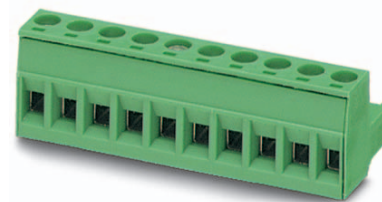


Order No.: 1757116

Type: MSTB 2,5/12-ST-5,08

Plug component, Screw connection with tension sleeve



The figure shows a 10-position version of the product

## 1 Main features



- |                           |                                      |                        |                     |
|---------------------------|--------------------------------------|------------------------|---------------------|
| • No. of pos.             | 12                                   | • Nominal current      | 12 A                |
| • Conductor cross section | 2.5 mm <sup>2</sup>                  | • Nominal voltage      | 320 V               |
| • Color                   | green                                | • Connection direction | 0 °                 |
| • Pitch                   | 5.08 mm                              | • Type of packaging    | packed in cardboard |
| • Connection method       | Screw connection with tension sleeve |                        |                     |

## 2 Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors



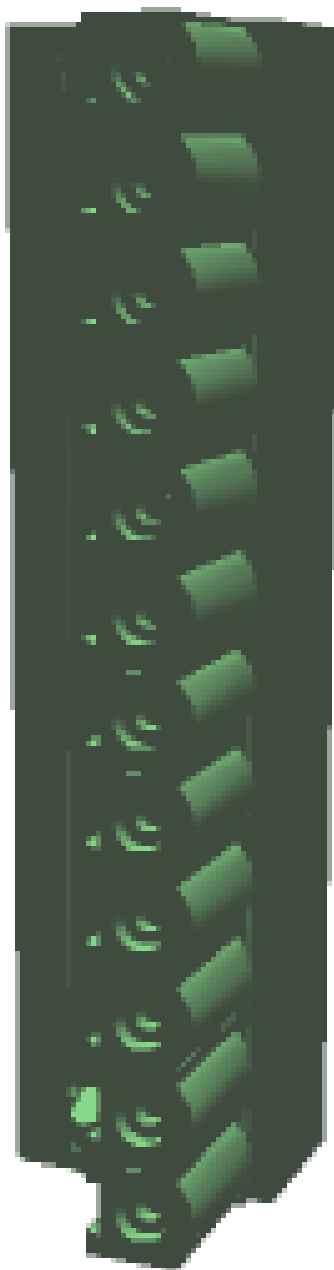
Make sure you always use the latest documentation.  
It can be downloaded at: [phoenixcontact.net/product/1757116](https://phoenixcontact.net/product/1757116)

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1757116 MSTB 2,5/12-ST-5,08

4 3D model in PDF can be activated (Acrobat Reader only)



**1757116 MSTB 2,5/12-ST-5,08****5 item properties**

Order No.	1757116
Type	MSTB 2,5/12-ST-5,08
Type of contact	Female connector
Range of articles	MSTB 2,5/...ST
Pitch	5.08 mm
Number of positions	12
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm
Locking	without

**5.1 Connection capacity**

Conductor cross section, solid	0.2 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Conductor cross section, flexible	0.2 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil	24 to 12
2 conductors with same cross section, solid	0.2 mm <sup>2</sup> to 1 mm <sup>2</sup>
2 conductors with same cross section, stranded	0.2 mm <sup>2</sup> to 1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve	0.25 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> to 1 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm <sup>2</sup> to 1.5 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	2.8 mm x 2.4 mm / 2.5 mm
Stripping length	7 mm

**5.2 Material data**

<b>Material of metal parts</b>	
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Terminal point surface	Sn 5 µm ... 7 µm
Surface contact area	Sn 5 µm ... 7 µm
Surface characteristics	hot-dip tin-plated
<b>Insulating material data</b>	
Insulating material	PA
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Color	green (6021)
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

