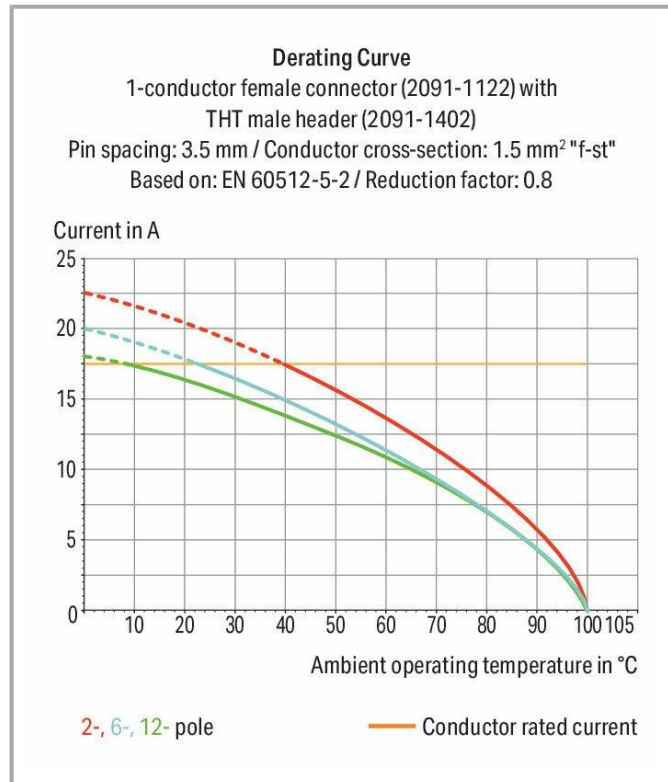
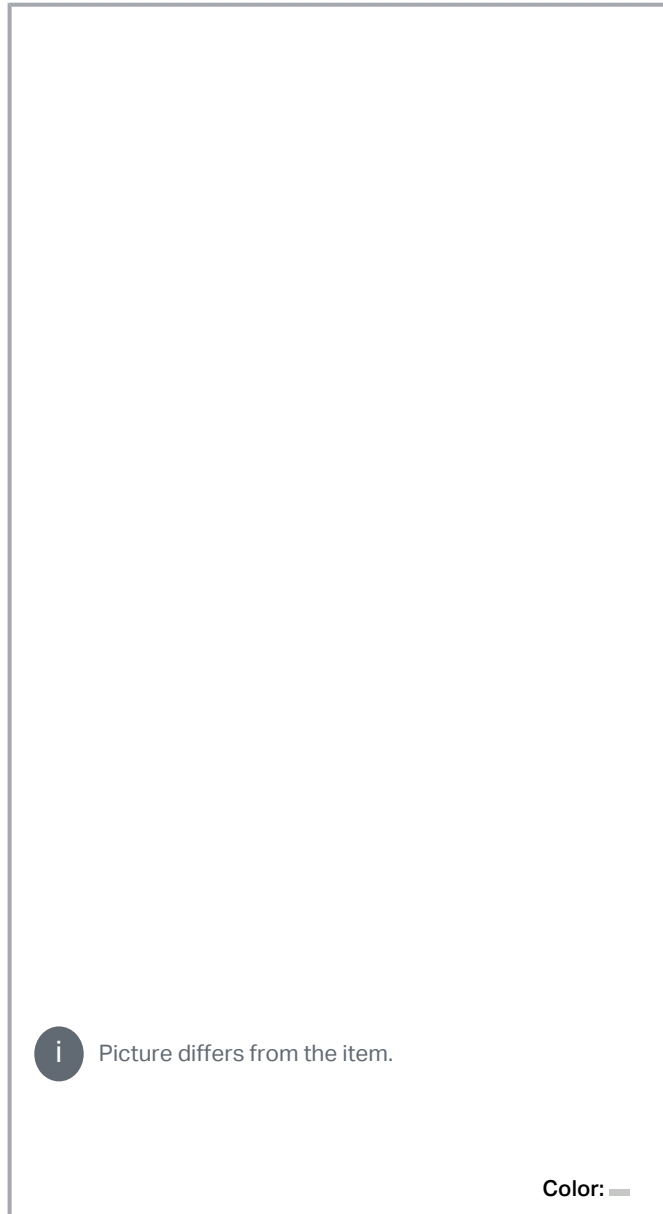


