

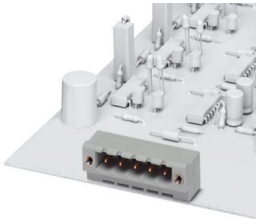
# MSTBW 2,5/ 5-GF-5,08 6,03 ABAU - PCB header



1845109

<https://www.phoenixcontact.com/us/products/1845109>

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PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: agate gray, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Au, contact connection type: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: MSTBW 2,5/...-GF(6,03), pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting method: Threaded flange, type of packaging: packed in cardboard, Gold-plated contact surface / color: Gray RAL 7038

## Your advantages

- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Well-known mounting principle allows worldwide use
- Stand-offs enable the PCB to be cleaned or sealed

## Commercial data

Item number	1845109
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA08
Product key	AAHGGE
GTIN	4017918217457
Weight per piece (including packing)	4.299 g
Weight per piece (excluding packing)	3.849 g
Customs tariff number	85366930
Country of origin	IN

# MSTBW 2,5/ 5-GF-5,08 6,03 ABAU - PCB header



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## Technical data

### Product properties

Product type	PCB headers
Product family	MSTBW 2,5/..-GF(6,03)
Product line	COMBICON Connectors Special
Type	Components DeviceNet compatible
Number of positions	5
Pitch	5.08 mm
Number of connections	5
Number of rows	1
Number of potentials	5
Mounting type	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

#### Properties

Nominal current $I_N$	12 A
Nominal voltage $U_N$	320 V
Rated voltage (III/3)	250 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)	400 V
Rated surge voltage (II/2)	4 kV

### Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

### Material specifications

#### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Completely gold-plated
Metal surface contact area (top layer)	Gold (0.8 - 1.4 $\mu\text{m}$ Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 $\mu\text{m}$ Ni)
Metal surface soldering area (top layer)	Gold (0.8 - 1.4 $\mu\text{m}$ Au)
Metal surface soldering area (middle layer)	Nickel (2 - 4 $\mu\text{m}$ Ni)

#### Material data - housing

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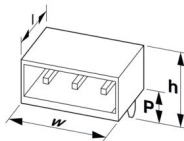
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Color (Housing)	agate gray (7038)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature 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.
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## Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	25.4 mm
Height [h]	15.92 mm
Length [l]	12 mm
Installed height	12.42 mm
Solder pin length [P]	3.5 mm
Pin dimensions	1 x 1 mm

## PCB design

Hole diameter	1.4 mm
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## Electrical tests

### Air clearances and creepage distances |

Insulating material group	I
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV

## Environmental and real-life conditions

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## Ambient conditions

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

## Packaging specifications

Type of packaging	packed in cardboard
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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1845109>

 <b>cULus Recognized</b> Approval ID: E60425-19931011				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	300 V	15 A	-	-
D	300 V	10 A	-	-

 <b>CSA</b> Approval ID: 2406780				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	300 V	10 A	-	-
D	300 V	10 A	-	-

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## Classifications

### ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

### ETIM

ETIM 9.0	EC002637
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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### EF3.0 Climate Change

CO2e kg	0.053 kg CO2e
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