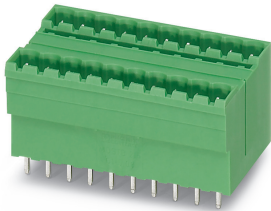


# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

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: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 34, Number of rows: 2, Number of positions per row: 17, number of connections: 34, product range: MDSTBV 2,5/..-G1, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard, In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!


The figure shows a 10-pos. version with 20 contacts

## 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
- ✓ Conductor connection on several levels enables higher contact density



## Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 031251
GTIN	4017918031251

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	MDSTBV 2,5/..-G1
Pitch	5.08 mm
Number of positions	17
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	2
Number of connections	34

# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

## Technical data

### Item properties

Number of potentials	34
Pin connector pattern alignment	Standard

### Electrical parameters

Nominal current	10 A
Nom. voltage	320 V
Rated voltage (III/3)	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 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 (5 - 7 µm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

### Material data - housing

Housing color	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

### Flange specifications

Type of locking	without
Mounting flange	without

### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	28.5 mm
Width [ w ]	87.92 mm
Height [ h ]	25.9 mm
Pitch	5.08 mm

# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

## Technical data

### Dimensions for the product

Height (without solder pin)	22 mm
Solder pin [P]	3.9 mm
Pin dimensions	1 x 1 mm

### Dimensions for PCB design

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

### 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.

### 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)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 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>	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	1.3 mΩ

## Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

### Technical data

#### Durability tests (B)

Contact resistance R <sub>2</sub> 2nd level	1.3 mΩ
Impulse withstand voltage at sea level	4.8 kV

#### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	20
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
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

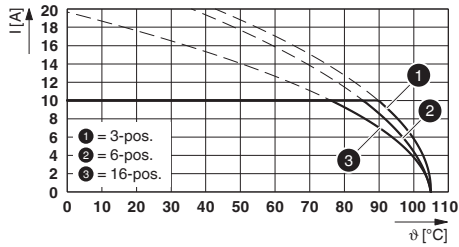
#### Environmental Product Compliance

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

### Drawings

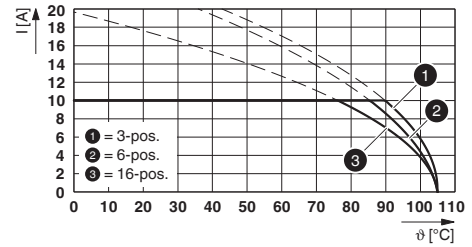
# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

Diagram



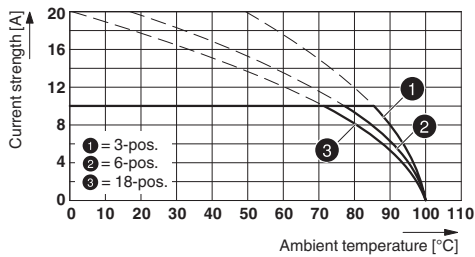
Type: FKCVR 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Diagram



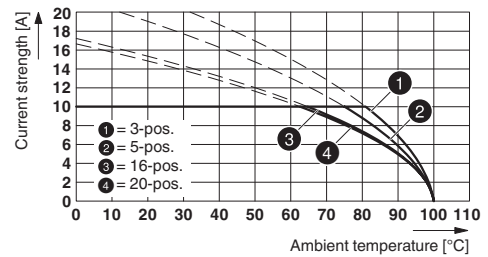
Type: FKCVW 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Diagram



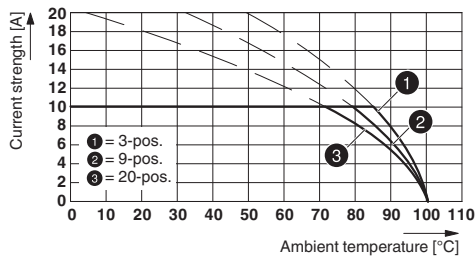
Type: FKCN 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Diagram



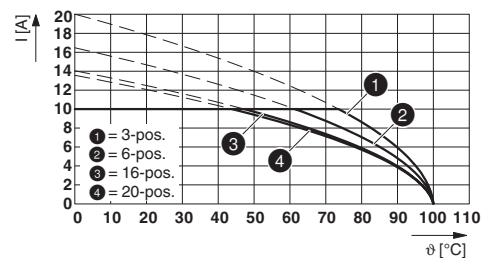
Type: MSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Diagram