**6 Dimensions**

**1757116 MSTB 2,5/12-ST-5,08**

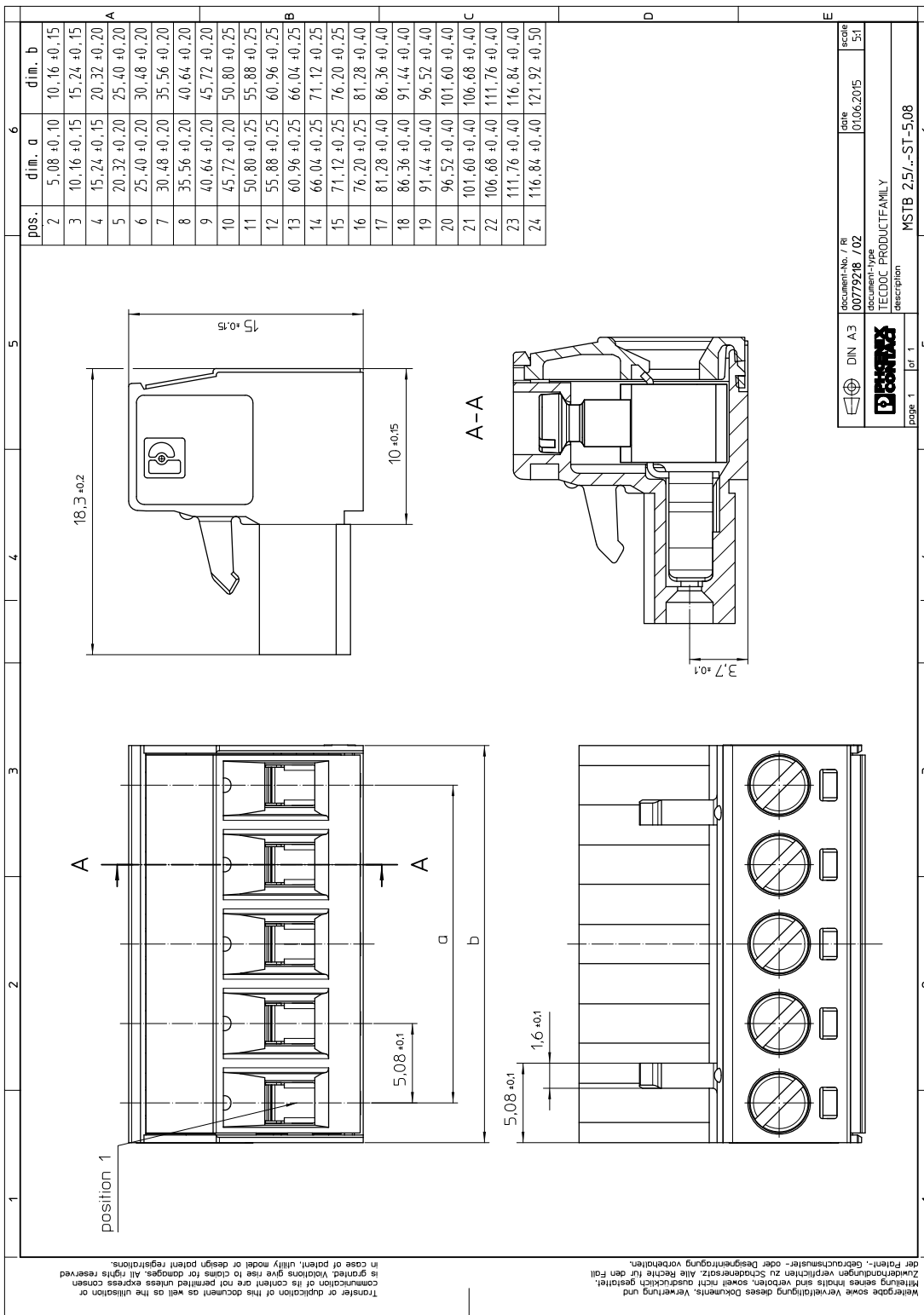
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**6.1 Dimensions for the product**

Length	18.3 mm
Width	60.96 mm
Total height	15 mm
Dimension a	55.88 mm

1757116 MSTB 2,5/12-ST-5,08

7 Series drawing



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DIN A3

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document-type	TECDOC PRODUCTFAMILY				
description	MSTB 2,5/12-ST-5,08				

page 1 of 1  
 page 1 of 6

**1757116 MSTB 2,5/12-ST-5,08****8 Packaging information**

Type of packaging	packed in cardboard
Pieces per package	50

**9 Application****9.1 Temperature limit values**

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

**1757116 MSTB 2,5/12-ST-5,08****10 Mechanical tests**

Mechanical test group A	
Specification	IEC 61984:2008-10
Visual test	Test passed
Specification	IEC 60512-1-1:2002-02
Dimensional test	Test passed
Specification	IEC 60512-1-2:2002-02
Resistance of marking	Test passed
Specification	IEC 60068-2-70:1995-12
Insertion and withdrawal force	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization and coding	Test passed
Specification	IEC 60512-13-5:2006-02
Test force	20 N
Contact retention in insert	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	27 N

