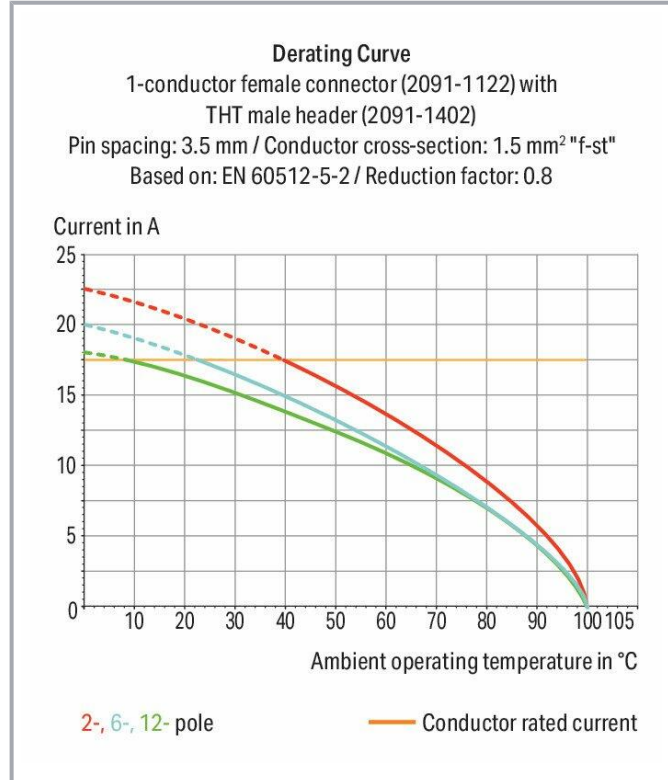
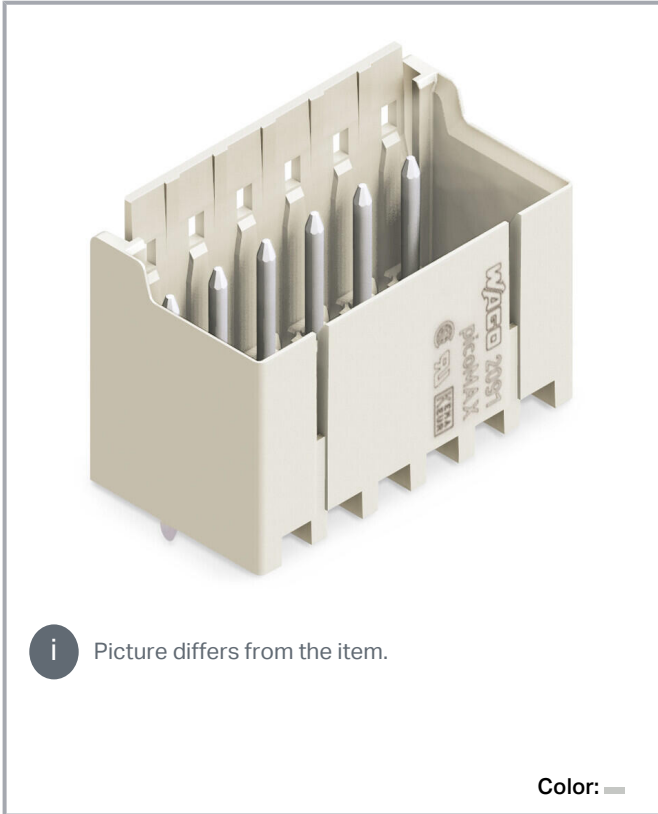


Data sheet | Item number: 2091-1412/200-000

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



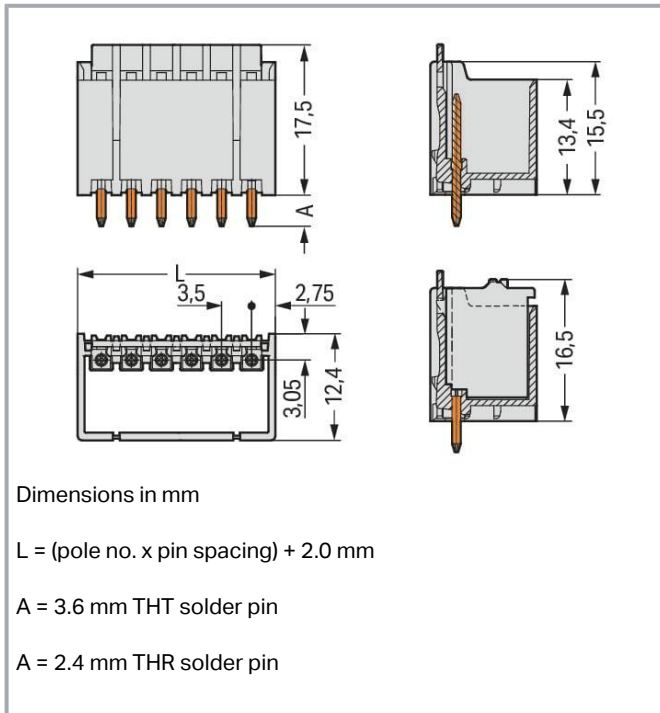
[www.wago.com/2091-1412/200-000](http://www.wago.com/2091-1412/200-000)



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

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## Item description

- Assembly of female connectors without loss of poles, allowing different functions to be divided within one male header ( $\geq 4$  poles)
- 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

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

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

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### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	160 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse 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) $\hat{=}$ Overvoltage category III / Pollution degree 2

### Ratings per UL 1059

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
Number of connection types	1
Number of levels	1

### Connection 1

Pole number	12
-------------	----

### Physical data

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

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



## 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	THR
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## Material Data

Note (material data)	Information on material specifications can be found here
Color	light gray
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.082 MJ
Weight	3.8 g
MSL gemäß J-STD 020D	1

## Environmental requirements

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

## Commercial data

eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02

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

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ETIM 8.0	EC002637
ETIM 7.0	EC002637
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821396161
Customs tariff number	85366990990

## Environmental Product Compliance

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

### General 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
	<b>UL</b> Underwriters Laboratories Inc.	UL 1977	E45171
	<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172

## 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)

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

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## Optional accessories

### Coding

Coding

	<b>Item no.: 2091-1610</b> Coding key carrier; suitable for 3.5 mm pin spacing; orange	<a href="http://www.wago.com/2091-1610">www.wago.com/2091-1610</a>
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## Downloads

### Documentation

#### Additional Information

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

## CAD/CAE-Data

### CAD data

2D/3D Models 2091-1412/200-000	URL	Download
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### CAE data

ZUKEN Portal 2091-1412/200-000	URL	Download
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## Environmental Product Compliance

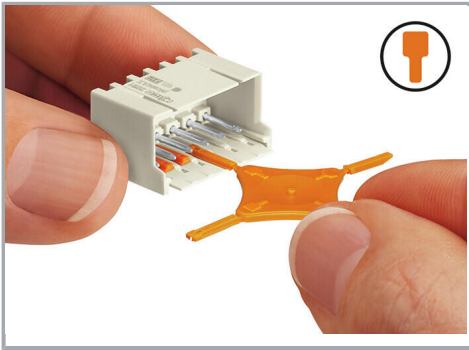
### Compliance Search

Environmental Product Compliance 2091-1412/200-000 THR male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 12-pole; light gray	URL	Download
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## 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).

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