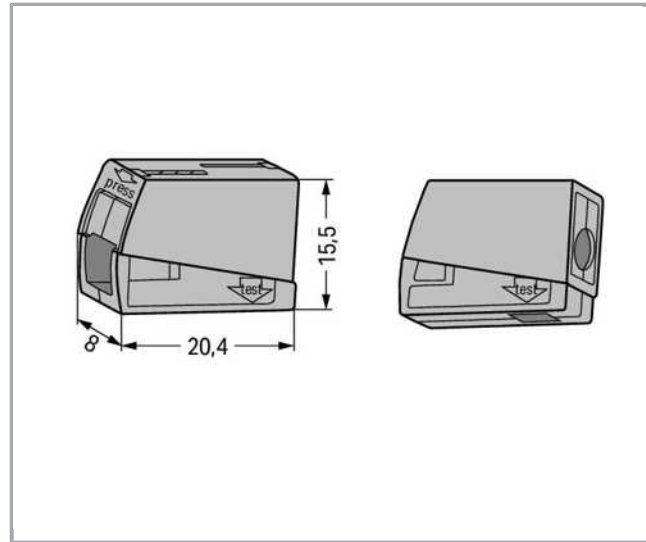


## Data sheet | Item number: 224-101

Lighting connector; push-button on lighting side; Lighting side: for all conductor types; Inst. side: for solid conductors; 224 Series; max. 2.5 mm<sup>2</sup>; Surrounding air temperature: max 60°C; 2,50 mm<sup>2</sup>; gray

[www.wago.com/224-101](http://www.wago.com/224-101)



### Item description

#### Note:

#### Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm<sup>2</sup>/12 AWG if WAGO "Alu-Plus" Contact Paste is used for termination.

#### "Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

For spring clamp connections with PUSH WIRE® connection technology, **WAGO recommends that the aluminum conductor first be cleaned and then immediately inserted into the clamping unit filled with "Alu-Plus" contact paste.**

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::

Subject to changes. Please also observe the further product documentation!

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2.5 mm<sup>2</sup> = 16 A4 mm<sup>2</sup> = 22 A**Safety information 1:**

in grounded power lines

**Data****Electrical data****Ratings per IEC/EN 60664-1**

Ratings per	EN 60664
Rated voltage (II / 2)	400 V
Rated impulse voltage (II / 2)	4 kV
Rated current	24 A
Legend (ratings)	(II / 2) ≙ Overvoltage category II / Pollution degree 2

**Connection data**

Connection type (1)	Installation side
Connection technology	PUSH WIRE <sup>®</sup>
Actuation type	Push-in
Connectable conductor materials	Copper Aluminum
Solid conductor	1 ... 2,5 mm <sup>2</sup> / 14 ... 12 AWG
Strip length	9 ... 11 mm / 0.35 ... 0.43 inch
Connection type (2)	Lighting side
Connection technology 2	CAGE CLAMP <sup>®</sup>
Number of connection points	1
Solid conductor (2)	0,5 ... 2,5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor (2)	0,5 ... 2,5 mm <sup>2</sup> / 20 ... 16 AWG
Total number of connection points	2
Total number of potentials	1
Type of wiring	Side-entry wiring

**Geometrical Data**

Width	8 mm / 0.315 inch
Height	15,5 mm / 0.61 inch
Depth	20,4 mm / 0.803 inch

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## Material Data

Color	gray
Fire load	0.041 MJ
Weight	1.8 g

## Environmental Requirements



Continuous operating temperature	105 °C
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## Commercial data

Packaging type	BOX
Country of origin	CH
GTIN	4044918583817
Customs Tariff No.	85369010000

## Approvals / Certificates

### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2	1053495
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 60998	40022792

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	18- HG1755093- PDA
	BV Bureau Veritas S.A.	EN 60998	11914/C0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	EN 60998	TAE000015T

Subject to changes. Please also observe the further product documentation!





LR  
Lloyds Register

EN 60998

04/20013  
(E8)

## UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	EN 60998	D-05895-A1 (EN60998-1 EN60998-2-2)
	UL UL International Germany GmbH	EN 60998	CCA-2617-A1
	UL UL International Germany GmbH	UL 486C	E69654

## Counterpart

## Compatible products

### General accessories



Item no.: 249-130  
Syringe; Contents: 20 ml Alu-Plus contact paste

[www.wago.com/249-130](http://www.wago.com/249-130)

## Downloads

### Documentation

#### Bid Text

224-101	Feb 21, 2019	docx	Download
GAEB docx - Datei		15.9 kB	

Subject to changes. Please also observe the further product documentation!