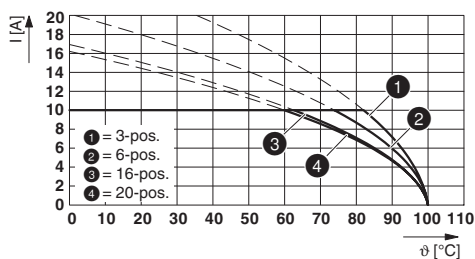
Type: FKC 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Diagram



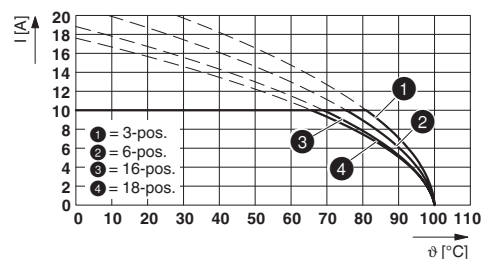
Type: SMSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Diagram



Type: MSTBP 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

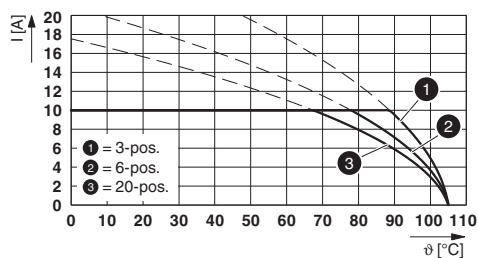
Diagram



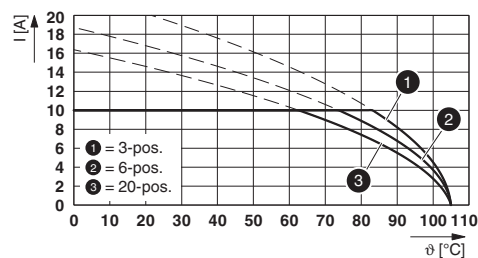
Type: MSTBT 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

Diagram



Diagram



Type: FKCT 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

Type: FRONT-MSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G1-5,08

## 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 9.0	27440402

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

### 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

# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

## Approvals

Approvals

VDE Zeichengenehmigung / IECCEB Scheme / EAC / cULus Recognized

Ex Approvals

### Approval details

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		250 V	
Nominal current IN		10 A	

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60988-B1B2
Nominal voltage UN		250 V	
Nominal current IN		10 A	

EAC		B.01687
-----	--	---------

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>	E60425-19931011
Nominal voltage UN		B 300 V	D 150 V
Nominal current IN		12 A	12 A

## Accessories

Accessories

Coding element

# Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

## Accessories

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

---

## Labeled terminal marker

Marker card - SK 5,08/3,8:FORTL.ZAHLEN - 0804293



Marker card, 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

---

## Additional products

Printed-circuit board connector - FKCN 2,5/17-ST-5,08 - 1754717



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: FKCN 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - MSTB 2,5/17-ST-5,08 - 1757161



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard



## Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

### Accessories

#### Printed-circuit board connector - MSTBP 2,5/17-ST-5,08 - 1769162



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MSTBP 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - FRONT-MSTB 2,5/17-ST-5,08 - 1777439



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: FRONT-MSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - MVSTBR 2,5/17-ST-5,08 - 1792391



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MVSTBR 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - MVSTBW 2,5/17-ST-5,08 - 1792906



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MVSTBW 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - MSTBC 2,5/17-ST-5,08 - 1808968



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MSTBC 2,5/..-ST, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, 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

## Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

### Accessories

#### Printed-circuit board connector - MSTBC 2,5/17-STZ-5,08 - 1809653



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MSTBC 2,5/..-STZ, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, 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

#### Printed-circuit board connector - MSTBU 2,5/17-STD-5,08 - 1824272



Direct plug-in block, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: MSTBU 2,5/..-STD, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, mounting: Direct mounting, conductor/PCB connection direction: 0 °, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - SMSTB 2,5/17-ST-5,08 - 1850563



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: SMSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -45 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - FKC 2,5/17-ST-5,08 - 1875904



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: FKC 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - FKCT 2,5/17-ST-5,08 - 1902262



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: FKCT 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

## Feed-through header - MDSTBV 2,5/17-G1-5,08 - 1762651

### Accessories

#### Printed-circuit board connector - QC 1/17-ST-5,08 - 1915974



PCB connector, nominal cross section: 1 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: QC 1/..-ST, pitch: 5.08 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

---

#### Printed-circuit board connector - FKCS 2,5/17-ST-5,08 - 1975228



PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 17, Number of rows: 1, Number of positions per row: 17, number of connections: 17, product range: FKCS 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: without, type of packaging: packed in cardboard

---

Phoenix Contact 2021 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>