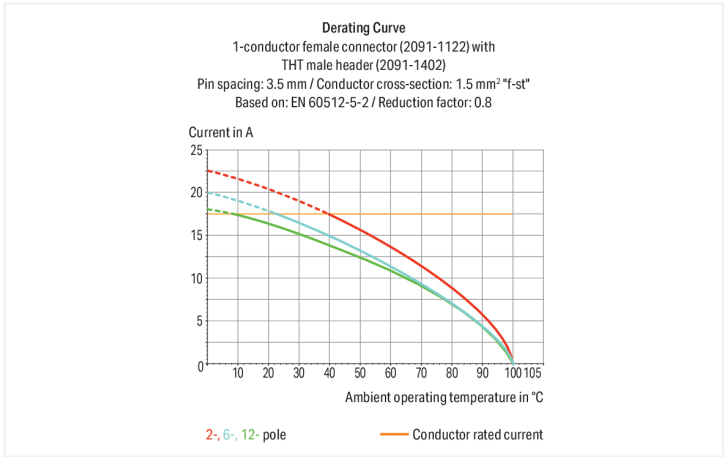


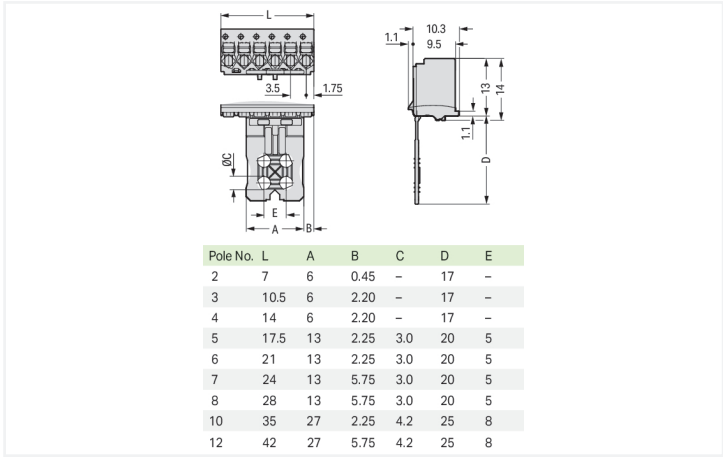
Data Sheet | Item Number: 2091-1103

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Gripping plate; 1,50 mm²; light gray

<https://www.wago.com/2091-1103>



Color: ■ light gray



Dimensions in mm

Female connector, 2091 Series, light gray

This female connector (item number 2091-1103) 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 product outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The item's dimensions are (10.5 x 30 x 11.4) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.2 mm² to 1.5 mm².

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		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		160 V	160 V	320 V
Rated impulse withstand 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	3	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 Pole number 3
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	30 mm / 1.181 inches
Depth	11.4 mm / 0.449 inches

Mechanical data	
Variable coding	Yes
Design	with gripping plate
Suitable	suitable for Single Pair Ethernet (SPE)
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)	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	0.007 MJ
Weight	1.5 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	4050821160687
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 2091-1103 

Documentation

Additional Information
Technical Section 03.04.2019 pdf 2027.26 KB 

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2091-1103 	ZUKEN Portal 2091-1103 

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 2091-1523/002-000
1-conductor male connector; Push-in CA-GE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Integrated release lever; 1,50 mm²; light gray



Item No.: 2091-1423
THT male header; 1.0 mm Ø solder pin; angled; Pin spacing 3.5 mm; 3-pole; light gray



Item No.: 2091-1403
THT male header; 1.0 mm Ø solder pin; straight; Pin spacing 3.5 mm; 3-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 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



Item No.: 216-144
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; 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; uninsulated; electro-tin plated; silver-colored



Item No.: 216-106
Ferrule; Sleeve for 2.5 mm² / AWG 14; 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 0,5mm²

1.2.4 Tool

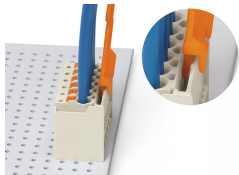
1.2.4.1 Operating tool



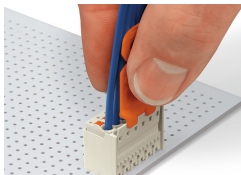
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

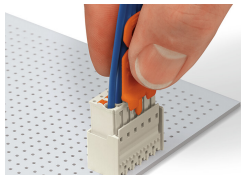
Locking system



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

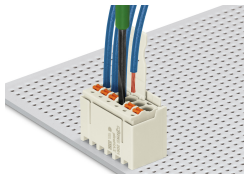


Insert unlocking tool until it hits the back-stop. Wedge opens locking latches.



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

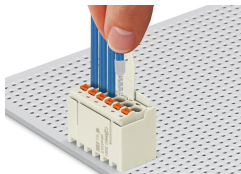
Conductor termination



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.