

Data Sheet | Item Number: 2091-1180

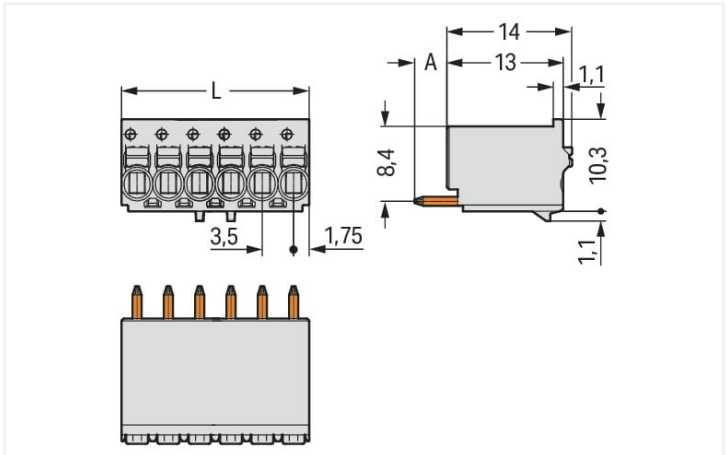
1-conductor THT female connector straight; push-button; Push-in CAGE CLAMP®;
1.5 mm²; Pin spacing 3.5 mm; 10-pole; 1.0 mm Ø solder pin; 1,50 mm²; light gray

<https://www.wago.com/2091-1180>



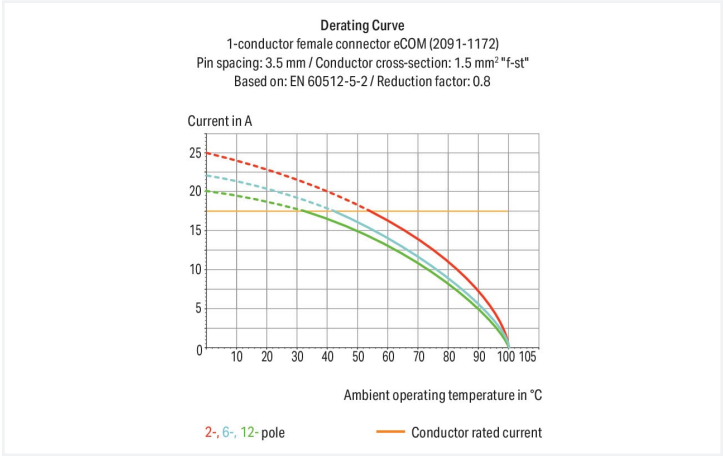
Color: ■ light gray

Similar to illustration



Dimensions in mm

L = pole no. x pin spacing
A = 3.6 mm THT solder pin
A = 2.4 mm THR solder pin



- 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

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 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		160 V	160 V	320 V
Rated surge voltage		2.5 kV	2.5 kV	2.5 kV
Rated current		10 A	10 A	10 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		10 A	-	10 A

Connection data

Connection points	10
Total number of potentials	10
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	10

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	35 mm / 1.378 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 (+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	90 °

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	0.015 MJ
Weight	5.4 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	4050821162469
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-49736/A1
CSA DEKRA Certification B.V.	C22.2	2362521
CSA DEKRA Certification B.V.	C22.2 No. 158	2362521
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-102260 REV.1
UL Underwriters Laboratories Inc.	UL 1977	E45171
UR Underwriters Laboratories Inc.	UL 1059	E45172

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2091-1180	



Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2010.85 KB	

CAD/CAE-Data

CAD data
2D/3D Models 2091-1180

CAE data
ZUKEN Portal 2091-1180

1 Compatible Products

1.1 Optional Accessories

1.1.1 Coding

1.1.1.1 Coding



Item No.: 2091-1610
Coding key carrier; suitable for 3.5 mm pin spacing; orange

1.1.2 Test and measurement

1.1.2.1 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 0,5mm²

1.1.3 Tool

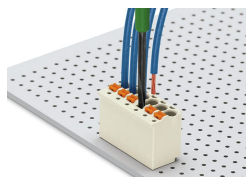
1.1.3.1 Operating tool



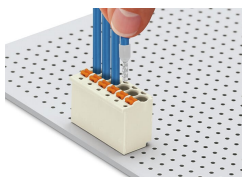
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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



Testing via 1 mm Ø test pin – touch contact.