**10.1 Termination and connection method**

Specification	IEC 60999-1:1999-11
Check for damage to conductor or loosening	Test passed

**10.2 Pull-out test**

Termination and connection method: pull-out test	
Specification	IEC 60999-1:1999-11
Result	Test passed
Conductor cross section/conductor type/tractive force actual value	0.2 mm <sup>2</sup> / solid / > 10 N
Conductor cross section/conductor type/tractive force actual value	0.2 mm <sup>2</sup> / stranded / > 10 N
Conductor cross section/conductor type/tractive force actual value	2.5 mm <sup>2</sup> / solid / > 50 N
Conductor cross section/conductor type/tractive force actual value	2.5 mm <sup>2</sup> / stranded / > 50 N
Conductor cross section/conductor type/tractive force actual value	AWG 12 / stranded / > 60 N



**1757116 MSTB 2,5/12-ST-5,08****11 Electrical tests****11.1 Electrical data**

Rated current / conductor cross section	12 A / 2.5 mm <sup>2</sup>
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Contact resistance	1.3 mΩ
Degree of pollution	2

**11.2 Air and creepage distances**

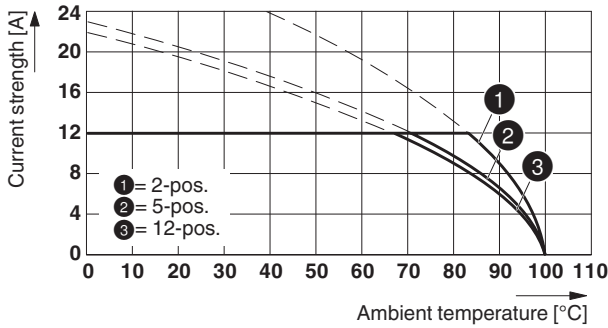
Component	Plug component		
Specification	IEC 60664-1:2007-04		
Mains type	unearthed mains		
Insulating material group	I		
Comparative tracking index (IEC 60112:2003-01)	CTI 600		
Rated insulation voltage	250 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Degree of pollution	3	2	2
Overvoltage category	III	III	II
Minimum clearance case A (inhomogeneous field)	3 mm	3 mm	3 mm
Minimum value of the creepage path requirement in acc. with table	3.2 mm	3 mm	3.2 mm

1757116 MSTB 2,5/12-ST-5,08

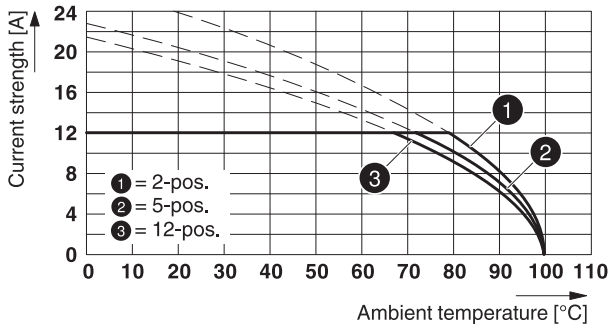
12 Current carrying capacity/derating curves

Specification	IEC 61984:2008-10
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	0.8
Number of positions	See diagram
Conductor cross section	2.5 mm <sup>2</sup>

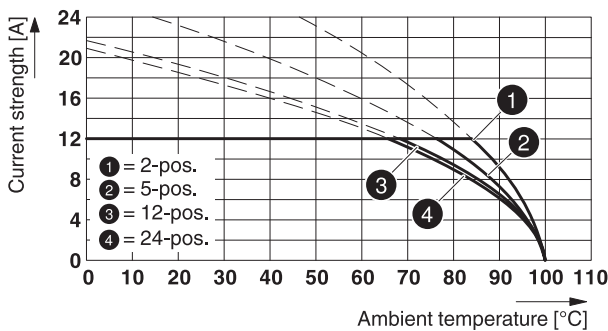
Type: MSTB 2,5/...-ST-5,08 with CC 2,5/...-G-5,08 P26THR



