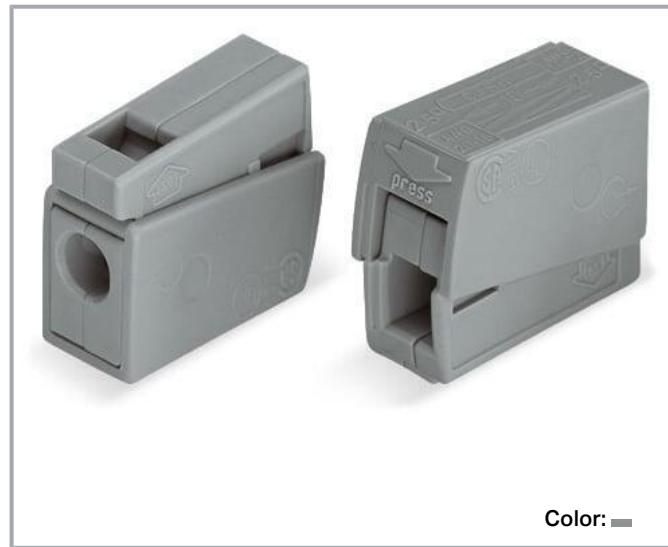
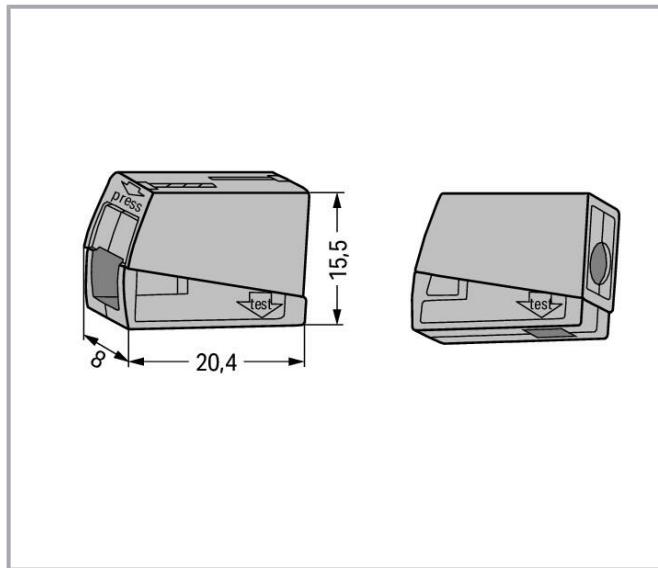


Lighting connector; push-button on lighting side; Lighting side: for all conductor types; Inst. side: for solid conductors; 224 Series; max. 2.5 mm<sup>2</sup>; Surrounding air temperature: max 60°C; 2,50 mm<sup>2</sup>; gray

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



Color: ■■■



## Data Notes

Safety information

in grounded power lines

## Electrical data

### Ratings per IEC/EN

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

## Connection data

Connection points	2
Total number of potentials	1

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

## Connection 1

Connection type 1	Installation side
Connection technology	PUSH WIRE®
Number of connection points	1
Actuation type	Push-in
Connectable conductor materials	Copper Aluminum
Connectable conductor materials (note)	<b>Terminating Aluminum Conductors (Not for use in North America)</b> 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 249-130 is used for termination.
	<b>"Alu-Plus" Contact Paste Advantages:</b>
	<ul style="list-style-type: none"> <li>■ Automatically destroys the oxide film during clamping.</li> <li>■ Prevents fresh oxidation at the clamping point.</li> <li>■ Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).</li> <li>■ Provides long-term protection against corrosion.</li> </ul>

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, **aluminum conductors must first be cleaned with a blade** and then immediately be inserted into the clamping units filled with "Alu-Plus" Contact Paste.

