

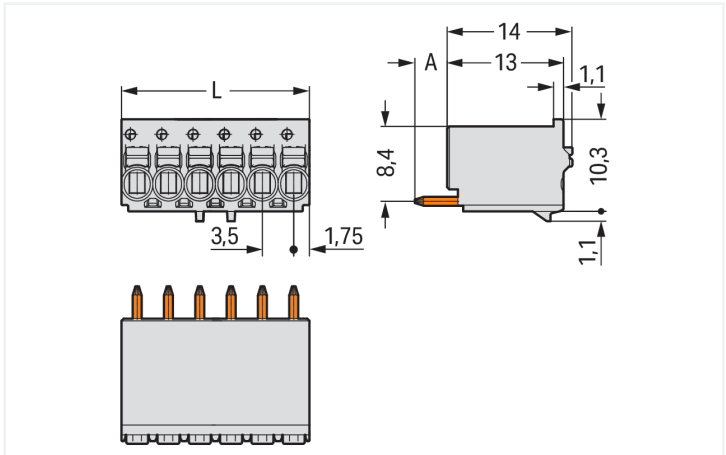
Data Sheet | Item Number: 2091-1172

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

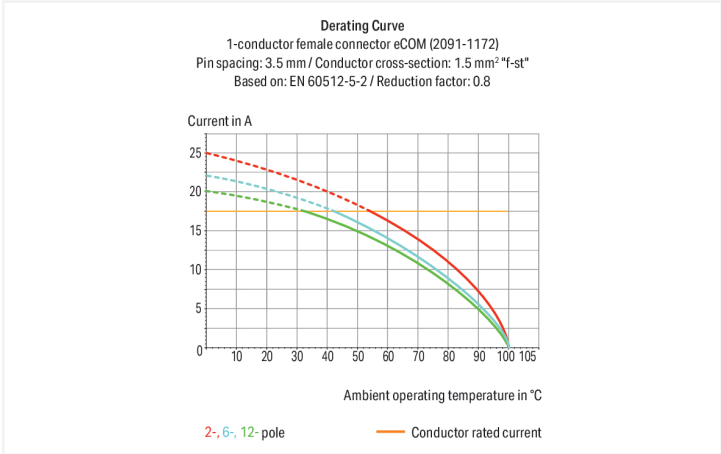
<https://www.wago.com/2091-1172>



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 90 ° Leitereinführung zur Platine

Die Federleiste/Buchse (Artikelnummer 2091-1172) bietet eine saubere Elektroinstallation. Unsere Leiterplatten-Steckverbinder ermöglichen Ihnen die größtmögliche Flexibilität bei unterschiedlichen Montagearten. Für den Leiteranschluss werden bei dieser Federleiste/Buchse Abisolierlängen von 8 bis 9 mm benötigt. Dieses Produkt ist mit der Push-in CAGE CLAMP®-Technologie ausgestattet. Die Push-in CAGE CLAMP® Anschlusstechnik ist der Universalanschluss für alle Leiterarten mit dem Zusatznutzen des direkten Steckens. Starre Leiter sowie feindrähtige Leiter mit Aderendhülse können ohne Werkzeug direkt in die Klemmstelle gesteckt werden. Die Abmessungen sind in Breite x Höhe x Tiefe (7 x 14 x 11,4) mm. In Abhängigkeit von der Leiterart eignet sich die Federleiste/Buchse für Leiterquerschnitte von 0,2 mm² bis 1,5 mm². Für die Kontaktoberfläche wurde Zinn verwendet. Durch einen Drücker wird diese Federleiste/Buchse betätigt. picoMAX® ist das kompakte und innovative Steckverbindersystem. Die Kontaktkraft einer einzigen Cr-Ni-Stahlfeder wird hier zweifach verwendet – neben dem Anschluss des Leiters auch für die Kontaktierung des Steckerstiftes. Der Leiterplatten-Steckverbinder wird mittels THT auf die Platine gelötet. Der Leiter wird zur Oberfläche im Winkel von 90 ° eingeführt.

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.



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							
Clamping units				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

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 (+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	0.021 MJ
Weight	1.1 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	4050821162407
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 2091-1172

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

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CAD/CAE-Data

CAD data

2D/3D Models 2091-1172

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CAE data

ZUKEN Portal 2091-1172

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PCB Design

Symbol and Footprint via SamacSys 2091-1172

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Symbol and Footprint via Ultra Librarian 2091-1172

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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

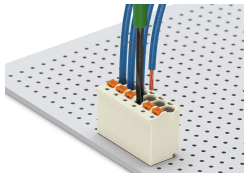
1.1.3.1 Operating tool



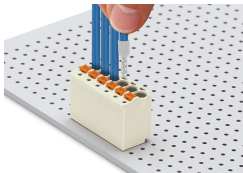
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.