Type: MSTB 2,5/...-ST-5,08 with CCV 2,5/...-G-5,08 P26THR

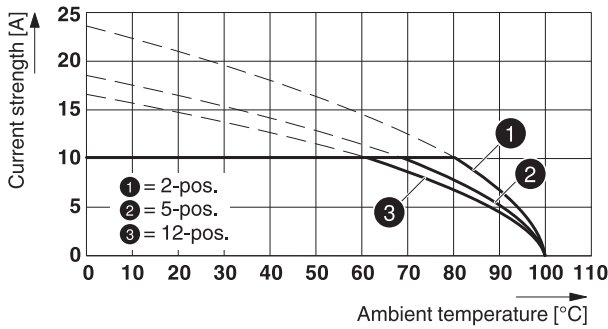


Type: MSTB 2,5/...-ST-5,08 with CCVA 2,5/...-G-5,08 P26THR

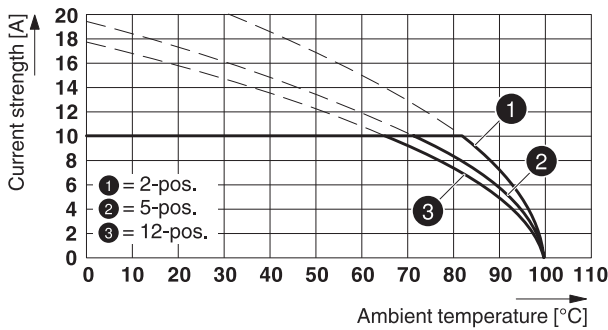


**1757116 MSTB 2,5/12-ST-5,08**

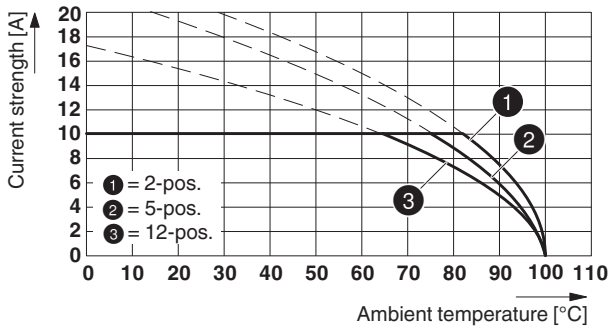
**Type: MSTB 2,5/...-ST-5,08 with MDSTB 2,5/...-G-5,08**



**Type: MSTB 2,5/...-ST-5,08 with MDSTBA 2,5/...-G-5,08**



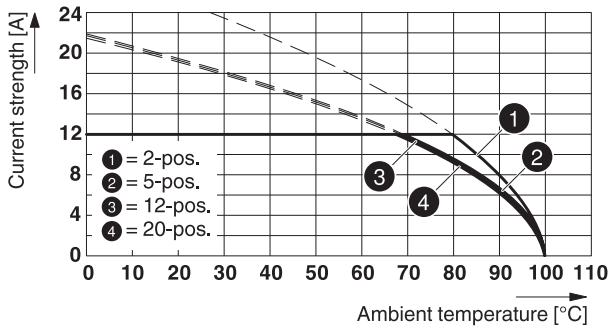
**Type: MSTB 2,5/...-ST-5,08 with MDSTBW 2,5/...-G-5,08**



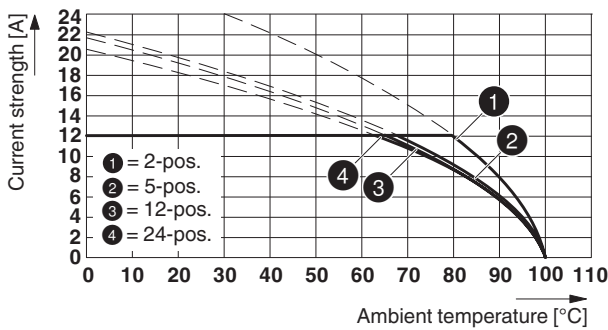
**Type: MSTB 2,5/...-ST-5,08 with MDSTBV 2,5/...-G-5,08**

