

**Data sheet | Item number: 734-112/107-000**

1-conductor female plug; 100% protected against mismatching; Screw flange;  
1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole



734-112/107-000



RoHS  
Compliant

BOMcheck.net

Color:

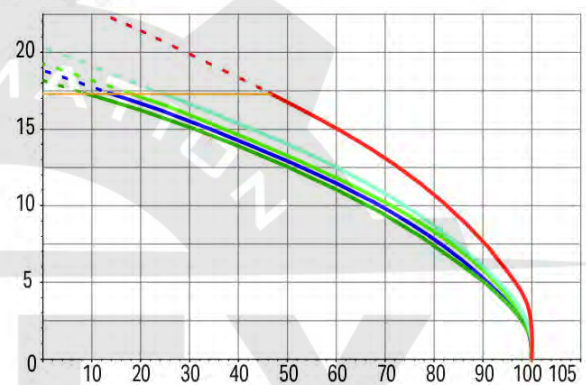
**Derating Curve**

1-conductor female connector (734-102) with  
THT male header (734-132)

Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm<sup>2</sup> "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8

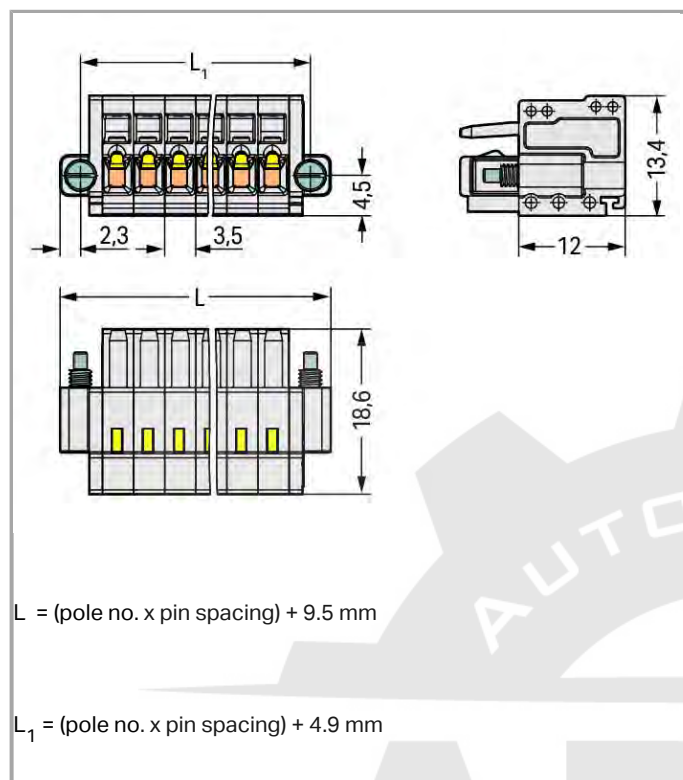
Current in A



Ambient operating temperature in °C

2-, 4-, 6-, 12-, 24- pole

— Conductor rated current



### Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates and housings for field assembly
- 100% protected against mismatching
- Coding via coding fingers

### Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

### Data

#### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 160 V  |
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2)         | 160 V  |
| Rated impulse voltage (III / 2) | 2.5 kV |
| Rated voltage (II / 2)          | 320 V  |

|                                |        |
|--------------------------------|--------|
| Rated impulse voltage (II / 2) | 2.5 kV |
| Rated current                  | 10 A   |

### Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 10 A  |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A  |

### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 10 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

### Connection data

|                                                             |                                                                                                                                  |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Connection technology                                       | CAGE CLAMP®                                                                                                                      |
| Actuation type                                              | Operating tool                                                                                                                   |
| Solid conductor                                             | 0.08 ... 1.5 mm² / 28 ... 14 AWG                                                                                                 |
| Fine-stranded conductor                                     | 0.08 ... 1.5 mm² / 28 ... 14 AWG                                                                                                 |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 1.5 mm²                                                                                                                 |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 1.5 mm²                                                                                                                 |
| Strip length                                                | 6 ... 7 mm / 0.24 ... 0.28 inch                                                                                                  |
| Note (conductor cross-section)                              | Terminating 1.5 mm² conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row. |
| No. of poles                                                | 12                                                                                                                               |
| Total number of connection points                           | 12                                                                                                                               |
| Total number of potentials                                  | 12                                                                                                                               |
| Number of connection types                                  | 1                                                                                                                                |
| Number of levels                                            | 1                                                                                                                                |
| Conductor entry direction to mating direction               | 0°                                                                                                                               |

### Geometrical Data

|             |                      |
|-------------|----------------------|
| Pin spacing | 3.5 mm / 0.138 inch  |
| Width       | 51.5 mm / 2.028 inch |
| Height      | 13.4 mm / 0.528 inch |
| Depth       | 18.6 mm / 0.732 inch |

### Plug connection

|                                    |                         |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
|------------------------------------|-------------------------|

|                               |                |
|-------------------------------|----------------|
| Connector connection type     | for conductors |
| Mismating protection          | Yes            |
| Locking of plug-in connection | Screw flange   |

