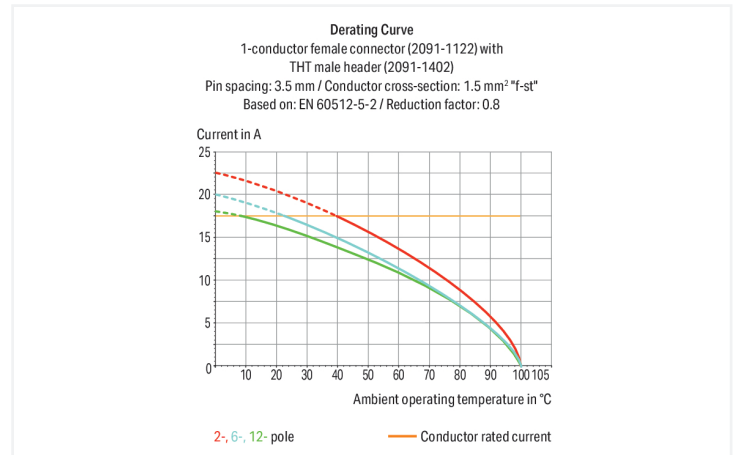
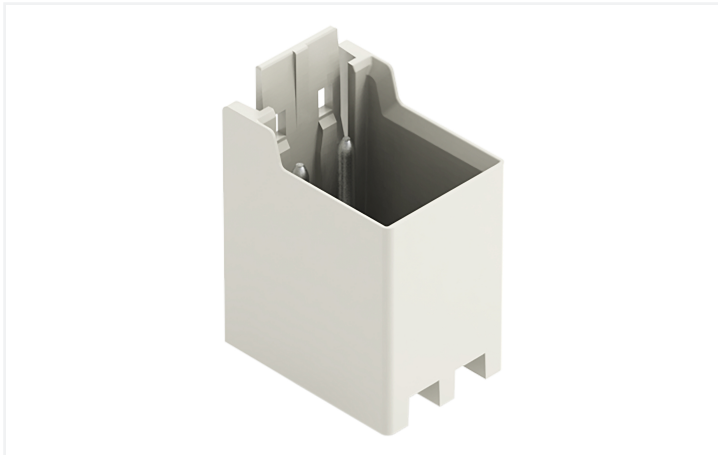


## Data Sheet | Item Number: 2091-1412

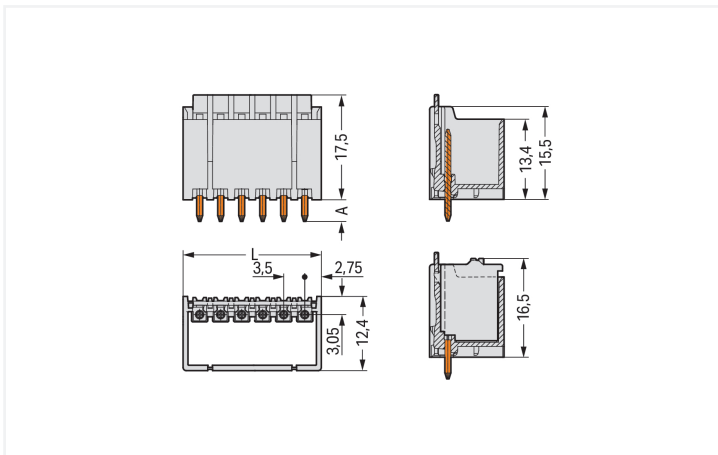
THT male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 12-pole; light gray

<https://www.wago.com/2091-1412>



Color: ■ light gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 2.0 \text{ mm} = 3.6 \text{ mm THT solder pin}$   
 $A = 2.4 \text{ mm THR solder pin}$

Male connector, 2091 Series, with 3.5 mm pin spacing

This male connector (item number 2091-1412) is designed for fault-free electrical installations. The dimensions are (44 x 21.1 x 12.4) mm (width x height x depth).

The contact surface is coated with tin. THT is used to solder the pcb connector.

## 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 unmated.

## Variants:

Direct marking  
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## 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	160 V	160 V	320 V	Rated current	10 A	-	10 A
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV				
Rated current	10 A	10 A	10 A				

## Connection Data

Total number of potentials	12	<b>Connection 1</b>	
Number of connection types	1		
Number of levels	1		
		Pole number	12

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	44 mm / 1.732 inches
Height	21.1 mm / 0.831 inches
Height from the surface	17.5 mm / 0.689 inches
Depth	12.4 mm / 0.488 inches
Solder pin length	3.6 mm
Solder pin diameter	1 mm
Drilled hole diameter	1.2 <sup>(+0.1)</sup> mm

## Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

## Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Plugging without loss of pin spacing	Yes
Mating direction to the PCB	90 °
Locking of plug-in connection	Locking latch

### 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
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.038 MJ
Weight	3.9 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	4050821161066
Customs tariff number	85366930000

### 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-89884
CSA CSA Group	C22.2	2362521
CSA DEKRA Certification B.V.	C22.2 No. 158	2362521
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-129873

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2091-1412



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models  
2091-1412



CAE data

ZUKEN Portal  
2091-1412



PCB Design

Symbol and Footprint  
via SamacSys  
2091-1412



Symbol and Footprint  
via Ultra Librarian  
2091-1412



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



[Item No.: 2091-1132](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; 1,50 mm<sup>2</sup>; light gray



[Item No.: 2091-1112/002-000](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; Gripping plate sliding connector release; 1,50 mm<sup>2</sup>; light gray



[Item No.: 2091-1112/002-1000](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; Gripping plate sliding connector release; direct marking; 1,50 mm<sup>2</sup>; light gray



[Item No.: 2091-1112](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; Gripping plate; 1,50 mm<sup>2</sup>; light gray



[Item No.: 2091-1112/000-1000](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; Gripping plate; direct marking; 1,50 mm<sup>2</sup>; light gray



[Item No.: 2091-1112/000-5000](#)

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; Gripping plate; direct marking; 1,50 mm<sup>2</sup>; light gray

## 1.2 Optional Accessories

### 1.2.1 Coding

#### 1.2.1.1 Coding



Item No.: [2091-1610](#)

Coding key carrier; suitable for 3.5 mm pin spacing; orange

## Installation Notes

### Coding



Coding a male header (via coding key carrier and two keys for male header, see symbol).