**1757116 MSTB 2,5/12-ST-5,08**

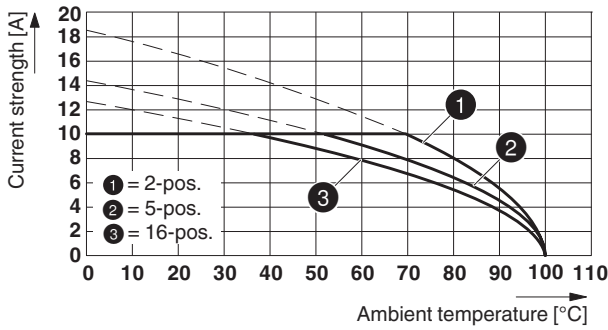
**Type: MSTB 2,5/...-ST-5,08 with MVSTBU 2,5/...-GB-5,08**



**Type: MSTB 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08**



**Type: MSTBP 2,5/...-ST-5,08 with MDSTBVA 2,5/...-G-5,08**



**Type: MSTB 2,5/...-ST(-5,08) with EMSTBVA 2,5/...-G(-5,08)**

86981\_1000\_en

**Type: MSTB 2,5/...-ST-5,08 with MSTBW 2,5/...-G-5,08**

**Type: MSTB 2,5/...-ST-5,08 with MSTBVA 2,5/...-G-5,08**

87454\_1000\_en

**Type: MSTB 2,5/...-ST-5,08 with MSTBV 2,5/...-G-5,08**

87683\_1000\_en


**1757116 MSTB 2,5/12-ST-5,08****13 Environmental and durability tests****13.1 Vibration test**


Specification	IEC 60068-2-6:2007-12
Result	Test passed
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
Test directions	X-, Y- and Z-axis


**14 Classification for connectors**


Specification	IEC 61984:2008-10
Main features	Connectors without switching capacity (COC)
Construction form	Fixed connectors
Strain relief elements	without strain relief
Connection method	Can be reconnected
Protection against electric shock	Not encapsulated - touch-proof when inserted
Protective conductor	without PE
Lock	no
Connection method	Screw terminal points

**15 Approvals**

CSA 				
Use group	B	D		
mm <sup>2</sup> /AWG/kcmil	28-12	28-12		
Voltage	300 V	300 V		
Current	10 A	10 A		

VDE Gutachten mit Fertigungsüberwachung 				
mm <sup>2</sup> /AWG/kcmil	0.2-2.5			
Voltage	250 V			
Current	12 A			

IECEE CB Scheme 				
mm <sup>2</sup> /AWG/kcmil	0.2-2.5			
Voltage	250 V			
Current	12 A			

cULus Recognized 				
Use group	B	D		
mm <sup>2</sup> /AWG/kcmil	30-12	30-12		
Voltage	300 V	150 V		
Current	15 A	15 A		

**1757116 MSTB 2,5/12-ST-5,08**

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EAC 

**1757116 MSTB 2,5/12-ST-5,08****16 Commercial Data**

Order No.	1757116
Type	MSTB 2,5/12-ST-5,08
Pieces per package	50
Net weight	20 g
GTIN	4017918029647
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

**17 corresponding headers**

Order No.	Type
1735785	MSTBW 2,5/12-G-5,08
1755833	MSTBVA 2,5/12-G-5,08
1757349	MSTBA 2,5/12-G-5,08
1758115	MSTBV 2,5/12-G-5,08
1759114	MSTB 2,5/12-G-5,08
1762606	MDSTBV 2,5/12-G1-5,08
1762703	MDSTB 2,5/12-G1-5,08
1767478	SMSTBA 2,5/12-G-5,08
1768040	MSTBA 2,5/12-G-5,08-LA
1769560	SMSTB 2,5/12-G-5,08
1808560	MSTBV 2,5/12-GEH-5,08
1842160	MDSTBA 2,5/12-G-5,08
1842319	MDSTBW 2,5/12-G-5,08
1842610	MDSTB 2,5/12-G-5,08
1845439	MDSTBVA 2,5/12-G-5,08
1845581	MDSTBV 2,5/12-G-5,08
1859616	EMSTBVA 2,5/12-G-5,08
1880407	EMSTBA 2,5/12-G-5,08
1898936	DFK-MSTBA 2,5/12-G-5,08
1899236	DFK-MSTBVA 2,5/12-G-5,08
1954579	CC 2,5/12-G-5,08 P26THR
1954689	CC 2,5/12-G-5,08 P26THRR88
1955028	CCA 2,5/12-G-5,08 P26THR
1955138	CCA 2,5/12-G-5,08 P26THRR88
1955510	CCV 2,5/12-G-5,08 P26THR
1955620	CCV 2,5/12-G-5,08 P26THRR88
1955950	CCVA 2,5/12-G-5,08 P26THR
1956069	CCVA 2,5/12-G-5,08 P26THRR88
1959163	CCA 2,5/12-GL-5,08P26THR
1959231	CCA 2,5/12-GL-5,08P26THRR88
1959309	CCA 2,5/12-GR-5,08P26THR
1959370	CCA 2,5/12-GR-5,08P26THRR88
1960000	CCVA 2,5/12-GL-5,08P26THR
1960110	CCVA 2,5/12-GL-5,08P26THRR88
1960181	CCVA 2,5/12-GR-5,08P26THR
1960259	CCVA 2,5/12-GR-5,08P26THRR88