**Data sheet | Item number: 2091-1412/205-000**

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

[www.wago.com/2091-1412/205-000](http://www.wago.com/2091-1412/205-000)



Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 2.0 \text{ mm}$

$L_1 = (\text{pole no.} \times \text{pin spacing}) + 7.8 \text{ mm}$

$L_2 = (\text{pole no.} \times \text{pin spacing}) + 6.8 \text{ mm}$

A = 3.6 mm THT solder pin

A = 2.4 mm THR solder pin

## Item description

- Assembly of female connectors without loss of poles, allowing different functions to be divided within one male header

—  
Subject to changes. Please also observe the further product documentation!

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- Coding pins inserted into the header interface prevent mismatching, allowing subsequent coding in panel feedthrough applications
- The female connector is fully shrouded by the male header's housing, providing vibration resistance up to 20 g

## Data Notes

### Safety information 1

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. 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

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) ± Overvoltage category III / Pollution degree 2

### Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

## Connection data

Total number of potentials	12
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Subject to changes. Please also observe the further product documentation!



Number of connection types	1
Number of levels	1

### Connection 1

Pole No.	12
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### Physical data

Pin spacing	3.5 mm / 0.138 inch
Width	44 mm / 1.732 inch
Height	19.9 mm / 0.783 inch
Height from the surface	17.5 mm / 0.689 inch
Depth	12.4 mm / 0.488 inch
Solder pin length	2.4 mm
Solder pin diameter	1 mm
Plated through-hole diameter (THR)	1.2 <sup>(+0.1)</sup> mm

### Mechanical data

Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	90°
Locking of plug-in connection	Locking latch

### PCB contact

PCB Contact	THR
-------------	-----

### Material data

Note on material data	Information on material data can be found here
Color	light gray
Material group	I
Insulation material	Polyphthalamide (PPA GF)

Subject to changes. Please also observe the further product documentation!

Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.095 MJ
Weight	4.2 g

### Environmental requirements



Limit temperature range	-60 ... +100 °C
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### Commercial data


PU (SPU)	100 Stück
Packaging type	box
Country of origin	DE
GTIN	4050821412113
Customs tariff number	85366990990

### Approvals / Certificates

#### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-49736 /A1
	<b>CSA</b> DEKRA Certification B.V.	C22.2	2362521
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	71-102260 REV.1

#### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc.	UL 1977	E45171

Subject to changes. Please also observe the further product documentation!



## Counterpart

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

[www.wago.com/2091-1132](http://www.wago.com/2091-1132)

## Optional accessories

### Coding

Coding

Item no.: 2091-1610

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

[www.wago.com/2091-1610](http://www.wago.com/2091-1610)

## Downloads

### Documentation

#### Additional Information

Technical explanations	Apr 3, 2019	pdf 2.0 MB	Download
THR Soldering Process		pdf 402.7 kB	Download

## CAD/CAE-Data

### CAD data

2D/3D Models 2091-1412/205-000	URL	Download
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### CAE data

ZUKEN Portal 2091-1412/205-000	URL	Download
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## Environmental Product Compliance

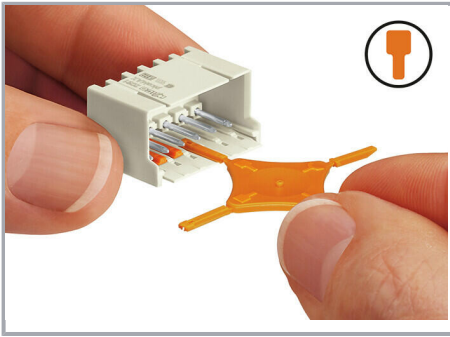
### Compliance Search

Environmental Product Compliance 2091-1412/205-000	URL	Download
THR male header; 1.0 mm Ø solder pin; straight; clamping collar; Pin spacing 3.5 mm; 12-pole; light gray		

## Installation Notes

### Coding

Subject to changes. Please also observe the further product documentation!



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

### Product family

*<i>picoMAX</i><sup>®</sup> 3.5*

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!