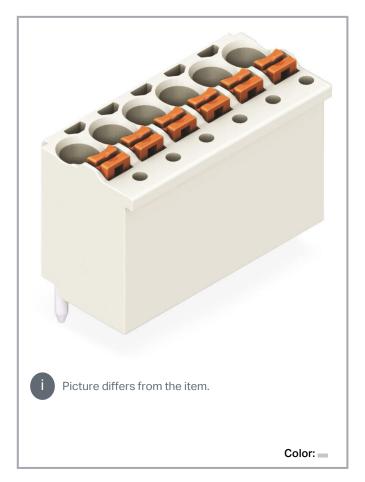
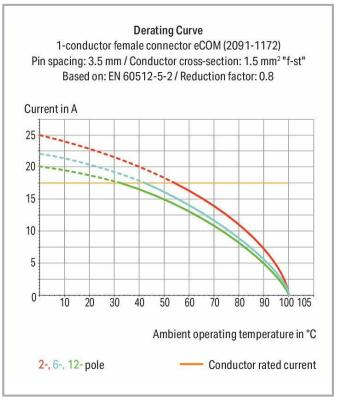
1-conductor THT female connector straight; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; 1.0 mm Ø solder pin; 1,50 mm²; light gray



www.wago.com/2091-1172





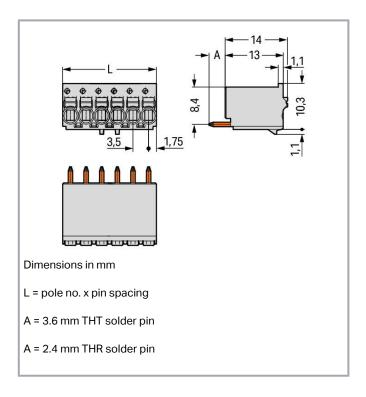
 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

WAGO GmbH & Co. KG Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com

www.wago.com/2091-1172





### Item description

- Universal connection for all conductor types
- Simple, push-in termination of solid and ferruled conductors
- Easy-to-use design does not require special tools
- Ability to wire while mated or unmated
- Integrated test ports for testing parallel to conductor entry
- Custom-installed solder pins

# 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.

### Electrical data

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 | Web: www.wago.com

www.wago.com/2091-1172



## 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) ≙ 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

Connection points	2
Total number of potentials	2
Number of connection types	1
Number of levels	1

#### Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Actuation direction 1	Operation parallel to conductor entry
Solid conductor	0.2 1.5 mm² / 24 14 AWG
Fine-stranded conductor	0.2 1.5 mm² / 24 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 0.75 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 1.5 mm²
Strip length	8 9 mm / 0.31 0.35 inches
Conductor connection direction to PCB	90 °
Pole number	2

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

WAGO GmbH & Co. KG

Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

www.wago.com/2091-1172



## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	7 mm / 0.276 inches
Height	14 mm / 0.551 inches
Depth	11.4 mm / 0.449 inches
Solder pin length	3.6 mm
Solder pin diameter	1 mm
Drilled hole diameter with tolerance	1.2 <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 °
Locking of plug-in connection	none

### **PCB** contact

PCB contact	THT
-------------	-----

## **Material Data**

Note (material data)

Inf	ormation	on material	specifications	can be	found	here
-----	----------	-------------	----------------	--------	-------	------

Color	light gray
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.021 MJ

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

WAGO GmbH & Co. KG

Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

www.wago.com/2091-1172



Weight	1 g
Environmental requirements	
·	
Limit temperature range	-60 +100 °C
Processing temperature	-35 +60 °C

### Commercial data

Product Group	26 (picoMAX Connectors)
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 8.0	EC002637
ETIM 7.0	EC002637
PU (SPU)	200 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821162407
Customs tariff number	85366990990

### **Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption	
------------------------	-------------------------	--

## Approvals / Certificates

### General approvals

Logo Approval		Additional Approval Text	Certificate name
	Approval		
	СВ	IEC 61984	NL-49736
	DEKRA Certification B.V.		/A1
	CSA	C22.2 No. 158	2362521
	DEKRA Certification B.V.		
$\overline{}$	CSA	C22.2	2362521
(SP	DEKRA Certification B.V.		
	KEMA/KEUR	EN 61984	71-
<b>∠</b> EMA	DEKRA Certification B.V.		102260
NEUR			REV.1

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 | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

www.wago.com/2091-1172





**UL** Underwriters Laboratories Inc. UL 1977 E45171



**UR**Underwriters Laboratories Inc.

UL 1059 E45172

### Optional accessories

#### Testing and measuring

Testing accessories



Item no.: 735-500

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to www.wago.com/735-500 0,5mm<sup>2</sup>

Coding

Coding



Item no.: 2091-1610

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

www.wago.com/2091-1610

Tool

Operating tool



Item no.: 210-719

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

www.wago.com/210-719

# **Downloads**

#### **Documentation**

#### **Additional Information**

Technical Section 2019 Apr 3 pdf Download Technical explanations 2.0 MB

#### CAD/CAE-Data

CAD data

2D/3D Models 2091-1172 URL Download

**PCB** Design

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 | Web: www.wago.com

www.wago.com/2091-1172



Symbol and Footprint 2091-1172

CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

#### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

#### **CAE** data

ZUKEN Portal 2091-1172 URL Download

### **Environmental Product Compliance**

#### Compliance Search

Environmental Product Compliance 2091-1172

URL

Download

 $\hbox{1-conductor THT female connector straight; push-button; Push-in CAGE CLAMP°;}\\$ 

1.5 mm²; Pin spacing 3.5 mm; 2-pole; 1.0 mm Ø solder pin; 1,50 mm²; light gray

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

WAGO GmbH & Co. KG

Hansastr. 27 32423 Minden

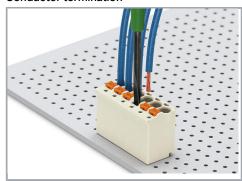
Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

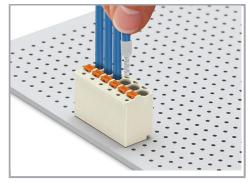


#### **Installation Notes**

## 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

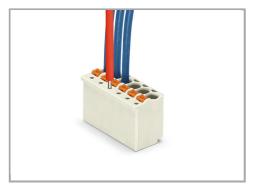
 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

WAGO GmbH & Co. KG Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com

www.wago.com/2091-1172





Testing via 1 mm Ø test pin – touch contact.

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$