3D Models<br>734-104/008-000 |



| CAE data                        |
|---------------------------------|
| ZUKEN Portal<br>734-104/008-000 |



1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: [734-304](#)  
1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; 100% protected against mismating; 1,50 mm²; light gray



| 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                                                                | <br><b>Item No.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                         | <br><b>Item No.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                       |
| <br><b>Item No.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black            | <br><b>Item No.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | <br><b>Item No.: 216-284</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | <br><b>Item No.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                            |
| <br><b>Item No.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | <br><b>Item No.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored                                                              |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                       |

1.2.2 Installation

1.2.2.1 Mounting accessories



**Item No.: 209-137**  
Mounting adapter; can be used as end stop; 6.5 mm wide; gray

1.2.3 Insulation stop

1.2.3.1 Insulation stop



**Item No.: 734-671**  
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 8 pieces/strip; light gray

1.2.4 Marking

1.2.4.1 Marking strip



**Item No.: 210-332/350-202**  
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/350-204**  
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/350-206**  
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.5 Strain relief

1.2.5.1 Strain relief housing



**Item No.: 734-604**  
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 3.5 mm; 4-pole; light gray

1.2.5.2 Strain relief plate



**Item No.: 734-127**  
Strain relief plate; for female and male connectors; 6 mm wide; 1 part; Pin spacing 3.5 mm; light gray

1.2.6 Test and measurement

1.2.6.1 Testing accessories



**Item No.: 735-500**  
WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

1.2.7 Tool

1.2.7.1 Operating tool



**Item No.: 734-190**  
Combination operating tool; natural



**Item No.: 734-231**  
Operating tool; black



**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



**Item No.: 210-251**  
Operating tool; for MCS MICRO and MINI with CAGE CLAMP® connection; yellow



**Item No.: 210-250**  
Operating tool; for MCS MINI and MIDI with CAGE CLAMP® connection; red

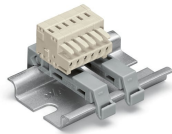


**Item No.: 734-191**  
Operating tool; made of insulating material; 1-way; loose; black



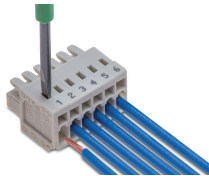
**Item No.: 734-230**  
Operating tool; made of insulating material; 1-way; white

Installation Notes

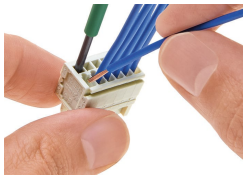


Using two DIN-35 rail mounting adapters (209-137) for 3 or more poles; distance between two mounting adapters: maximum 7 poles

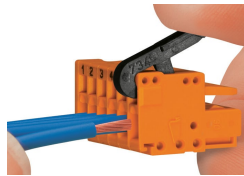
Conductor termination



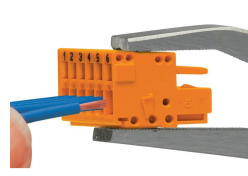
Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



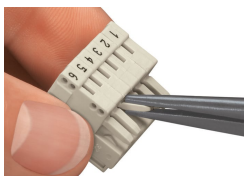
Inserting a conductor into CAGE CLAMP® unit via operating tool (734-191).



Inserting a conductor into CAGE CLAMP® unit via operating tool (210-251 or 210-250).

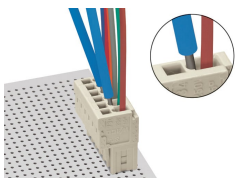


## Coding



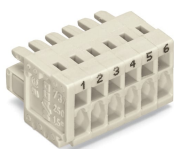
Coding a female connector – removing coding finger(s).

## Testing



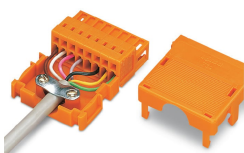
Testing via 1 mm Ø test pin (735-500) – CAGE CLAMP® connection – touch contact.

## Marking



Labeling via direct marking or self-adhesive strips.

## Installation



Strain relief housing for 734 Series Male and Female Connectors with CAGE CLAMP® connection