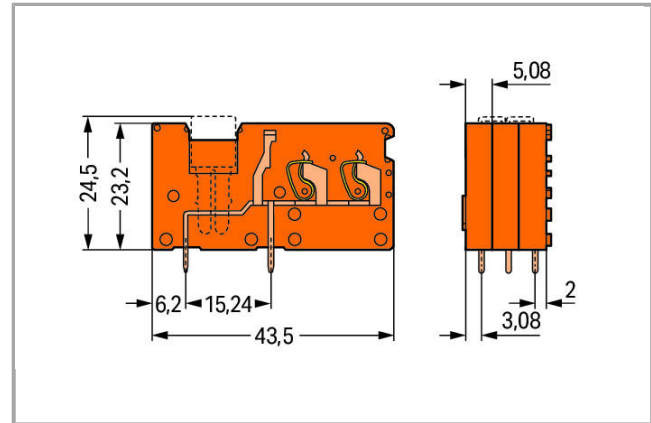


## Data sheet | Item number: 742-176

Stackable 2-conductor PCB terminal block; with commoning option; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 1-pole; CAGE CLAMP®



742-176



RoHS  
Compliant

BOMcheck.net

Color: ■

### Item description

- Modular PCB terminal blocks with screwdriver-actuated CAGE CLAMP®
- Adjacent jumpers for multiplying and distributing potentials
- Disconnect and fuse PCB terminal blocks can be combined to form complex function assemblies
- Test socket for 2.0 mm and 2.3 mm Ø test plugs

### Data

#### Electrical data

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

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 320 V |
| Rated impulse voltage (III / 3) | 4 kV  |
| Rated voltage (III / 2)         | 320 V |
| Rated impulse voltage (III / 2) | 4 kV  |
| Rated voltage (II / 2)          | 630 V |
| Rated impulse voltage (II / 2)  | 4 kV  |
| Rated current                   | 16 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 ... 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 ferrule with plastic collar    | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Strip length                                                | 6 ... 7 mm / 0.24 ... 0.28 inch              |
| Conductor entry angle to the PCB                            | 90°                                          |
| Note (conductor cross-section)                              | 12 AWG: THHN, THWN                           |
| No. of poles                                                | 1                                            |
| Total number of connection points                           | 2                                            |
| Total number of potentials                                  | 1                                            |
| Number of connection types                                  | 1                                            |
| Number of levels                                            | 1                                            |

### Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 5.08 mm / 0.2 inch             |
| Width                             | 7.1 mm / 0.28 inch             |
| Height                            | 27.2 mm / 1.071 inch           |
| Height from the surface           | 23.2 mm / 0.913 inch           |
| Depth                             | 43.5 mm / 1.713 inch           |
| Solder pin length                 | 4 mm                           |
| Solder pin dimensions             | 1 x 0.8 mm                     |
| Drilled hole diameter (tolerance) | 1.4 <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 | 2                                  |

## Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | orange                                 |
| Material group              | I                                      |
| Insulating material         | Polyamide 66 (PA 66)                   |
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Chrome nickel spring steel (CrNi)      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.082 MJ                               |
| Weight                      | 4.796 g                                |

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | CH                  |
| GTIN               | 4044918473101       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                        | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 60947-7-4             | NTR NL<br>7436   |
|  | CCA<br>DEKRA Certification B.V. | EN 60947-7-4             | 2169331.25       |
|  | CSA<br>DEKRA Certification B.V. | C22.2 No. 158            | 1711139          |

## Ship Approvals

| Logo                                                                             | Approval                                                | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------|------------------|
|  | <b>ABS</b><br>American Bureau of Shipping               | -                        | 14-HG1241537-PDA |
|  | <b>DNV GL</b><br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z       |

## UL-Approvals

| Logo                                                                             | Approval                                    | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|---------------------------------------------|--------------------------|------------------|
|  | <b>UR</b><br>Underwriters Laboratories Inc. | UL 1059                  | E45172           |

## Compatible products

## tools

|                                                                                    |                                                                                                         |         |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 210-657</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short  | 210-657 |
|  | <b>Item no.: 210-720</b><br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm | 210-720 |

## Jumper

|                                                                                    |                                                                                |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 280-402</b><br>Adjacent jumper; insulated; IN = IN terminal block | 280-402 |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------|

## check

|                                                                                    |                                                                    |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------|
|  | <b>Item no.: 210-136</b><br>Test plug; 2 mm Ø; with 500 mm cable   | 210-136 |
|  | <b>Item no.: 210-137</b><br>Test plug; 2.3 mm Ø; with 500 mm cable | 210-137 |

## ferrule

|                                                                                    |                                                                                                               |         |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 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.: 216-221</b><br>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 mm <sup>2</sup> / 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 mm <sup>2</sup> / 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 mm <sup>2</sup> / 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 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-284              |
|                                                                                    | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated                                                                         | 216-321              |
|     | <b>Item no.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated                                                                         | 216-322              |
| <b>End plate</b>                                                                   |                                                                                                                                                                                      |                      |
|    | <b>Item no.: 742-650</b><br>End plate; snap-fit type; 1.5 mm thick                                                                                                                   | 742-650              |
| <b>Marking accessories</b>                                                         |                                                                                                                                                                                      |                      |
|   | <b>Item no.: 2009-145</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                                | 2009-145             |
|  | <b>Item no.: 2009-145/000-002</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                        | 2009-145<br>/000-002 |
|  | <b>Item no.: 2009-145/000-005</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                        | 2009-145<br>/000-005 |
|  | <b>Item no.: 2009-145/000-006</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                        | 2009-145<br>/000-006 |
|  | <b>Item no.: 2009-145/000-007</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                        | 2009-145<br>/000-007 |
|  | <b>Item no.: 2009-145/000-012</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                        | 2009-145<br>/000-012 |
|  | <b>Item no.: 2009-145/000-023</b><br>Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                         | 2009-145<br>/000-023 |
|  | <b>Item no.: 2009-145/000-024</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                                                        | 2009-145<br>/000-024 |
|  | <b>Item no.: 248-501</b><br>Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card                                                         | 248-501              |

|                                                                                    |                                                                                                   |                     |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------|
|    | Item no.: 248-501/000-002<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-002 |
|    | Item no.: 248-501/000-005<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-005 |
|    | Item no.: 248-501/000-006<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-006 |
|    | Item no.: 248-501/000-007<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-007 |
|    | Item no.: 248-501/000-012<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-012 |
|    | Item no.: 248-501/000-017<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-017 |
|   | Item no.: 248-501/000-023<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-023 |
|  | Item no.: 248-501/000-024<br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501<br>/000-024 |

## Downloads

## Documentation

## Additional Information

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