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224-101 GAEB X81 - Datei	Feb 19, 2019	xml 3.5 kB	Download
<b>Additional Information</b> Technical explanations	Apr 3, 2019	pdf 2.1 MB	Download

## CAD/CAE-Data

### CAD data

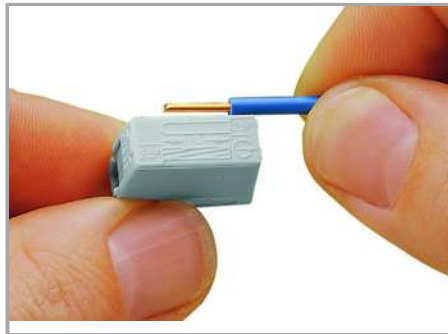
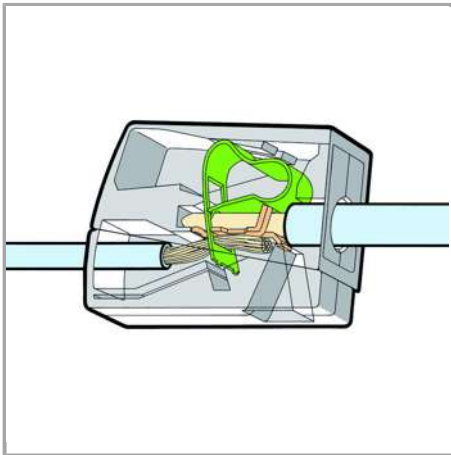
2D/3D Models 224-101	URL	Download
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### CAE data

EPLAN Data Portal 224-101	URL	Download
WSCAD Universe 224-101	URL	Download

## Installation Notes

### Conductor termination



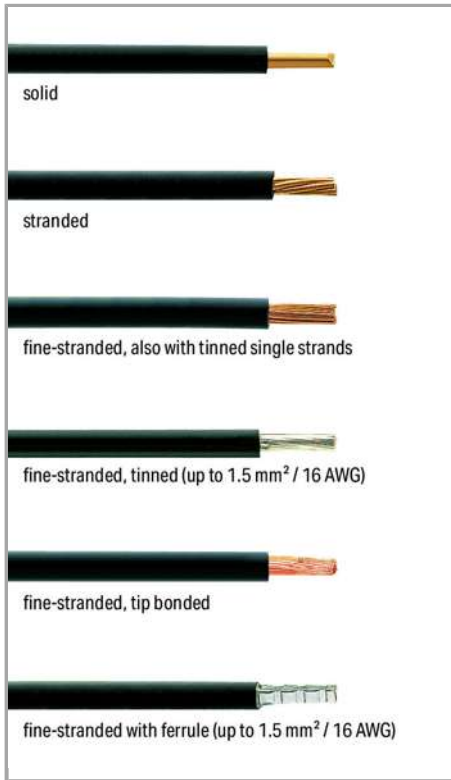
Strip conductor to 9 ... 11 mm (0.35 ... 0.43 inch).

Lighting Connectors, 2.5 mm<sup>2</sup> (12 AWG), 224 Series

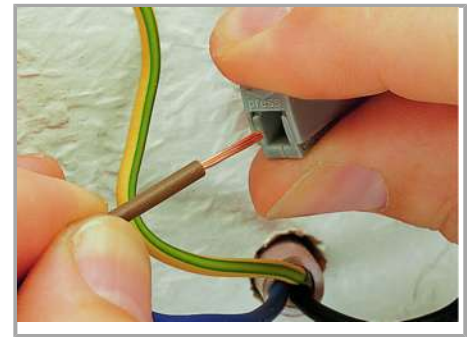
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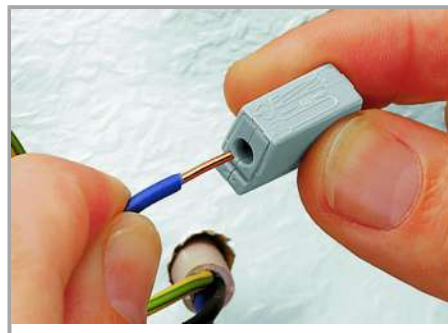
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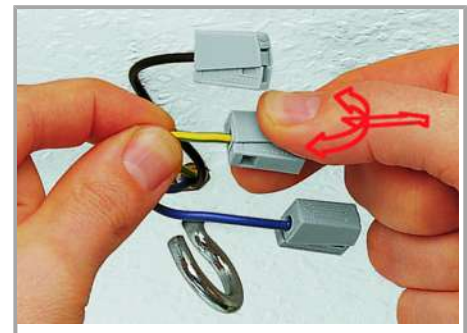
To connect: Press button fully, insert stripped conductor into square entry and release.



To remove: Press button and withdraw conductor.



To connect: Insert stripped solid conductor into circular entry and push until it hits the backstop.



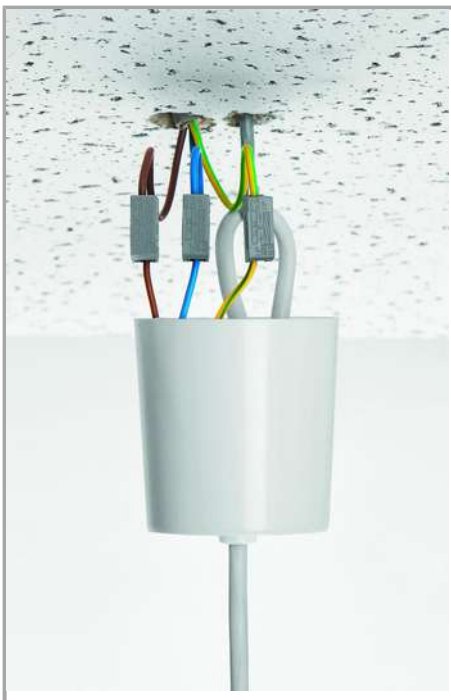
To remove: Hold conductor to be removed and twist alternately left and right while slightly pulling the connector.

## Testing

Subject to changes. Please also observe the further product documentation!



Testing via separate test ports.



Connecting solid conductors with fine-stranded conductors via lighting connectors (224-101).

Subject to changes. Please also observe the further product documentation!