

# Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

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 connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin


The figure shows a 3-pos. version of the product

## Your advantages

- ✓ White design: Stable color when welding and during use
- ✓ High current carrying capacity of 6 A in very compact dimensions
- ✓ Intuitive locking mechanism prevents accidental disconnection
- ✓ Cost-effective connection of crimped conductors in large quantities
- ✓ Tools for manual and automatic crimping available as an option



## Key Commercial Data

Packing unit	250 pc
GTIN	 4 055626 496542
GTIN	4055626496542

## Technical data

### Item properties

Brief article description	Printed-circuit board connector
Plug-in system	COMBICON COMPACT PTSM
Type of contact	Female connector
Range of articles	PTCM 0,5/...-PL
Pitch	2.5 mm
Number of positions	4
Connection method	Crimp connection
Number of levels	1
Number of connections	4
Number of potentials	4

# Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

## Technical data

### Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	320 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV

### Connection capacity

Connection method	Crimp connection
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (Maximum external diameter of the insulation 1.9 mm)
Conductor cross section AWG / kcmil	26 ... 18 (Maximum external diameter of the insulation 1.9 mm)
Stripping length	4.1 mm ... 4.5 mm

### 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	hot-dip tin-plated

### Material data - housing

Housing color	white (9010)
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

### Dimensions for the product

Length [ l ]	16.2 mm
Width [ w ]	24.46 mm
Height [ h ]	3.9 mm
Pitch	2.5 mm
Height (without solder pin)	3.9 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

### Ambient conditions

# Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)

### Termination and connection method

### Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	2 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	20 N

### 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)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

### Current carrying capacity / derating curves

Caption	Type: PTCM 0,5/...-PL-2,5 WH with PTSM 0,5/...-HH-2,5-THR WH R...
Specification	IEC 61984:2008-10
Reduction factor	0.8
Note	Representation based on IEC 60512-5-2:2002-02
	For number of positions, see diagram

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	2 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

## Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

### Technical data

#### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	2 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	2.1 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 0,4 TΩ

#### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	8
Conductor cross section	0.75 mm <sup>2</sup>
Test current	6 A
Upper limiting temperature requirements <100 °C	Test passed

#### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-55 °C/2 h
Thermal stress	105 °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	2.95 kV
Power-frequency withstand voltage	1.39 kV

#### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Back of hand safety with IP10 access probe

