

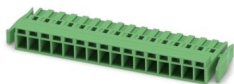
# MSTBC 2,5/16-STZ-5,08-R - PCB connector



1809187

<https://www.phoenixcontact.com/us/products/1809187>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact connection type: Socket, number of potentials: 16, number of rows: 1, number of positions: 16, number of connections: 16, product range: MSTBC 2,5/...-STZ-RF, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON MSTB 2,5, locking: Snap-in locking, mounting method: Latching flange, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross-section range [mm<sup>2</sup>] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

## Your advantages

- Inexpensive connection of large quantities of preassembled conductors
- Pull-out aid facilitates handling and allows the tensile force to be reduced at the contact point
- Intuitive locking mechanism prevents accidental disconnection

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1809187                        |
| Packing unit                         | 50 pc                          |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | AA03                           |
| Product key                          | AACCEE                         |
| GTIN                                 | 4017918115067                  |
| Weight per piece (including packing) | 9.26 g                         |
| Weight per piece (excluding packing) | 5.3 g                          |
| Customs tariff number                | 85389099                       |
| Country of origin                    | PL                             |

# MSTBC 2,5/16-STZ-5,08-R - PCB connector



1809187

<https://www.phoenixcontact.com/us/products/1809187>

## Technical data

### Product properties

|                       |                       |
|-----------------------|-----------------------|
| Product type          | PCB connector         |
| Product family        | MSTBC 2,5/...-STZ-RF  |
| Product line          | COMBICON Connectors M |
| Type                  | Standard              |
| Number of positions   | 16                    |
| Pitch                 | 5.08 mm               |
| Number of connections | 16                    |
| Number of rows        | 1                     |
| Number of potentials  | 16                    |
| Mounting type         | Latching flange       |

### Electrical properties

#### Properties

|                             |       |
|-----------------------------|-------|
| Nominal current $I_N$       | 12 A  |
| Nominal voltage $U_N$       | 320 V |
| Rated voltage (III/3)       | 320 V |
| Rated surge voltage (III/3) | 4 kV  |
| Rated voltage (III/2)       | 320 V |
| Rated surge voltage (III/2) | 4 kV  |
| Rated voltage (II/2)        | 630 V |
| Rated surge voltage (II/2)  | 4 kV  |

### Connection data

#### Connection technology

|                         |                     |
|-------------------------|---------------------|
| Connector system        | COMBICON MSTB 2,5   |
| Nominal cross section   | 2.5 mm <sup>2</sup> |
| Contact connection type | Socket              |

#### Interlock

|               |                 |
|---------------|-----------------|
| Locking type  | Snap-in locking |
| Mounting type | Latching flange |

#### Conductor connection

|                                    |   |
|------------------------------------|---|
| Connection method                  | Crimp connection                            |
| Conductor/PCB connection direction | 0 °   |
| Conductor cross-section flexible   | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross-section AWG        | 20 ... 14                                   |

### Material specifications

#### Material data - housing

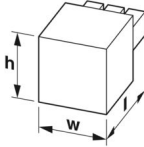
# MSTBC 2,5/16-STZ-5,08-R - PCB connector

1809187

<https://www.phoenixcontact.com/us/products/1809187>

|   |              |
|---|--------------|
| Color (Housing)   | green (6021) |
| Insulating material   | PA           |
| Insulating material group   | I            |
| CTI according to IEC 60112  | 600          |
| Flammability rating according to UL 94                            | V0           |
| Glow wire flammability index GWFI according to EN 60695-2-12      | 850          |
| Glow wire ignition temperature GWIT according to EN 60695-2-13    | 775          |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C       |

## Dimensions

|                     |  |
|---------------------|--|
| Dimensional drawing |  |
| Pitch               | 5.08 mm  |
| Width [w]           | 91.71 mm   |
| Height [h]          | 10.5 mm  |
| Length [l]          | 25 mm  |

## Notes

|                    |  |
|--------------------|--|
| Notes on operation | In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load. |
|--------------------|--|

## Environmental and real-life conditions

### Ambient conditions

|   |   |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C                                    |
| Relative humidity (storage/transport)   | 30 % ... 70 %                                       |
| Ambient temperature (assembly)          | -5 °C ... 100 °C                                    |
| Ambient temperature (operation)         | -40 °C ... 100 °C (dependent on the derating curve) |

## Electrical tests

### Air clearances and creepage distances |

|  |                     |
|--|---------------------|
| Specification  | IEC 60664-1:2007-04 |
| Insulating material group                              | I                   |
| Comparative tracking index (IEC 60112)                 | CTI 600             |
| Rated insulation voltage (III/3)                       | 320 V               |
| Rated surge voltage (III/3)                            | 4 kV                |
| minimum clearance value - non-homogenous field (III/3) | 3 mm                |
| minimum creepage distance (III/3)                      | 4 mm                |
| Rated insulation voltage (III/2)                       | 320 V               |

# MSTBC 2,5/16-STZ-5,08-R - PCB connector



1809187

<https://www.phoenixcontact.com/us/products/1809187>

|  |        |
|--|--------|
| Rated surge voltage (III/2)                            | 4 kV   |
| minimum clearance value - non-homogenous field (III/2) | 3 mm   |
| minimum creepage distance (III/2)                      | 3 mm   |
| Rated insulation voltage (II/2)                        | 630 V  |
| Rated surge voltage (II/2)                             | 4 kV   |
| minimum clearance value - non-homogenous field (II/2)  | 3 mm   |
| minimum creepage distance (II/2)                       | 3.2 mm |

## Packaging specifications

|                   |                     |
|-------------------|---------------------|
| Type of packaging | packed in cardboard |
|-------------------|---------------------|

## Drawings



Type: MSTBC 2,5/...-ST-5,08 with MSTBA 2,5/...-G-5,08; contact: MSTBC-MT 1,5 - 2,5

# MSTBC 2,5/16-STZ-5,08-R - PCB connector




1809187

<https://www.phoenixcontact.com/us/products/1809187>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1809187>

|  <b>cULus Recognized</b><br>Approval ID: E60425-19930525 |                       |                       |                   |                             |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| B   | 300 V                 | 10 A                  | 20 - 14           | -                           |
| D   | 300 V                 | 10 A                  | 20 - 14           | -                           |

|  <b>VDE approval of drawings</b><br>Approval ID: 40050648 |  |
|--|--|
|--|--|

# MSTBC 2,5/16-STZ-5,08-R - PCB connector



1809187

<https://www.phoenixcontact.com/us/products/1809187>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27460202 |
| ECLASS-15.0 | 27460202 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC002638 |
|-----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# MSTBC 2,5/16-STZ-5,08-R - PCB connector



1809187

<https://www.phoenixcontact.com/us/products/1809187>

## Environmental product compliance

### EU RoHS

|   |                    |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

### China RoHS

|  |  |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|  | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

### EF3.1 Climate Change

|         |               |
|---------|---------------|
| CO2e kg | 0.071 kg CO2e |
|---------|---------------|

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)