

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

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 headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, contact surface: Tin, contact connection type: Pin, number of potentials: 9, number of rows: 1, number of positions: 9, number of connections: 9, product range: MSTB 2,5/..-GF-EX, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.23 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5 EX, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

## Your advantages

- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Easy PCB replacement thanks to plug-in modules
- Well-known mounting principle allows worldwide use
- Satisfies the more stringent safety requirements of “Ex eb” protection according to IEC 60079-7 for potentially explosive areas

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1795734                        |
| Packing unit                         | 50 pc                          |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Product key                          | AACSHN                         |
| Catalog page                         | Page 374 (C-1-2013)            |
| GTIN                                 | 4046356635936                  |
| Weight per piece (including packing) | 4.684 g                        |
| Weight per piece (excluding packing) | 4.684 g                        |
| Customs tariff number                | 85366930                       |
| Country of origin                    | DE                             |

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

## Technical data

### Product properties

|                           |                       |
|---------------------------|-----------------------|
| Product type              | PCB headers           |
| Product family            | MSTB 2,5/..-GF-EX     |
| Product line              | COMBICON Connectors M |
| Type                      | Standard              |
| Number of positions       | 9                     |
| Pitch                     | 5.08 mm               |
| Number of connections     | 9                     |
| Number of rows            | 1                     |
| Number of potentials      | 9                     |
| Mounting flange           | Threaded flange       |
| Pin layout                | Linear pinning        |
| Solder pins per potential | 1                     |

### Electrical properties

|                                         |                          |
|-----------------------------------------|--------------------------|
| Nominal current $I_N$                   | 12 A                     |
| Nominal voltage $U_N$                   | 176 V                    |
| Rated current / conductor cross section | 12 A/2.5 mm <sup>2</sup> |
| Degree of pollution                     | 3                        |

### Ex data

#### Ex approval

|                                 |                                         |
|---------------------------------|-----------------------------------------|
| Identification                  | 0344 <sup>Ⓔ</sup> II 2GD / Ex eb IIC Gb |
| EU-type examination certificate | KEMA 10ATEX0196 U                       |
| IECEx certificate               | IECEx KEM 10.0093U                      |

### Mounting

|               |                |
|---------------|----------------|
| Mounting type | Wave soldering |
| Pin layout    | Linear pinning |

#### Flange

|                   |        |
|-------------------|--------|
| Tightening torque | 0.3 Nm |
|-------------------|--------|

#### Attachment on the PCB

|                   |                                                                  |
|-------------------|------------------------------------------------------------------|
| Tightening torque | 0.3 Nm                                                           |
| Screw             | Sheet metal screw ISO 1481-ST 2,2x6,5 C or ISO 7049-ST 2,2x6,5 C |

### Material specifications

#### Material data - contact

|      |                                                                                  |
|------|----------------------------------------------------------------------------------|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201 |
|------|----------------------------------------------------------------------------------|

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

|                                             |                        |
|---------------------------------------------|------------------------|
| Contact material                            | Cu alloy               |
| Surface characteristics                     | Tin-plated             |
| Metal surface contact area (top layer)      | Tin (3 - 5 µm Sn)      |
| Metal surface contact area (middle layer)   | Nickel (1.3 - 3 µm Ni) |
| Metal surface soldering area (top layer)    | Tin (3 - 5 µm Sn)      |
| Metal surface soldering area (middle layer) | Nickel (1.3 - 3 µm Ni) |

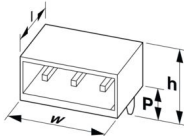
## Material data - housing

|                                                                   |              |
|-------------------------------------------------------------------|--------------|
| 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       |

## 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. |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Dimensions

|                       |                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing   |  |
| Pitch                 | 5.08 mm                                                                              |
| Width [w]             | 55.88 mm                                                                             |
| Height [h]            | 11.8 mm                                                                              |
| Length [l]            | 12 mm                                                                                |
| Installed height      | 8.57 mm                                                                              |
| Solder pin length [P] | 3.23 mm                                                                              |
| Pin dimensions        | 1 x 1 mm                                                                             |

## PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.4 mm |
|---------------|--------|

## Environmental and real-life conditions

### Ambient conditions

|                                         |                   |
|-----------------------------------------|-------------------|
| Ambient temperature (operation)         | -60 °C ... 110 °C |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C  |

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

|                                       |                  |
|---------------------------------------|------------------|
| Relative humidity (storage/transport) | 30 % ... 70 %    |
| Ambient temperature (assembly)        | -5 °C ... 100 °C |

## Packaging specifications

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

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1795734>

|  |                                               |                       |                   |                             |
|--|-----------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>ATEX</b><br>Approval ID: KEMA 10ATEX0196 U |                       |                   |                             |
|  | Nominal voltage $U_N$                         | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|  | 176 V                                         | 12 A                  | -                 | 0.2 - 2.5                   |

|  |                                                 |                       |                   |                             |
|--|-------------------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>IECEX</b><br>Approval ID: IECEX KEM 10.0093U |                       |                   |                             |
|  | Nominal voltage $U_N$                           | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|  | 176 V                                           | 12 A                  | -                 | 0.2 - 2.5                   |

|  |                                          |  |  |  |
|--|------------------------------------------|--|--|--|
|  | <b>EAC Ex</b><br>Approval ID: B.00065/19 |  |  |  |
|  |                                          |  |  |  |

|  |                                             |  |  |  |
|--|---------------------------------------------|--|--|--|
|  | <b>CCC</b><br>Approval ID: 2021122313114375 |  |  |  |
|  |                                             |  |  |  |

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27460201 |
| ECLASS-12.0 | 27460201 |
| ECLASS-13.0 | 27460201 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002637 |
|----------|----------|

### UNSPSC

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

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

## 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%               |

# MSTB 2,5/ 9-GF-5,08 EX - PCB header



1795734

<https://www.phoenixcontact.com/pc/products/1795734>

## Accessories

### CR-MSTB - Coding section

1734401

<https://www.phoenixcontact.com/pc/products/1734401>

Coding section, inserted into the recess in the header or the inverted plug, red insulating material



---

### MSTB-BL - Accessories

1755477

<https://www.phoenixcontact.com/pc/products/1755477>

Keying cap, for forming sections, plugs onto header pin, green insulating material





# MSTB 2,5/ 9-GF-5,08 EX - PCB header

1795734

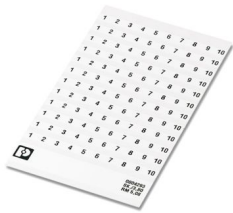
<https://www.phoenixcontact.com/pc/products/1795734>



## SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

<https://www.phoenixcontact.com/pc/products/0804293>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

---

## SK 5,08/3,8:UNBEDRUCKT - Marker card

0805412

<https://www.phoenixcontact.com/pc/products/0805412>



Marker card, Sheet, white, unlabeled, can be labeled with: Marker pen: without print, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm, Number of individual labels: 120

# MSTB 2,5/ 9-GF-5,08 EX - PCB header

1795734

<https://www.phoenixcontact.com/pc/products/1795734>



## B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/pc/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)