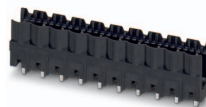

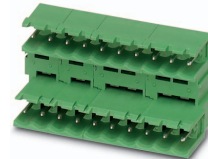
**1757116 MSTB 2,5/12-ST-5,08****18 Accessories**

Description	Order No.	Type
Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip	1205053	SZS 0,6X3,5
	0804293	SK 5,08/3,8:FORTL.ZAHLEN
	1783818	KGS-MSTB 2,5/12
Coding profile, is inserted into the slot on the plug or inverted header, red insulating material	1734634	CP-MSTB
	0803883	SK U/2,8 WH:UNBEDRUCKT
	0805108	SK 5,08/2,8:SO
Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm	1051993	B-STIFT



## 1757116 MSTB 2,5/12-ST-5,08

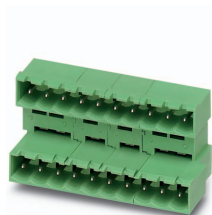
## 19 Combination tests

					
	<b>MSTB 2,5/12-ST</b>	<b>CC 2,5/12-G</b>	<b>CCV 2,5/12-G</b>	<b>CCVA 2,5/12-G</b>	<b>MDSTB 2,5/12-G</b>
Specification		IEC 61984	IEC 61984	IEC 61984	IEC 61984
<b>Mechanical tests (A)</b>					
Insertion/withdrawal force per position		approx. 8 N / 6 N	approx. 8 N / 6 N	approx. 8 N / 6 N	approx. 8 N / 6 N
Polarization when inserted Requirement >20 N		Test passed	Test passed	Test passed	Test passed
Contact holder in insert Requirements >20 N		Test passed	Test passed	Test passed	Test passed
<b>Durability tests (B)</b>					
Contact resistance R <sub>1</sub>		1.3 mΩ	1.2 mΩ	1.3 mΩ	1.6 mΩ
Insertion/withdrawal cycles		25	25	25	25
Contact resistance R <sub>2</sub>		1.4 mΩ	1.2 mΩ	1.4 mΩ	1.6 mΩ
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)		4.8 kV	4.8 kV	4.8 kV	4.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)		2.21 kV	2.21 kV	2.21 kV	2.21 kV
Insulation resistance Requirements > 5 MΩ		> 2 TΩ	> 0.1 TΩ	> 7.0 TΩ	> 0.1 TΩ
<b>Thermal tests (C)</b>					
Tested number of positions		12	12	24	12
Tested conductor cross section		2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Test current		12 A	12 A	12 A DC	10 A
Upper limiting temperature Requirements < 100°C		Test passed	Test passed	Test passed	Test passed
<b>Climatic tests (D)</b>					
Test sequence 1: low temperature storage		-40 °C/2 h	-40 °C/2 h	-40 °C/2 h	-40 °C/2 h
Test sequence 2: heat storage		100 °C/168 h	100 °C/168 h	100 °C/168 h	100 °C/168 h
Test sequence 3: noxious gas storage (ISO 6988)		0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)		4.8 kV	4.8 kV	4.8 kV	4.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)		2.21 kV	2.21 kV	2.21 kV	2.21 kV
<b>Environmental and endurance tests (E)</b>					
Specification		IEC 61984:2008-10	IEC 61984:2008-10	IEC 61984:2008-10	IEC 61984:2008-10
Degree of protection		Finger safety with IP20 test finger	Finger safety with IP20 test finger	Finger safety with IP20 test finger	Finger safety with IP20 test finger

