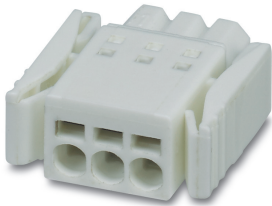


# Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

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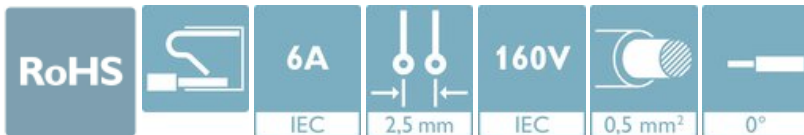


PCB connector, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-PL WH, pitch: 2.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON COMPACT PTSM, Locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

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

## Your advantages

- ✓ White design: Stable color when welding and during use
- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ High current carrying capacity of 6 A in very compact dimensions
- ✓ Intuitive locking mechanism prevents accidental disconnection



## Key Commercial Data

Packing unit	1 pc
Minimum order quantity	100 pc
GTIN	
GTIN	4055626130545
Weight per Piece (excluding packing)	2.000 g
Custom tariff number	85366990
Country of origin	Poland

## Technical data

### Item properties

Brief article description	Printed-circuit board connector
Connector system	COMBICON COMPACT PTSM

# Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

## Technical data

### Item properties

Type of contact	Female connector
Range of articles	PTSM 0,5/..-PL WH
Pitch	2.5 mm
Number of positions	6
Number of levels	1
Number of connections	6
Number of potentials	6

### Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage (III/3)	100 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	Push-in spring connection
Conductor cross section solid	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (up to 0.75 mm <sup>2</sup> supported, at a rated insulation voltage of 32 V at III/2)
Conductor cross section AWG / kcmil	24 ... 20
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	6 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
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

### Material data - housing

Housing color	white (9010)
Insulating material	PA

# Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

## Technical data

### Material data - housing

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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	5.2 mm
Width [ w ]	21.46 mm
Height [ h ]	15 mm
Pitch	2.5 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
Denomination packing units	Pcs.
Outer packaging type	Carton

### 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)

### Termination and connection method

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.14 mm <sup>2</sup> / solid / > 10 N
	0.25 mm <sup>2</sup> / flexible / > 10 N
	0.5 mm <sup>2</sup> / solid / > 20 N
	0.75 mm <sup>2</sup> / flexible / > 30 N

## Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

### Technical data

#### 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	10
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 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)	1.8 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

#### Electrical tests - Function

Specification	IEC 60999-1:1999-11
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#### Temperature cycles

Specification	IEC 60999-1:1999-11
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#### Current carrying capacity / derating curves

Caption	Type: PTSM 0,5/...-PL-2,5 ... with PTSM 0,5/...-HH-2,5-SMD... R...
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#### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	4 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>	3 mΩ

## Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

### Technical data

#### Durability tests (B)

Insertion/withdrawal cycles	10
Contact resistance R <sub>2</sub>	4 mΩ
Impulse withstand voltage at sea level	2.95 kV

#### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	8
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	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

#### Standards and Regulations

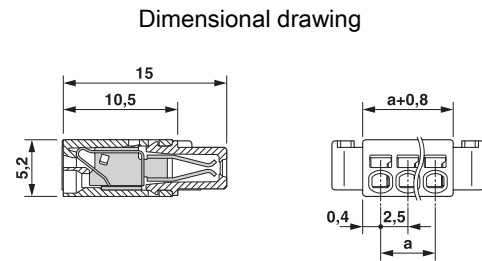
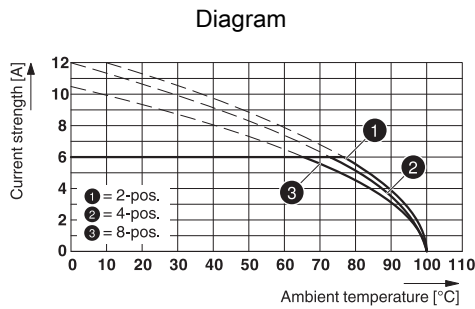
Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

#### Environmental Product Compliance

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

### Drawings

# Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463



Type: PTSM 0,5/...-PL-2,5 ... with PTSM 0,5/...-HH-2,5-SMD... R...

## Classifications

### eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
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	27440309
eCl@ss 9.0	27440309

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

### 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

# Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

## Approvals


### Approvals


#### Approvals

VDE Zeichengenehmigung / UL Recognized / 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>	40048497
Nominal voltage UN	160 V		
Nominal current IN	6 A		
mm <sup>2</sup> /AWG/kcmil	0.14-.5		

UL 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>	E118976-20130619
	B		
Nominal voltage UN	150 V		
Nominal current IN	5 A		
mm <sup>2</sup> /AWG/kcmil	26-18		

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>	E60425-20101209
	B		
Nominal voltage UN	150 V		
Nominal current IN	5 A		
mm <sup>2</sup> /AWG/kcmil	26-20		

## Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

### Accessories

#### Accessories

##### Cable end sleeve

Ferrule - AI 0,25- 6 BU - 3203040



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: blue

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Ferrule - AI 0,25- 6 YE - 3203024



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

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Ferrule - AI 0,34- 6 TQ - 3203053



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: turquoise

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### Screwdriver tools

Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

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### Additional products

## Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

### Accessories

#### Feed-through header - PTSM 0,5/ 6-HH0-2,5-SMD WH R44 - 1814951



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HH-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape

#### Feed-through header - PTSM 0,5/ 6-HV-2,5-SMD WH R44 - 1778735



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HV-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape, Article with anti-rotation pin

#### Feed-through header - PTSM 0,5/ 6-HV0-2,5-SMD WH R44 - 1839237



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HV-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard

#### Feed-through header - PTSM 0,5/ 6-HTB-2,5-SMD WH R44 - 1830168



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HTB-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape

#### Feed-through header - PTSM 0,5/ 6-HH-2,5-THR WH R32 - 1814883



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HH-THR WH, pitch: 2.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape

## Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

### Accessories

#### Feed-through header - PTSM 0,5/ 6-HV-2,5-THR WH R32 - 1815303



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HV-THR WH, pitch: 2.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape

#### Printed-circuit board connector - PTSM 0,5/ 6-PI-2,5 WH - 1709454



PCB connector, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-PI WH, pitch: 2.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON COMPACT PTSM, Locking: without, mounting: without, type of packaging: packed in cardboard

#### Feed-through header - PTSM 0,5/ 6-HH-2,5-SMD WH R44 - 1708015



PCB header, nominal cross section: 0.5 mm<sup>2</sup>, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 6, Number of rows: 1, Number of positions per row: 6, number of connections: 6, product range: PTSM 0,5/..-HH-SMD WH, pitch: 2.5 mm, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, plug-in system: COMBICON COMPACT PTSM, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard, Article with anti-rotation pin

#### Connector set - SAMPLE PTSM 0,5 PI/PL-6 SET - 1714627

Connector set, number of positions: 6, pitch: 2.5 mm, color: white