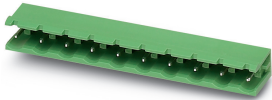


## Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

PCB header, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: GMSTB 2,5/...-G, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, Stecksystem: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard




The figure shows a 10-position version of the product

### Your advantages

- ✓ Plug-in direction parallel to the PCB
- ✓ Headers with angled solder pins for 630 V applications (III/2)
- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- ✓ Items that can be aligned in various pitches support flexible and space-saving PCB assembly
- ✓ Well-known mounting principle allows worldwide use
- ✓ Larger pitch for increased voltage requirements
- ✓ Plug-in direction parallel to the PCB



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 017918 032159
GTIN	4017918032159
Weight per Piece (excluding packing)	1.830 g
Custom tariff number	85366930
Country of origin	Germany

### Technical data

#### Item properties

## Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

### Technical data

#### Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	GMSTB 2,5/..-G
Pitch	7.62 mm
Number of positions	3
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	3
Number of potentials	3
Pin connector pattern alignment	Standard

#### Electrical parameters

Nominal current	12 A
Nom. voltage	630 V
Rated voltage (III/3)	400 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV

#### 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	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

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600

# Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

## Technical data

### Material data - housing

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 for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	12 mm
Width [ w ]	21.06 mm
Height [ h ]	11.8 mm
Pitch	7.62 mm
Height (without solder pin)	8.6 mm
Solder pin [P]	3.2 mm
Pin dimensions	1 x 1 mm

### Dimensions for PCB design

Hole diameter	1.4 mm
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### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

### General product information

Type of note	Notes on operation
Note	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.
	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.

### Ambient conditions

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

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	5.5 mm

## Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

### Technical data

#### Air clearances and creepage distances

Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	6.3 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm

#### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

#### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	1.6 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	1.6 mΩ
Impulse withstand voltage at sea level	4.8 kV

#### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Upper limiting temperature requirements <100 °C	Test passed

#### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV

#### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

#### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz

# Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

## Technical data

### Vibration test

Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Standards and Regulations

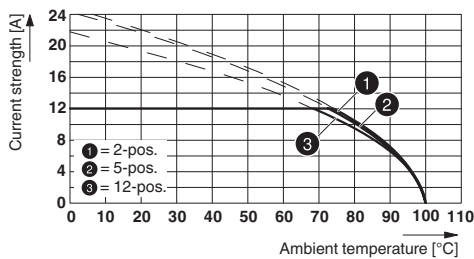
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

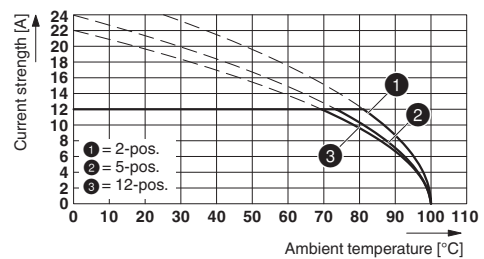
## Drawings

Diagram



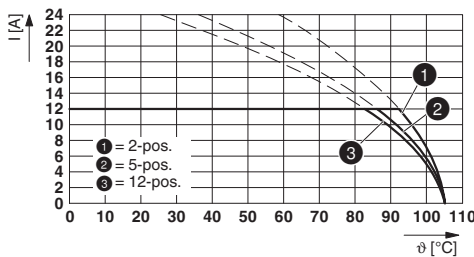
Type: FRONT-GMSTB 2,5/...-ST-7,62 with GMSTB 2,5/...-G-7,62

Diagram



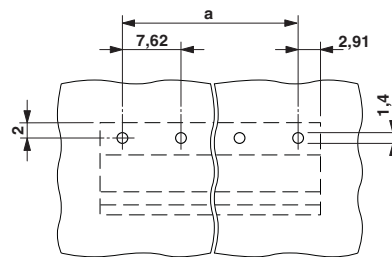
Type: GMSTB 2,5/...-ST-7,62 with GMSTB 2,5/...-G-7,62

Diagram



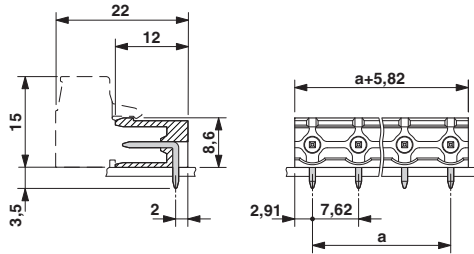
Type: GFKC 2,5/...-ST-7,62 with GMSTB 2,5/...-G-7,62

Drilling diagram

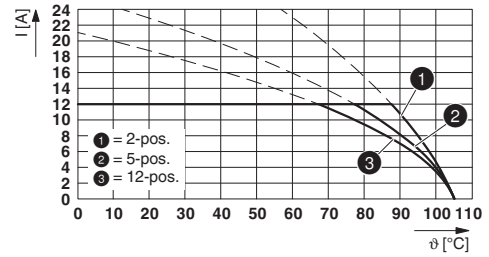


# Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

Dimensional drawing

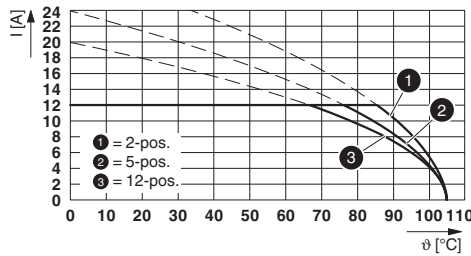


Diagram



Type: GICV 2,5/...-G-7,62 with GMSTB 2,5/...-G-7,62

Diagram



Type: GIC 2,5/...-G-7,62 with GMSTB 2,5/...-G-7,62

## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637

# Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

## Classifications

### ETIM

ETIM 7.0	EC002637
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### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals


#### Approvals

CSA / IECCE CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	LR13631-2585950
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60988-B1B2
Nominal voltage UN	400 V		
Nominal current IN	12 A		

# Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

## Approvals

EAC		B.01687
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19931013
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	15 A	10 A	

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40050648
Nominal voltage UN		400 V	
Nominal current IN		12 A	

## Accessories

### Accessories

#### Coding element

Coding section - CR-MSTB - 1734401

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



#### Filler plug

Accessories - MSTB-BL - 1755477



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



## Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

### Accessories

#### Flange

Accessories - MSTB-BF - 1759981



Mounting flange, for fixing both ends of the header onto the PCB, green insulating material, with M 2 x 14 screws and nuts.

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### Labeled terminal marker

Marker card - SK 7,62/3,8:FORTL.ZAHLEN - 0804549



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

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### Additional products

Printed-circuit board connector - GMSTB 2,5/ 3-ST-7,62 - 1767012



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: GMSTB 2,5/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Stecksystem: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

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Printed-circuit board connector - FRONT-GMSTB 2,5/ 3-ST-7,62 - 1806122



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: FRONT-GMSTB 2,5/..-ST, pitch: 7.62 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Stecksystem: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

## Feed-through header - GMSTB 2,5/ 3-G-7,62 - 1766136

### Accessories

#### Printed-circuit board connector - GMVSTBW 2,5/ 3-ST-7,62 - 1832426



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: GMVSTBW 2,5/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Stecksystem: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - GMVSTBR 2,5/ 3-ST-7,62 - 1832536



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: GMVSTBR 2,5/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Stecksystem: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - GFKC 2,5/ 3-ST-7,62 - 1939646



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: GFKC 2,5/..-ST, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Stecksystem: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard, COMBICON connectors may only be activated under no load conditions. If for operating reasons small loads must be switched, experimental values are available upon request.