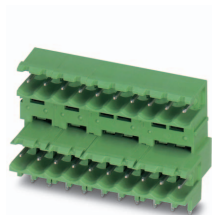
## 1757116 MSTB 2,5/12-ST-5,08



MSTB 2,5/..-ST



MDSTBA 2,5/..-G



MDSTBW 2,5/..-G

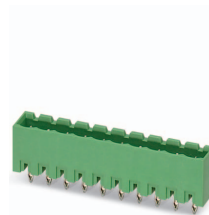


MDSTBV 2,5/..-G

DFK-MSTBA 2,5/  
..-G

Specification	IEC 61984	IEC 61984	IEC 61984	IEC 61984
<b>Mechanical tests (A)</b>				
Insertion/withdrawal force per position	approx. 8 N / 6 N	approx. 8 N / 6 N	approx. 8 N / 6 N	
Polarization when inserted Requirement >20 N	Test passed	Test passed	Test passed	
Contact holder in insert Requirements >20 N	Test passed	Test passed	Test passed	
<b>Durability tests (B)</b>				
Contact resistance R <sub>1</sub>	1.6 mΩ	1.6 mΩ	2.6 mΩ	
Insertion/withdrawal cycles	25	25	25	
Contact resistance R <sub>2</sub>	1.6 mΩ	1.7 mΩ	2.6 mΩ	
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	4.8 kV	4.8 kV	4.8 kV	
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	2.21 kV	2.21 kV	2.21 kV	
Insulation resistance Requirements > 5 MΩ	> 50 GΩ	> 0.3 TΩ	> 50 GΩ	
<b>Thermal tests (C)</b>				
Tested number of positions	12	12	12	
Tested conductor cross section	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	
Test current	10 A	10 A	10 A	
Upper limiting temperature Requirements < 100°C	Test passed	Test passed	Test passed	
<b>Climatic tests (D)</b>				
Test sequence 1: low temperature storage	-40 °C/2 h	-40 °C/2 h	-40 °C/2 h	
Test sequence 2: heat storage	100 °C/168 h	100 °C/168 h	100 °C/168 h	
Test sequence 3: noxious gas storage (ISO 6988)	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> / 40 °C/1 cycle	
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	4.8 kV	4.8 kV	4.8 kV	
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	2.21 kV	2.21 kV	2.21 kV	
<b>Environmental and endurance tests (E)</b>				
Specification	IEC 61984:2008-10	IEC 61984:2008-10	IEC 61984:2008-10	
Degree of protection	Finger safety with IP20 test finger	Finger safety with IP20 test finger	Finger safety with IP20 test finger	

## 1757116 MSTB 2,5/12-ST-5,08

**MSTB 2,5/12-ST****MVSTBU 2,5/12-GB****MSTB 2,5/12-G****MDSTBVA 2,5/12-G****EMSTBVA 2,5/12-G**

## Specification

IEC 61984

IEC 61984

IEC 61984

DIN VDE 0627 (in parts)

**Mechanical tests (A)**

## Insertion/withdrawal force per position

approx. 8 N / 6 N

approx. 8 N / 6 N

approx. 8 N / 6 N

approx. 5 N / 4 N

Polarization when inserted  
Requirement >20 N

Test passed

Test passed

Test passed

Contact holder in insert  
Requirements >20 N

Test passed

Test passed

Test passed

**Durability tests (B)**Contact resistance  $R_1$ 1.9 m $\Omega$ 1.4 m $\Omega$ 2.5 m $\Omega$ 1.1 m $\Omega$ 

## Insertion/withdrawal cycles

25

25

25

100

Contact resistance  $R_2$ 2.2 m $\Omega$ 1.4 m $\Omega$ 2.5 m $\Omega$ 1.5 m $\Omega$ Rated impulse voltage at sea level  
Voltage waveform  $\geq$  (1.2/50  $\mu$ s)

4.8 kV

4.8 kV

4.8 kV

4.8 kV

Power-frequency withstand voltage  
Voltage waveform  $\geq$  (50/60 Hz)

2.21 kV

2.21 kV

2.21 kV

2.21 kV

Insulation resistance  
Requirements > 5 M $\Omega$ > 0.7 T $\Omega$ > 0.3 T $\Omega$ > 0.2 T $\Omega$ > 8 T $\Omega$ **Thermal tests (C)**

