

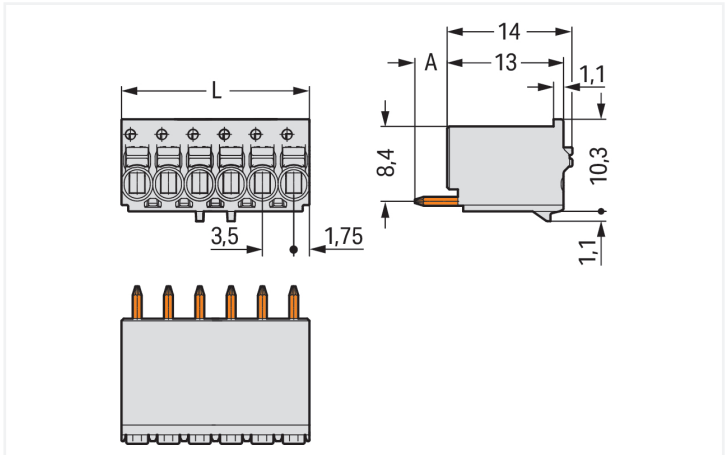
Data Sheet | Item Number: 2091-1173

1-conductor THT female connector straight; push-button; Push-in CAGE CLAMP®;
1.5 mm²; Pin spacing 3.5 mm; 3-pole; 1.0 mm Ø solder pin; 1,50 mm²; light gray

<https://www.wago.com/2091-1173>

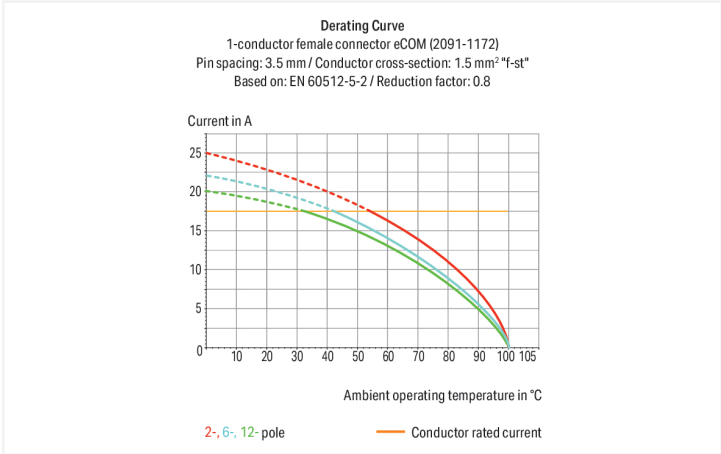


Color: ■ light gray



Dimensions in mm

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



Federleiste/Buchse Serie 2091 mit Push-in CAGE CLAMP®

Die Federleiste/Buchse hat die Artikelnummer 2091-1173 und ermöglicht eine fehlerfreie Elektroinstallation. Setzen Sie beim Design-In Ihres Gerätes auf alterprobte Sicherheit: Mit Leiterplatten-Steckverbindern haben Sie vielseitige Verwendungsmöglichkeiten. Diese Federleiste/Buchse benötigt für den Leiteranschluss eine Abisolierlänge zwischen 8 und 9 mm . Dieses Produkt ist mit der Push-in CAGE CLAMP®-Technologie ausgestattet. Mit der Push-in CAGE CLAMP® Anschlusstechnik wird der Anschluss aller Leiterarten perfekt. Durch den Zusatznutzen des direkten Steckens können Leiter mit ausreichender Knicksteifigkeit sowie feindrähtige Leiter mit Aderendhülse ohne Werkzeug gesteckt werden. Die Abmessungen sind in Breite x Höhe x Tiefe (10,5 x 14 x 11,4) mm. In Abhängigkeit von der Leiterart ist diese Federleiste/Buchse gemacht für Leiterquerschnitte von 0,2 mm² bis 1,5 mm². Die Kontaktoberfläche besteht aus Zinn. Über einen Drücker wird diese Federleiste/Buchse betätigt. picoMAX® ist das kompakte Steckverbindersystem mit innovativem Design. Es verwendet die Kontaktkraft einer einzigen Cr-Ni-Stahlfeder zweifach – sowohl für den Anschluss des Leiters als auch für die Kontaktierung des Steckerstiftes. Die Verlotung des Leiterplatten-Steckverbinders erfolgt mittels THT. Eingeführt wird der Leiter im Winkel von 90 ° zur Oberfläche.

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. 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 un-mated.

Safety information 2	The use of ferrules is recommended for applications with higher requirements. Effective cable securing must be used to prevent undue force on the clamping unit.
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Electrical data							
Ratings per		IEC/EN 60664-1		Approvals per		UL 1059	
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	160 V	160 V	320 V	Rated current	10 A	-	10 A
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV				
Rated current	10 A	10 A	10 A				

Connection data			
Clamping units	3	Connection 1 Connection technologyPush-in CAGE CLAMP® Actuation typePush-button Actuation direction 1Operation parallel to conductor entry Solid conductor0.2 ... 1.5 mm² / 24 ... 14 AWG Fine-stranded conductor0.2 ... 1.5 mm² / 24 ... 14 AWG Fine-stranded conductor; with insulated ferrule0.25 ... 0.75 mm² Fine-stranded conductor; with uninsulated ferrule0.25 ... 1.5 mm² Strip length8 ... 9 mm / 0.31 ... 0.35 inches Conductor connection direction to PCB90 ° Pole number3	
Total number of potentials	3		
Number of connection types	1		
Number of levels	1		

Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	10.5 mm / 0.413 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

Material data	
Note (material data)	Information on material specifications can be found here
Color	light gray
Material group	I
Insulation material (main housing)	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	0.005 MJ
Weight	1.7 g

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

Commercial data	
Product Group	26 (picoMAX Connectors)
PU (SPU)	200 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143633062
Customs tariff number	85366990990

Product classification	
UNSPSC	39121409
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 8.0	EC002637
ECCN	NO US CLASSIFICATION

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
General approvals		
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-102260 REV.1
UR Underwriters Laboratories Inc.	UL 1059	E45172



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 2091-1173			

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data			
2D/3D Models 2091-1173			

CAE data	
ZUKEN Portal 2091-1173	

PCB Design	
Symbol and Footprint via SamacSys 2091-1173	
Symbol and Footprint via Ultra Librarian 2091-1173	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

 Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	 Item No.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise	 Item No.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated
 Item No.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored
 Item No.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	 Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



1.1.1.1 Ferrule



Item No.: 216-144
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored



Item No.: 216-106
Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored

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

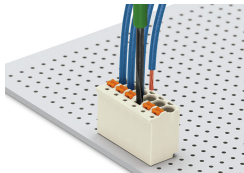
1.1.3.1 Operating tool



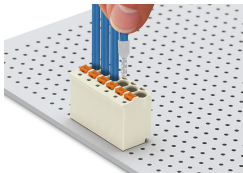
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.