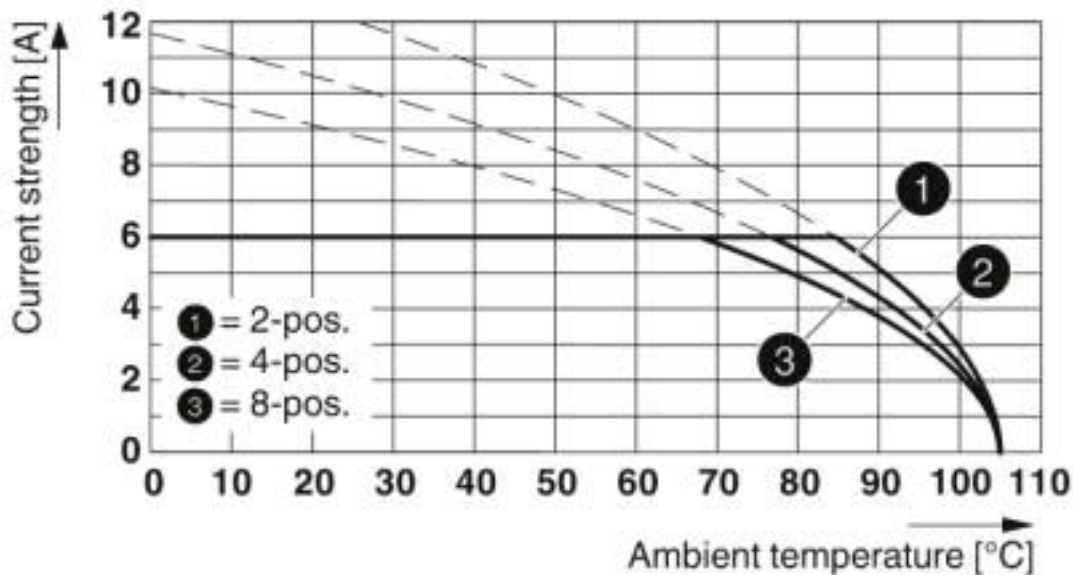
#### Environmental Product Compliance

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

### Drawings

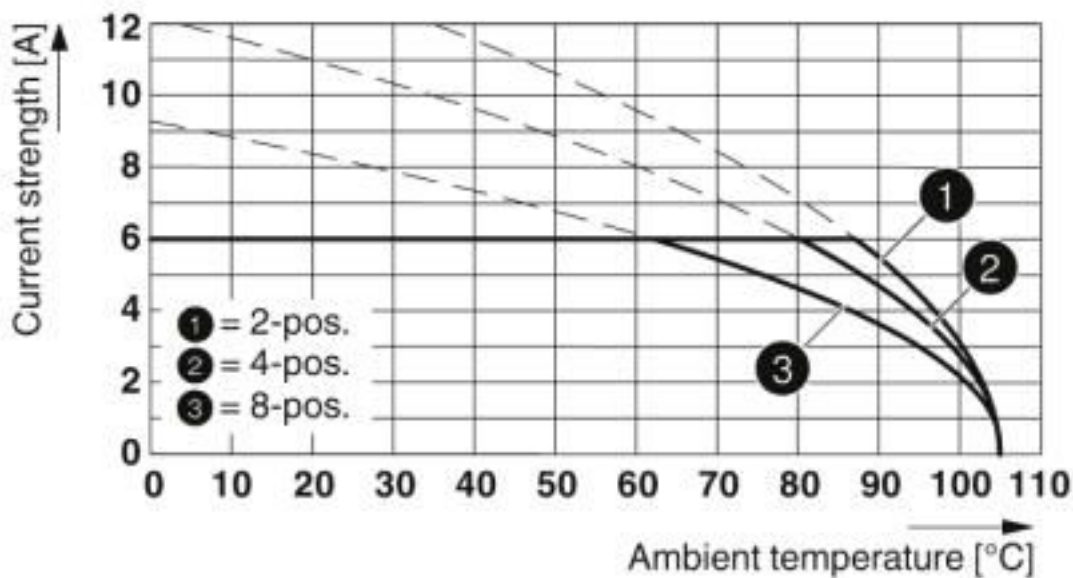
# Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

Diagram



Type: PTCM 0,5/...-PL-2,5 WH with PTCM 0,5/...-PI-2,5 WH

Diagram



Type: PTCM 0,5/...-PL-2,5 WH with PTSM 0,5/...-HH-2,5-THR WH R...

## Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 4.0	27260700

# Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

## Classifications

### eCl@ss

eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

### ETIM

ETIM 6.0	EC002638
ETIM 7.0	EC002638

## Approvals


### Approvals

#### Approvals


cULus Recognized / EAC / VDE Zeichengenehmigung

#### Ex Approvals

### Approval details

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> E60425-20101209		
	B	D
Nominal voltage UN	150 V	150 V
Nominal current IN	6 A	6 A
mm <sup>2</sup> /AWG/kcmil	22-18	22-18

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

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>	40048497
Nominal voltage UN	160 V	

# Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

## Approvals

Nominal current IN	6 A
mm <sup>2</sup> /AWG/kcmil	0.14-.75

## Accessories

### Accessories

#### Crimp contact

Accessories - PTCM-MP-P 0,34-0,75 R - 1013777



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Tin

Accessories - PTCM-MP-P 0,14-0,5 R - 1013778



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Tin

Accessories - PTCM-MP-P 0,34-0,75 - 1013780



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Tin

Accessories - PTCM-MP-P 0,14-0,5 - 1013781



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Tin

#### Crimping tool

## Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

### Accessories

Crimping pliers - CRIMPFOX-P CC 0.75 L - 1064998



Crimping pliers, for COMBICON crimp connectors with cross section: 0.14 ... 0.75 mm<sup>2</sup>. Unlockable pressure lock, precise parallel crimping, front entry, B crimp, incl. 2 positioning aids

---

### Additional products

Feed-through header - PTSM 0,5/ 4-HH0-2,5-SMD WH R32 - 1814935



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

---

Feed-through header - PTSM 0,5/ 4-HV-2,5-SMD WH R44 - 1778719



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, Article with anti-rotation pin

---

Feed-through header - PTSM 0,5/ 4-HV0-2,5-SMD WH R44 - 1839211



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

---

Feed-through header - PTSM 0,5/ 4-HTB-2,5-SMD WH R44 - 1830142



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry



## Printed-circuit board connector - PTCM 0,5/ 4-PL-2,5 WH - 1015462

### Accessories

#### Feed-through header - PTSM 0,5/ 4-HH-2,5-THR WH R32 - 1814867



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm

#### Feed-through header - PTSM 0,5/ 4-HV-2,5-THR WH R32 - 1815280



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm

#### Feed-through header - PTSM 0,5/ 4-HH-2,5-SMD WH R32 - 1708007



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, Article with anti-rotation pin

#### Printed-circuit board connector - PTSM 0,5/ 4-PI-2,5 WH - 1709452



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, connection method: Push-in spring connection, color: white, contact surface: Tin

#### Printed-circuit board connector - PTCM 0,5/ 4-PI-2,5 WH - 1015244



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm<sup>2</sup>, number of positions: 4, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

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

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1015462](#)