

# Data Sheet | Item Number: 737-516

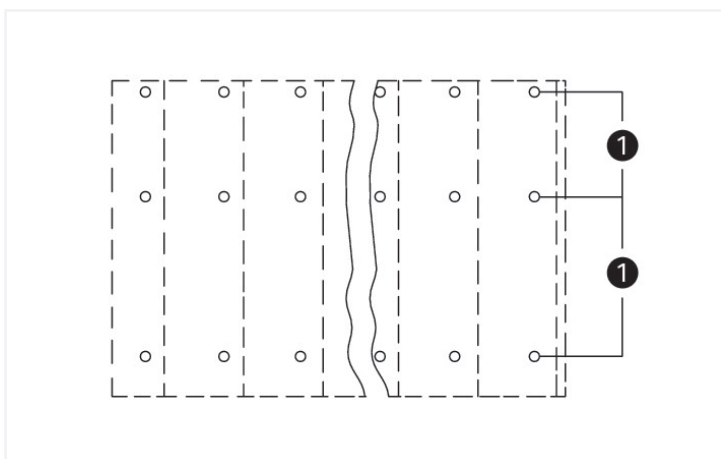
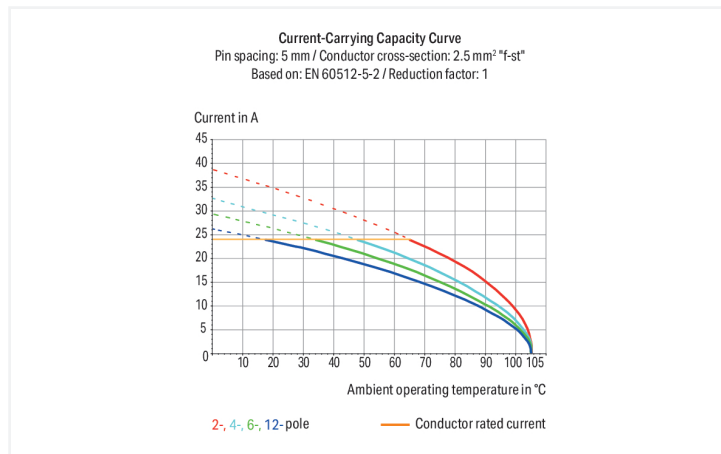
Triple-deck PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 48-pole; CAGE CLAMP®; gray

<https://www.wago.com/737-516>

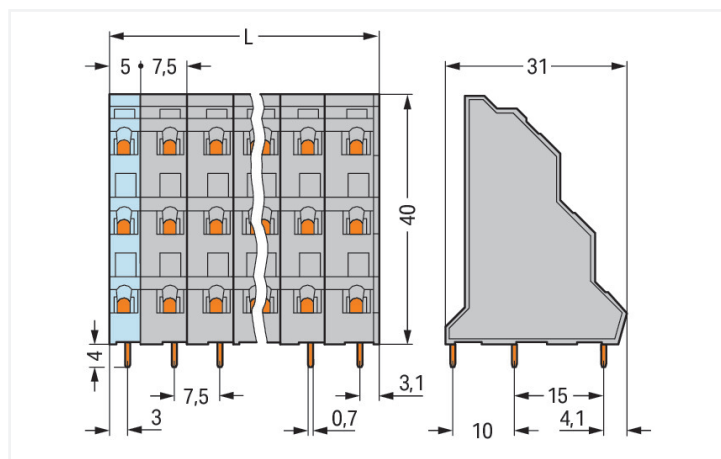


Color: ■ gray

Similar to illustration



(1) Solder pins in line



Dimensions in mm  
 $L = ((\text{pole no.} / 3) - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.1 \text{ mm}$

## PCB terminal block, 737 Series, CAGE CLAMP®

Our PCB terminal block (item number 737-516) makes connecting wires quick and easy. You can count on trusted safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Strip lengths must be between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a proven and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The item's dimensions are (118.6 x 44 x 31) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

The contact surface is coated with tin. An operating tool is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle.

## Notes

|           |  |
|-----------|--|
| Variants: | Other pole numbers<br>Other colors<br>Mixed-color PCB connector strips<br>Direct marking<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                         | between the modules |                |                | Ratings                         | between the decks |                |                |
|---------------------------------|---------------------|----------------|----------------|---------------------------------|-------------------|----------------|----------------|
| Ratings per                     | IEC/EN 60664-1      | IEC/EN 60664-1 | IEC/EN 60664-1 | Ratings per                     | IEC/EN 60664-1    | IEC/EN 60664-1 | IEC/EN 60664-1 |
| Overvoltage category            | III                 | III            | II             | Overvoltage category            | III               | III            | II             |
| Pollution degree                | 3                   | 2              | 2              | Pollution degree                | 3                 | 2              | 2              |
| Nominal voltage                 | 400 V               | 630 V          | 1000 V         | Nominal voltage                 | 320 V             | 320 V          | 630 V          |
| Rated impulse withstand voltage | 6 kV                | 6 kV           | 6 kV           | Rated impulse withstand voltage | 4 kV              | 4 kV           | 4 kV           |
| Rated current                   | 21 A                | 21 A           | 21 A           | Rated current                   | 21 A              | 21 A           | 21 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             | 48 |
| Total number of potentials | 48 |
| Number of connection types | 1  |
| Number of levels           | 3  |

