

## Data Sheet | Item Number: 2092-1180

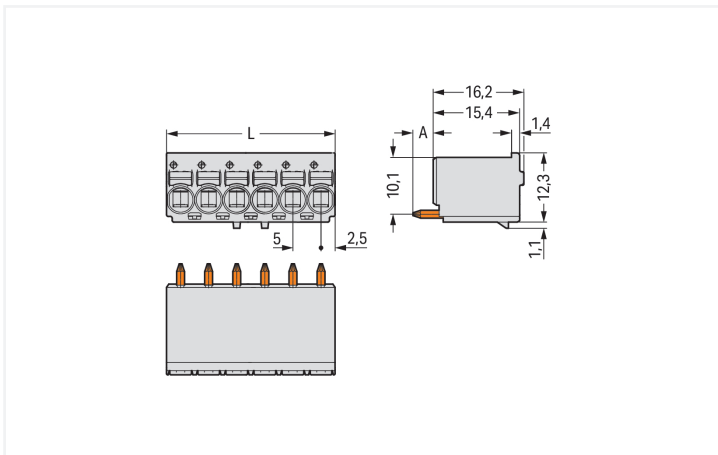
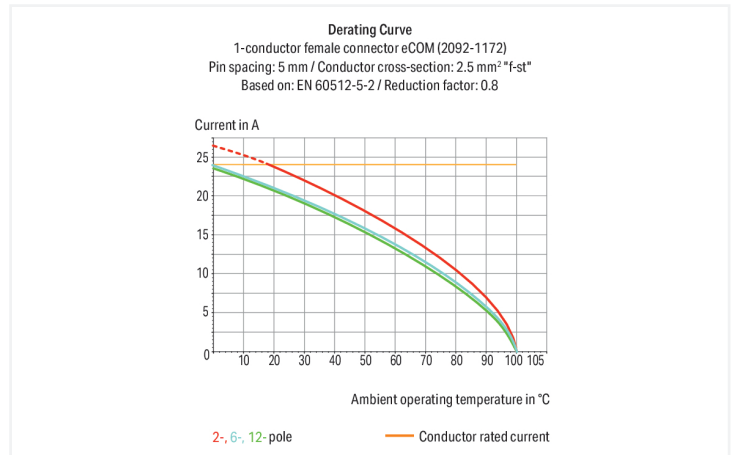
1-conductor THT female connector straight; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 10-pole; 1.4 mm Ø solder pin; 2,50 mm<sup>2</sup>; light gray

<https://www.wago.com/2092-1180>



Color: ■ light gray

Similar to illustration



Dimensions in mm

L = pole no. x pin spacing  
A = 3.6 mm THT solder pin  
A = 2.4 mm THR solder pin

Female connector, 2092 Series, 90° conductor entry to board

This female connector (item number 2092-1180) simplifies electrical installations. Ensure that the strip lengths are between 9 and 10 mm when connecting conductors to this female connector. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Dimensions: (50 x 16.2 x 13.4) mm (width x height x depth). Depending on the type of conductor, this female connector is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

The contact surface is coated with tin. The pcb connector is designed for THT soldering.

## Notes

## Safety Information

The **picoMAX® Pluggable Connection System** includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when un-mated.

## Safety information 2

The use of ferrules is recommended for applications with higher requirements.

To prevent excessive force on the clamping point, effective cable strain relief must be used.

## Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1059		
	III	III	II		Use group	B	C
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	250 V	320 V	630 V	Rated current	15 A	-	10 A
Rated impulse withstand voltage	4 kV	4 kV	4 kV				
Rated current	16 A	16 A	16 A				

## Connection Data

Clamping units	10	<b>Connection 1</b>	
Total number of potentials	10	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Push-button
Number of levels	1	Actuation direction 1	Operation parallel to conductor entry
		Solid conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG
		Fine-stranded conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup>
		Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
		Conductor connection direction to PCB	90 °
		Pole number	10

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	50 mm / 1.969 inches
Height	16.2 mm / 0.638 inches
Depth	13.4 mm / 0.528 inches
Solder pin length	3.6 mm
Solder pin diameter	1.4 mm
!	1.6 <sup>(+0.1)</sup> mm

### Mechanical data

Variable coding	No
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for PCB
Mismating protection	No
Plugging without loss of pin spacing	Yes
Mating direction to the PCB	90 °

### PCB contact

PCB contact	THT
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### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	light gray
Material group	I
Insulation material (main housing)	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.194 MJ
Weight	10.9 g

### Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

### Commercial data

Product Group	26 (picoMAX Connectors)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821165163
Customs tariff number	85366990990

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 10.0	EC002637
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-89885
CSA CSA Group	C22.2	2362521
CSA DEKRA Certification B.V.	C22.2 No. 158	2362521
cURus Underwriters Laboratories Inc.	UL 1059	E45172
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-129874
UL Underwriters Laboratories Inc.	UL 1977	E45171

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 2092-1180	<a href="#">↓</a>

**Documentation**

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data	
2D/3D Models 2092-1180	<a href="#">↓</a>

CAE data	
ZUKEN Portal 2092-1180	<a href="#">↓</a>

PCB Design	
Symbol and Footprint via SamacSys 2092-1180	↓
Symbol and Footprint via Ultra Librarian 2092-1180	↓

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule

<p><a href="#">Item No.: 216-301</a> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow</p>	<p><a href="#">Item No.: 216-131</a> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored</p>	<p><a href="#">Item No.: 216-302</a> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise</p>	<p><a href="#">Item No.: 216-132</a> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>
<p><a href="#">Item No.: 216-101</a> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored</p>	<p><a href="#">Item No.: 216-202</a> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>	<p><a href="#">Item No.: 216-102</a> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>	<p><a href="#">Item No.: 216-122</a> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>
<p><a href="#">Item No.: 216-203</a> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>	<p><a href="#">Item No.: 216-103</a> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated</p>	<p><a href="#">Item No.: 216-143</a> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>	<p><a href="#">Item No.: 216-204</a> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>
<p><a href="#">Item No.: 216-144</a> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored</p>	<p><a href="#">Item No.: 216-104</a> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored</p>	<p><a href="#">Item No.: 216-106</a> Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated; silver-colored</p>	

#### 1.1.2 Test and measurement

##### 1.1.2.1 Testing accessories

<p><a href="#">Item No.: 735-500</a> WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm<sup>2</sup></p>

### 1.1.3 Tool

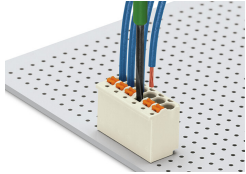
#### 1.1.3.1 Operating tool

**Item No.: 210-719**

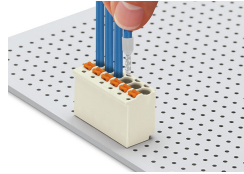
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

### Installation Notes

#### Conductor termination



Terminating fine-stranded conductors and removing all conductor types via push-buttons.



Solid and ferruled conductors are terminated by simply pushing them into unit.

#### Marking



Pole marking via direct marking perpendicular to conductor entry.



Pole marking via factory direct marking.

#### Testing



Testing via 1 mm Ø test pin – touch contact.