## Tested number of positions

20

24

16

6

## Tested conductor cross section

2.5 mm<sup>2</sup>2.5 mm<sup>2</sup>2.5 mm<sup>2</sup>2.5 mm<sup>2</sup>

## Test current

12 A

12 A

10 A

12 A

Upper limiting temperature  
Requirements < 100°C

Test passed

Test passed

Test passed

**Climatic tests (D)**

## Test sequence 1: low temperature storage

-40 °C/2 h

-40 °C/2 h

-40 °C/2 h

-40 °C/2 h

## Test sequence 2: heat storage

100 °C/168 h

100 °C/168 h

100 °C/168 h

100 °C/168 h

Test sequence 3: noxious gas storage  
(ISO 6988)0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycle0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycle0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycle0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycleRated impulse voltage at sea level  
Voltage waveform  $\geq$  (1.2/50  $\mu$ s)

4.8 kV

4.8 kV

4.8 kV

4.8 kV

Power-frequency withstand voltage  
Voltage waveform  $\geq$  (50/60 Hz)

2.21 kV

2.21 kV

2.21 kV

2.21 kV

**Environmental and endurance tests (E)**

## Specification

IEC 61984:2008-10

IEC 61984:2008-10

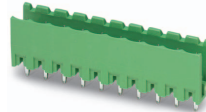
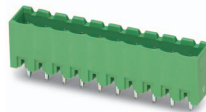
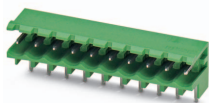
IEC 61984:2008-10

IEC 61984:2008-10

## Degree of protection

Finger safety with IP20  
test fingerFinger safety with IP20  
test fingerFinger safety with IP20  
test fingerFinger safety with IP20  
test finger

## 1757116 MSTB 2,5/12-ST-5,08

**MSTB 2,5/12-ST****MSTBW 2,5/12-G****MSTBVA 2,5/12-G****MSTBV 2,5/12-G**

Specification

IEC 61984

IEC 61984

IEC 61984

**Mechanical tests (A)**

Insertion/withdrawal force per position

approx. 8 N / 6 N

approx. 8 N / 6 N

approx. 8 N / 6 N

Polarization when inserted  
Requirement >20 N

Test passed

Test passed

Test passed

Contact holder in insert  
Requirements >20 N

Test passed

Test passed

Test passed

**Durability tests (B)**Contact resistance  $R_1$ 1.3 m $\Omega$ 2.4 m $\Omega$ 2.4 m $\Omega$ 

Insertion/withdrawal cycles

25

25

25

Contact resistance  $R_2$ 1.3 m $\Omega$ 2.5 m $\Omega$ 2.4 m $\Omega$ Rated impulse voltage at sea level  
Voltage waveform  $\geq$  (1.2/50  $\mu$ s)

4.8 kV

4.8 kV

4.8 kV

Power-frequency withstand voltage  
Voltage waveform  $\geq$  (50/60 Hz)

2.21 kV

2.21 kV

2.21 kV

Insulation resistance  
Requirements > 5 M $\Omega$ > 0.2 T $\Omega$ > 0.2 T $\Omega$ > 0.2 T $\Omega$ **Thermal tests (C)**

Tested number of positions

20

24

20

Tested conductor cross section

2.5 mm<sup>2</sup>2.5 mm<sup>2</sup>2.5 mm<sup>2</sup>

Test current

12 A

Upper limiting temperature  
Requirements < 100°C

Test passed

Test passed

Test passed

**Climatic tests (D)**

Test sequence 1: low temperature storage

-40 °C/2 h

-40 °C/2 h

-40 °C/2 h

Test sequence 2: heat storage

100 °C/168 h

100 °C/168 h

100 °C/168 h

Test sequence 3: noxious gas storage  
(ISO 6988)0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycle0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycle0.2 dm<sup>3</sup> SO<sub>2</sub> on 300 dm<sup>3</sup>/  
40 °C/1 cycleRated impulse voltage at sea level  
Voltage waveform  $\geq$  (1.2/50  $\mu$ s)

4.8 kV

4.8 kV

4.8 kV

Power-frequency withstand voltage  
Voltage waveform  $\geq$  (50/60 Hz)

2.21 kV

2.21 kV

2.21 kV

**Environmental and endurance tests (E)**

Specification

IEC 61984:2008-10

IEC 61984:2008-10

IEC 61984:2008-10

Degree of protection

Finger safety with IP20  
test fingerFinger safety with IP20  
test fingerFinger safety with IP20  
test finger