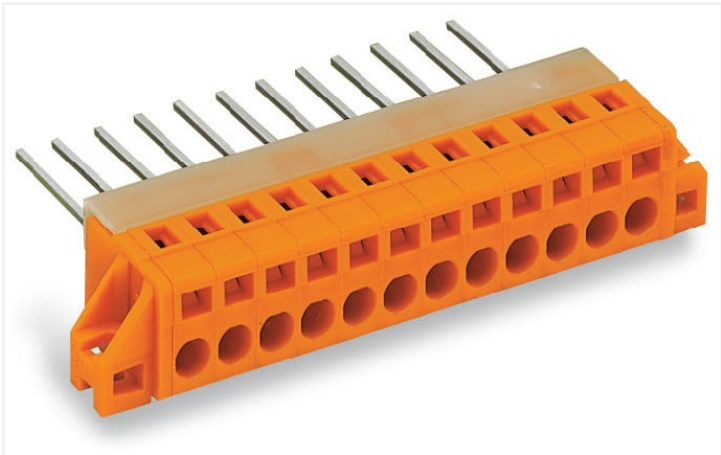


Data Sheet | Item Number: 731-171/048-000

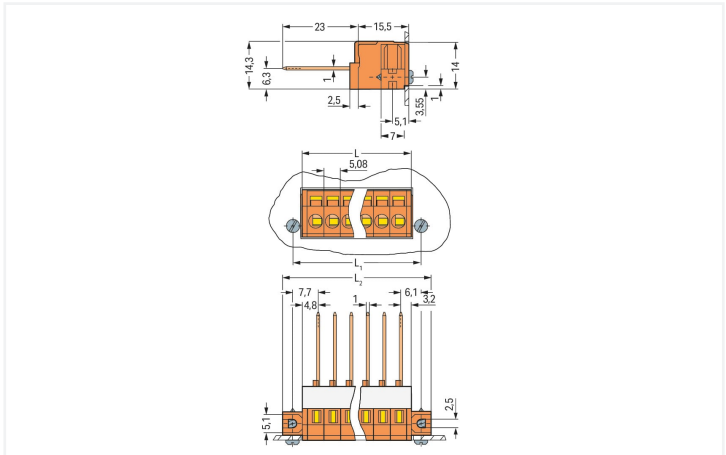
Feedthrough terminal block; Conductor/wire-wrap connection; Plate thickness: 1.5 mm; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 11-pole; CAGE CLAMP®; 2,50 mm<sup>2</sup>; orange

<https://www.wago.com/731-171/048-000>



Color: ■ orange

Similar to illustration



Dimensions in mm  
L = (pole no. x pin spacing) + 3 mm  
L1 = L + 5.8 mm  
L2 = L1 + 6.4 mm  
for plate thickness up to 1.5 mm

- Feedthrough PCB terminal strips with screwdriver-actuated CAGE CLAMP®
- With flanges for PCB or front-panel mounting – either flush with enclosure or protruding

| Notes     |                                                                                                                                                                                                                                                           |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variants: | Other pole numbers<br>Other colors<br>Direct marking<br>Versions without mounting flanges<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      |  | 320 V          | 320 V | 630 V |
| Rated surge voltage  |  | 4 kV           | 4 kV  | 4 kV  |
| Rated current        |  | 5 A            | 5 A   | 5 A   |
| Approvals per        |  | CSA            |       |       |
| Use group            |  | B              | C     | D     |
| Rated voltage        |  | 300 V          | -     | -     |
| Rated current        |  | 5 A            | -     | -     |
| Approvals per        |  | UL 1059        |       |       |
| Use group            |  | B              | C     | D     |
| Rated voltage        |  | 300 V          | 150 V | 300 V |
| Rated current        |  | 5 A            | 5 A   | 5 A   |

## Connection data

|                            |    |
|----------------------------|----|
| Connection points          | 11 |
| Total number of potentials | 11 |
| Number of connection types | 1  |
| Number of levels           | 1  |

### Connection 1

|                                                   |                                   |
|---------------------------------------------------|-----------------------------------|
| Connection technology                             | CAGE CLAMP®                       |
| Actuation type                                    | Operating tool                    |
| Solid conductor                                   | 0.08 ... 2.5 mm² / 28 ... 14 AWG  |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm² / 28 ... 14 AWG  |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm²                  |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm²                  |
| Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches |
| Pole number                                       | 11                                |

## Connection 2

|                         |               |
|-------------------------|---------------|
| Connection technology 2 | Wire-wrap pin |
|-------------------------|---------------|

## Physical data

|             |                         |
|-------------|-------------------------|
| Pin spacing | 5.08 mm / 0.2 inches    |
| Width       | 71.08 mm / 2.798 inches |
| Height      | 14.3 mm / 0.563 inches  |
| Depth       | 15.5 mm / 0.61 inches   |

## Mechanical data

|                         |                                                            |
|-------------------------|------------------------------------------------------------|
| Housing sheet thickness | 1.5 ... 1.5 mm / 0.059 ... 0.059 inches                    |
| Mounting type           | Mounting flange<br>Feed-through mounting<br>Panel mounting |

## Material data

|                             |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| Note (material data)        | <a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a> |
| Color                       | orange                                                                                                                 |
| Material group              | I                                                                                                                      |
| Insulation material         | Polyamide (PA66)                                                                                                       |
| Flammability class per UL94 | V0                                                                                                                     |
| Clamping spring material    | Chrome-nickel spring steel (CrNi)                                                                                      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> )                                                                                 |
| Contact plating             | Tin                                                                                                                    |
| Fire load                   | 0.273 MJ                                                                                                               |
| Weight                      | 17 g                                                                                                                   |

## Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °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)              | 10 pcs                 |  |
| Packaging type        | Box                    |  |
| Country of origin     | DE                     |  |
| GTIN                  | 4044918270175          |  |
| Customs tariff number | 85369010000            |  |

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

| Approvals / Certificates                                                         |           |                  |                                                                                    |           |                  |
|----------------------------------------------------------------------------------|-----------|------------------|------------------------------------------------------------------------------------|-----------|------------------|
| General approvals                                                                |           |                  | Approvals for marine applications                                                  |           |                  |
|  |           |                  |  |           |                  |
| Approval                                                                         | Standard  | Certificate Name | Approval                                                                           | Standard  | Certificate Name |
| CB<br>DEKRA Certification B.V.                                                   | IEC 61984 | NL-39756/A1      | ABS<br>American Bureau of Ship-<br>ping                                            | -         | 19-HG1869876-PDA |
| KEMA/KEUR<br>DEKRA Certification B.V.                                            | EN 61984  | 71-121453        | BV<br>Bureau Veritas S.A.                                                          | IEC 60998 | 11915/D0 BV      |
| UR<br>Underwriters Laboratories<br>Inc.                                          | UL 1059   | E45172           |                                                                                    |           |                  |

| Downloads                                              |                                                                                     |
|--------------------------------------------------------|-------------------------------------------------------------------------------------|
| Environmental Product Compliance                       |                                                                                     |
| Compliance Search                                      |                                                                                     |
| Environmental Product<br>Compliance<br>731-171/048-000 |  |

| Documentation          |            |                   |                                                                                     |
|------------------------|------------|-------------------|-------------------------------------------------------------------------------------|
| Additional Information |            |                   |                                                                                     |
| Technical Section      | 03.04.2019 | pdf<br>2010.85 KB |  |



| CAD/CAE-Data                                                                 |                                                                                   |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <div>CAD data</div> <div>2D/3D Models<br/>731-171/048-000</div> <div>↓</div> | <div>CAE data</div> <div>EPLAN Data Portal<br/>731-171/048-000</div> <div>↓</div> |
|                                                                              | <div>ZUKEN Portal<br/>731-171/048-000</div> <div>↓</div>                          |

| 1 Compatible Products    |
|--------------------------|
| 1.1 Optional Accessories |
| 1.1.1 Ferrule            |
| 1.1.1.1 Ferrule          |

|                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <div><b>Item No.: 216-301</b><br/>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</div>                                                                         |  <div><b>Item No.: 216-321</b><br/>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</div>                                                                     |  <div><b>Item No.: 216-151</b><br/>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated</div>                                                                               |  <div><b>Item No.: 216-131</b><br/>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored</div>                                                               |
|  <div><b>Item No.: 216-302</b><br/>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</div>                                                                |  <div><b>Item No.: 216-322</b><br/>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</div>                                                            |  <div><b>Item No.: 216-132</b><br/>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated</div>                                                                               |  <div><b>Item No.: 216-152</b><br/>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated</div>                                                                               |
|  <div><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</div> |  <div><b>Item No.: 216-201</b><br/>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</div>                                                                     |  <div><b>Item No.: 216-221</b><br/>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</div>                                                                         |  <div><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</div>      |
|  <div><b>Item No.: 216-101</b><br/>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored</div>                                                              |  <div><b>Item No.: 216-121</b><br/>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored</div>                                                          |  <div><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</div> |  <div><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</div> |
|  <div><b>Item No.: 216-202</b><br/>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray</div>                                                                         |  <div><b>Item No.: 216-222</b><br/>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray</div>                                                                     |  <div><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</div>     |  <div><b>Item No.: 216-102</b><br/>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored</div>                                                             |
|  <div><b>Item No.: 216-122</b><br/>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored</div>                                                             |  <div><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</div> |  <div><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</div>     |  <div><b>Item No.: 216-203</b><br/>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red</div>                                                                             |
|  <div><b>Item No.: 216-223</b><br/>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red</div>                                                                             |  <div><b>Item No.: 216-103</b><br/>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated</div>                                                                            |  <div><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</div>        |  <div><b>Item No.: 216-123</b><br/>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored</div>                                                                |



1.1.1.1 Ferrule



**Item No.: 216-204**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-224**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-244**  
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



**Item No.: 216-264**  
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



**Item No.: 216-284**  
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



**Item No.: 216-124**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated



**Item No.: 216-144**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



**Item No.: 216-104**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-106**  
Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored

1.1.2 Installation

1.1.2.1 Mounting accessories



**Item No.: 231-295**  
Screw with nut



**Item No.: 231-195**  
Screw with nut; M2x12; for fixing element



**Item No.: 209-147**  
Self-tapping screw



**Item No.: 231-194**  
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

1.1.3 Marking

1.1.3.1 Marking strip



**Item No.: 210-332/508-202**  
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-205**  
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-204**  
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-206**  
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.4 Tool

1.1.4.1 Operating tool



**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes



Feedthrough PCB terminal strips – front-entry conductor termination



Feedthrough PCB terminal strips can be used as front-panel feedthrough for external conductor termination.



With flanges for PCB or front-panel mounting – either flush with enclosure or protruding