## Connection 1

|   |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Operating tool                               |
| Solid conductor                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm <sup>2</sup>                 |
| Note (conductor cross-section)                    | 12 AWG: THHN, THWN                           |
| Strip length                                      | 5 ... 6 mm / 0.2 ... 0.24 inches             |
| Conductor connection direction to PCB             | 45°  |
| Pole number                                       | 48   |

## Physical data

|                         |                          |
|-------------------------|--------------------------|
| Pin spacing             | 7.5 mm / 0.295 inches    |
| Width                   | 118.6 mm / 4.669 inches  |
| Height                  | 44 mm / 1.732 inches     |
| Height from the surface | 40 mm / 1.575 inches     |
| Depth                   | 31 mm / 1.22 inches      |
| Solder pin length       | 4 mm                     |
| Solder pin dimensions   | 0.7 x 0.7 mm             |
| !                       | 1.3 <sup>(±0.1)</sup> mm |

### PCB contact

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| PCB contact                         | THT                                 |
| Solder pin arrangement              | within the terminal block (in-line) |
| Number of solder pins per potential | 1                                   |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | 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                   | Electrolytic copper (E <sub>cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 1.252 MJ   |
| Weight                             | 76 g   |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °C |
|-------------------------|-----------------|

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 8 pcs                          |
| Packaging type        | Box                            |
| Country of origin     | PL                             |
| GTIN                  | 4045454022471                  |
| Customs tariff number | 85369010000                    |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-44-04-01          |
| eCl@ss 9.0  | 27-44-04-01          |
| ETIM 9.0    | EC002643             |
| ETIM 10.0   | EC002643             |
| ECCN        | NO US CLASSIFICATION |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals



#### General approvals

|   |         |        |
|---|---------|--------|
| UR<br>Underwriters Laboratories<br>Inc. | UL 1059 | E45172 |
|---|---------|--------|

| Approval                        | Standard      | Certificate Name |
|---------------------------------|---------------|------------------|
| CCA<br>DEKRA Certification B.V. | EN 60947      | NTR NL-7960      |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4  | 2169331.28       |
| CSA<br>DEKRA Certification B.V. | C22.2 No. 158 | 70049157         |

Declarations of conformity and manufacturer's declarations

| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

Approvals for marine applications



| Approval                           | Standard  | Certificate Name |
|------------------------------------|-----------|------------------|
| ABS<br>American Bureau of Shipping | -         | 24-0095975-PDA   |
| BV<br>Bureau Veritas S.A.          | IEC 60998 | 11915/E0 BV      |
| DNV<br>DNV GL SE                   | -         | TAE000016Z       |

Downloads

Environmental Product Compliance

| Compliance Search                        |                   |
|--|-------------------|
| Environmental Product Compliance 737-516 | <a href="#">↓</a> |

Documentation

| Additional Information                     |            |                   |                   |
|--|------------|-------------------|-------------------|
| Technical Section                          | 03.04.2019 | pdf<br>2027.26 KB | <a href="#">↓</a> |
| Gebrückte Klemmenleisten für Leiterplatten |            | pdf<br>303.71 KB  | <a href="#">↓</a> |

CAD/CAE-Data

| CAD data             |                   |
|----------------------|-------------------|
| 2D/3D Models 737-516 | <a href="#">↓</a> |

| CAE data                  |                   |
|---------------------------|-------------------|
| EPLAN Data Portal 737-516 | <a href="#">↓</a> |
| ZUKEN Portal 737-516      | <a href="#">↓</a> |

PCB Design

|  |                   |
|--|-------------------|
| Symbol and Footprint via SamacSys 737-516        | <a href="#">↓</a> |
| Symbol and Footprint via Ultra Librarian 737-516 | <a href="#">↓</a> |

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 Ferrule**

**1.1.1.1 Ferrule**



**Item No.: 216-301**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-321**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-151**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

**Item No.: 216-131**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-302**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-322**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-132**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

**Item No.: 216-152**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-201**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white

**Item No.: 216-241**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

**Item No.: 216-221**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

**Item No.: 216-141**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-101**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-121**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-242**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

**Item No.: 216-262**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-202**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

**Item No.: 216-222**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

**Item No.: 216-142**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-122**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-243**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-223**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-103**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

**Item No.: 216-143**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-204**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-224**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-244**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

**Item No.: 216-144**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; 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 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored

### 1.1.1.1 Ferrule



**Item No.: 216-106**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored

### 1.1.2 Marking

#### 1.1.2.1 Marking strip



**Item No.: 210-332/750-020**

Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

### 1.1.3 Test and measurement

#### 1.1.3.1 Testing accessories



**Item No.: 231-456**

Testing plug module with contact stud; for 736, 737 Series; Pin spacing 7.5 mm / 0.295 in; gray

### 1.1.4 Tool

#### 1.1.4.1 Operating tool



**Item No.: 210-658**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



**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

#### Conductor termination



Inserting a conductor via 3.5 mm screwdriver.  
Screwdriver actuation parallel to conductor entry

## Installation



Low space requirements due to high-density design  
Double-deck PCB terminal strip – 736 Series

**Possible combination:**  
Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request

**Possible combination:**  
Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request

**Possible combination:**  
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request



**Possible combination:**  
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request

## Marking



## Testing



Testing via contact area above the conductors.