## Material Data

|                             |                                   |
|-----------------------------|-----------------------------------|
| Color                       | light gray                        |
| Material group              | I                                 |
| Insulating material         | Polyamide 66 (PA 66)              |
| Flammability class per UL94 | V0                                |
| Clamping spring material    | Chrome nickel spring steel (CrNi) |
| Contact material            | Copper alloy                      |
| Contact plating             | tin-plated                        |
| Fire load                   | 0.15 MJ                           |
| Weight                      | 10.326 g                          |

## Environmental Requirements

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

## Commercial data

|                    |                        |
|--------------------|------------------------|
| Product Group      | 3 (Multi Conn. System) |
| Country of origin  | DE                     |
| GTIN               | 4045454618988          |
| Customs Tariff No. | 85366990990            |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                              | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|                                                                                    | CB<br>DEKRA Certification B.V.        | EN 61984                 | NL-54190         |
|  | CSA<br>DEKRA Certification B.V.       | C22.2                    | 1465035          |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984                 | 71-<br>105522    |

### Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|----------|--------------------------|------------------|
|------|----------|--------------------------|------------------|



DNV GL  
Det Norske Veritas, Germanischer Lloyd

TAE000016Z

## UL-Approvals

| Logo                                                                             | Approval                             | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | UL<br>UL International Germany GmbH  | UL 1977                  | E45171           |
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | 20190122-E45172  |

## Compatible products

### tools

|                                                                                    |                                                                                                                   |         |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------|
|  | Item no.: 210-250<br>Operating tool; for female and male connectors with CAGE CLAMP® connection; MCS MIDI & MINI  | 210-250 |
|  | Item no.: 210-251<br>Operating tool; for female and male connectors with CAGE CLAMP® connection; MCS MINI & MICRO | 210-251 |
|  | Item no.: 210-647<br>Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short                   | 210-647 |
|  | Item no.: 210-719<br>Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm                  | 210-719 |
|  | Item no.: 734-190<br>Combination operating tool; for male and female connectors with CAGE CLAMP®                  | 734-190 |
|  | Item no.: 734-191<br>Operating tool; for male and female connectors with CAGE CLAMP®; loose                       | 734-191 |
|  | Item no.: 734-230<br>Push-button; for female and male connectors                                                  | 734-230 |
|  | Item no.: 734-231<br>Operating tool; for male and female connectors with CAGE CLAMP®; of 734 Series               | 734-231 |

### ferrule

|                                                                                   |                                                                                            |         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------|
|  | Item no.: 216-101<br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated | 216-101 |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------|

|                                                                                    |                                                                                                                                                                            |         |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Item no.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-102 |
|    | <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | 216-103 |
|    | <b>Item no.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                          | 216-104 |
|    | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated                                                                          | 216-121 |
|    | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-122 |
|    | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | 216-123 |
|    | <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                          | 216-124 |
|    | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-131 |
|    | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-132 |
|   | <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  | 216-141 |
|  | <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 | 216-142 |
|  | <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    | 216-143 |
|  | <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  | 216-144 |
|  | <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-151 |
|  | <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-152 |
|  | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-201 |
|  | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                           | 216-202 |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                              | 216-203 |
|  | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                            | 216-204 |
|                                                                                    | <b>Item no.: 216-221</b>                                                                                                                                                   |         |

|                                                                                   |                                                                                                                                                                                  |                      |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|    | Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                                                              | 216-221              |
|    | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                                 | 216-222              |
|    | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                                    | 216-223              |
|    | <b>Item no.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                                  | 216-224              |
|    | <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          | 216-241              |
|    | <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         | 216-242              |
|    | <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            | 216-243              |
|    | <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          | 216-244              |
|    | <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         | 216-262              |
|   | <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            | 216-263              |
|  | <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          | 216-264              |
|  | <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          | 216-284              |
|                                                                                   | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                                 | 216-301              |
|  | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                                 | 216-302              |
|                                                                                   | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                                 | 216-321              |
|  | <b>Item no.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                                 | 216-322              |
| <b>Marking accessories</b>                                                        |                                                                                                                                                                                  |                      |
|                                                                                   | <b>Item no.: 210-332/350-202</b><br>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 | 210-332<br>/ 350-202 |
|                                                                                   | <b>Item no.: 210-332/350-204</b><br>Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length                                          | 210-332<br>/ 350-204 |

182 mm; Horizontal marking; Self-adhesive

**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

210-332  
 / 350-206

210-332

**Insulation stop**



**Item no.: 734-671**

Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 8 pieces/strip

734-671

**Strain relief plate**



**Item no.: 734-129**

Strain relief plate

734-129

**check**



**Item no.: 735-500**

Test pin; 1 mm Ø; with solder connection for test wire

735-500

**Downloads**

**CAD/CAE - Smart Data**

**CAD data**

3D Download 734-112/107-000

URL

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Subject to changes.