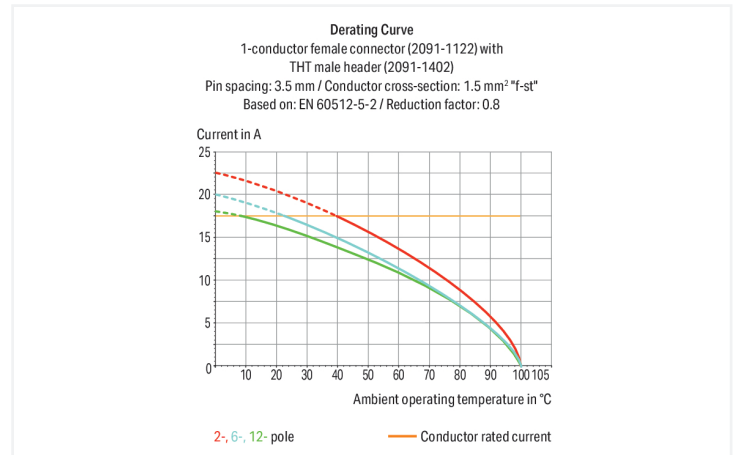


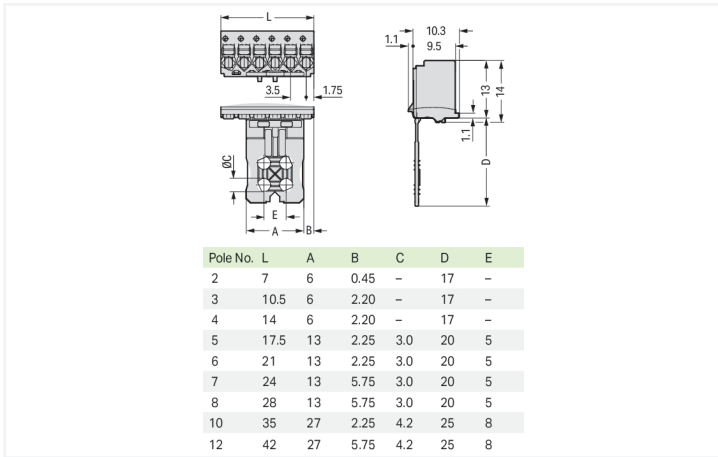
## Data Sheet | Item Number: 2091-1104

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 4-pole; Gripping plate; 1,50 mm<sup>2</sup>; light gray

<https://www.wago.com/2091-1104>



Color: ■ light gray



Dimensions in mm

### Female connector, 2091 Series, light gray

This female connector (item number 2091-1104) provides fault-free electrical installations. Conductors can only be connected to this female connector if their strip length is between 8 and 9 mm. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector delivers reliable performance. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be pushed in without needing to use any tools—all thanks to its pluggable design. The dimensions are (14 x 30 x 11.4) mm (width x height x depth). Depending on the conductor type, this female connector is ideal for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

The contact surface is coated with tin.

## 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.

To prevent excessive force on the clamping point, effective cable strain relief must be used.

## Variants:

Direct marking

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1059		
	III	III	II		Use group	B	C
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 impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV				
Rated current	10 A	10 A	10 A				

## Connection Data

Clamping units	4	<b>Connection 1</b>	
Total number of potentials	4	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Push-button
Number of levels	1	Actuation direction 1	Operation parallel to conductor entry
		Solid conductor	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 14 AWG
		Fine-stranded conductor	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 14 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm <sup>2</sup>
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
		Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
		Pole number	4

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	14 mm / 0.551 inches
Height	30 mm / 1.181 inches
Depth	11.4 mm / 0.449 inches

## Mechanical data

Variable coding	Yes
Design	with gripping plate
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No
Plugging without loss of pin spacing	Yes

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
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 <sub>cu</sub> )
Contact Plating	Tin
Fire load	0.023 MJ
Weight	1.9 g

### Environmental requirements

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

### Commercial data

Product Group	26 (picoMAX Connectors)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821160694
Customs tariff number	85366990990

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-89884
CSA CSA Group	C22.2	2362521
CSA DEKRA Certification B.V.	C22.2 No. 158	2362521
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-129873
UR Underwriters Laboratories Inc.	UL 1059	E45172

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance 2091-1104



## Documentation

### Additional Information

Technical Section

03.04.2019

pdf  
2027.26 KB



## CAD/CAE-Data

### CAD data

2D/3D Models  
2091-1104



### CAE data

ZUKEN Portal  
2091-1104



## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Male connector/plug



#### Item No.: 2091-1524/002-000

1-conductor male connector; Push-in CA-GE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; Integrated release lever; 1,50 mm²; light gray

#### Item No.: 2091-1424

THT male header; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 4-pole; light gray

#### Item No.: 2091-1404

THT male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 4-pole; light gray

## 1.2 Optional Accessories

### 1.2.1 Coding

#### 1.2.1.1 Coding



**Item No.: 2091-1610**

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

### 1.2.2 Ferrule

#### 1.2.2.1 Ferrule



**Item No.: 216-301**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-132**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; uninsulated; electro-tin plated



**Item No.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-122**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated



**Item No.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored

### 1.2.3 Test and measurement

#### 1.2.3.1 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 0,5mm<sup>2</sup>

### 1.2.4 Tool

#### 1.2.4.1 Operating tool

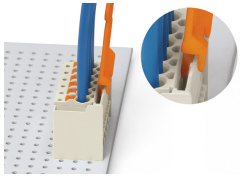


**Item No.: 210-719**

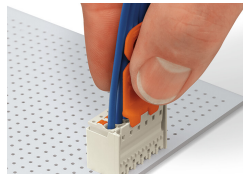
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

## Installation Notes

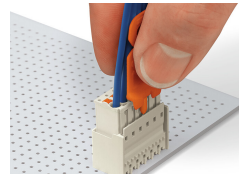
### Locking system



Disconnecting a female connector via unlocking tool. Plug unlocking tool into the male header's locking latch.

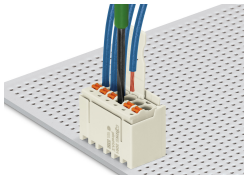


Insert unlocking tool until it hits the back-stop. Wedge opens locking latches.



Pull on both unlocking tool and conductors to remove female connector from male header.

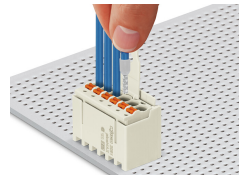
### Conductor termination



Inserting fine-stranded conductor into mated female connector via push-button.



Inserting a fine-stranded conductor into an unmated female connector via push-button.



Inserting solid and ferruled conductors via push-in termination.

### Marking



Pole marking via factory direct marking.

### Coding



Coding a female connector (via coding key carrier and two keys for female connector, see symbol).

### Testing



Testing via 1 mm Ø test pin – touch contact.