

Data sheet | Item number: 2091-1378

1-conductor THT female connector angled; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 1.0 mm Ø solder pin; 1,50 mm²; light gray

www.wago.com/2091-1378



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

WAGO GmbH & Co. KG
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Email: info.de@wago.com | Web: www.wago.com

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Dimensions in mm

L = pole no. x pin spacing

A = 3.6 mm THT solder pin

A = 2.4 mm THR solder pin

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

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- 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

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

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	8
Total number of potentials	8
Number of connection types	1
Number of levels	1

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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 mm ² / 24 ... 14 AWG
Fine-stranded conductor	0.2 ... 1.5 mm ² / 24 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm ²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Conductor connection direction to PCB	0°
Pole number	8

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	28 mm / 1.102 inches
Height	11.4 mm / 0.449 inches
Depth	14 mm / 0.551 inches
Solder pin length	3.6 mm
Solder pin diameter	1 mm
Drilled hole diameter with tolerance	1.2 ^(+0.1) 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	0°
Locking of plug-in connection	none

PCB contact

PCB contact	THT
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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
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact plating	Tin
Fire load	0.012 MJ
Weight	4.5 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)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821162919
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Certificate

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Logo	Approval	Additional Approval Text	name
	CB DEKRA Certification B.V.	IEC 61984	NL-49736 /A1
	CSA DEKRA Certification B.V.	C22.2 No. 158	2362521
	CSA DEKRA Certification B.V.	C22.2	2362521
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 102260 REV.1
	UL Underwriters Laboratories Inc.	UL 1977	E45171

Optional accessories

Coding

Coding	
<p>Item no.: 2091-1610 Coding key carrier; suitable for 3.5 mm pin spacing; orange</p>	www.wago.com/2091-1610

Downloads

Documentation

Additional Information

	2019 年4月3日	pdf 2.0 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 2091-1378	URL	Download
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PCB Design

Symbol and Footprint 2091-1378	URL	Download
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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

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- 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 2091-1378	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2091-1378	URL	Download
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Installation Notes

Conductor termination

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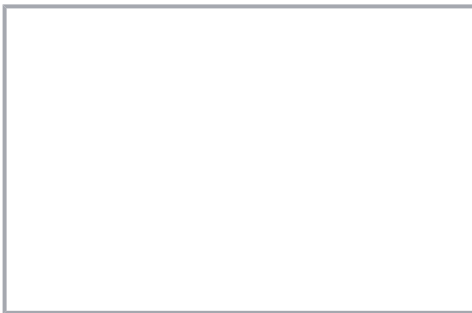


Terminating fine-stranded conductors and removing all conductor types via push-buttons.

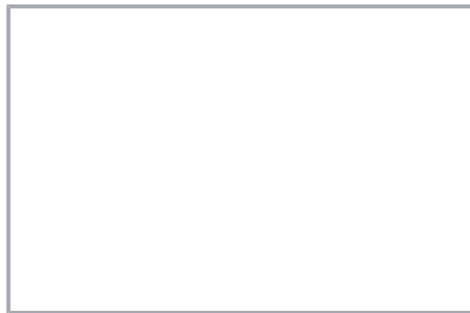


Solid and ferruled conductors are terminated by simply pushing them into unit.

Marking

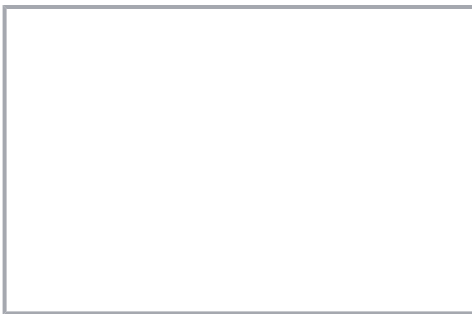


Pole marking via direct marking perpendicular to conductor entry.



Pole marking via factory direct marking.

Testing



Testing via 1 mm Ø test pin – touch contact.

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