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::

2.5 mm<sup>2</sup> = 16 A

4 mm<sup>2</sup> = 22 A

Solid conductor	1 ... 2.5 mm <sup>2</sup> / 14 ... 12 AWG
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Wiring direction	Side-entry wiring

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

## Connection 2

Connection type 2	Lighting side
Connection technology 2	CAGE CLAMP®
Number of connection points 2	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

## Physical data

Width	8 mm / 0.315 inches
Height	15.5 mm / 0.61 inches
Depth	20.4 mm / 0.803 inches

## Material data

### Note (material data)

Information on material specifications can be found here

Color	gray
Fire load	0.04 MJ
Weight	1.8 g

## Environmental requirements

Ambient temperature (operation)	+60 °C
Continuous operating temperature	105 °C

## Commercial data

eCl@ss 10.0	27-14-11-03
eCl@ss 9.0	27-14-11-03
ETIM 8.0	EC000447
ETIM 7.0	EC000447
PU (SPU)	1000 (100) pcs
Packaging type	box
Country of origin	CH
GTIN	4044918583817
Customs tariff number	85369010000

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

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates****General approvals**

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2	1053495
	UL UL International Germany GmbH	EN 60998	CCA-2617-A1
	UL UL International Germany GmbH	EN 60998	D-05895-A1 (EN60998-1 EN60998-2-2)
	UL UL International Germany GmbH	UL 486C	E69654
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 60998	40022792

**Declarations of conformity and manufacturer's declarations**

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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

## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	18- HG1755093- PDA
	<b>BV</b> Bureau Veritas S.A.	EN 60998	11914/D0 BV
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	EN 60998	TAE000015T
	<b>LR</b> Lloyds Register	EN 60998	LR22207029TA

## Optional accessories

## Tool

["Alu-Plus" contact paste](#)

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 docx - Datei	2019 Feb 21	docx 15.9 kB	<a href="#">Download</a>
224-101 X81 - Datei	2019 Feb 19	xml 3.5 kB	<a href="#">Download</a>

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

## CAD/CAE-Data

### CAE data

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

### CAD data

2D/3D Models 224-101	URL	Download
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### Asset Administration Shell

Asset Administration Shell 224-101	URL	Download
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## Environmental Product Compliance

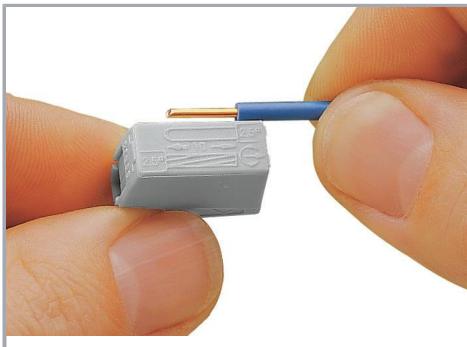
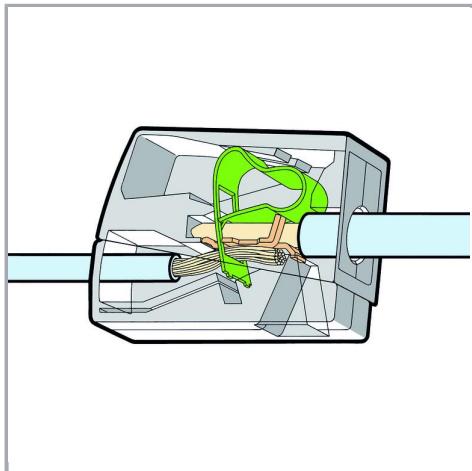
### Compliance Search

Environmental Product Compliance 224-101	URL	Download
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		

## Installation Notes

### Conductor termination

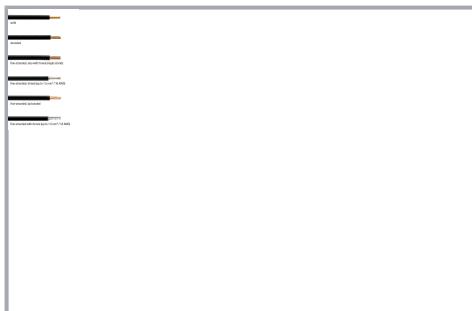
Subject to changes. Please also observe the further product documentation!



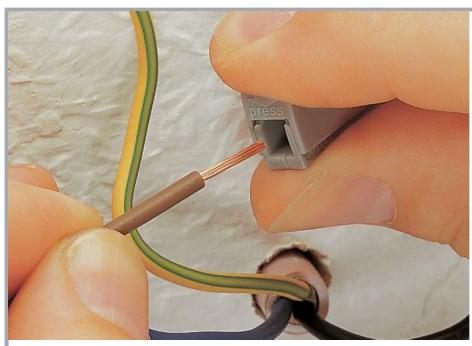
Strip conductor to 9 ... 11 mm (0.35 ... 0.43 inch).

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

#### Conductor termination



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



To remove: Press button and withdraw conductor.

#### Conductor termination

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

WAGO GmbH & Co. KG

Hansastr. 27

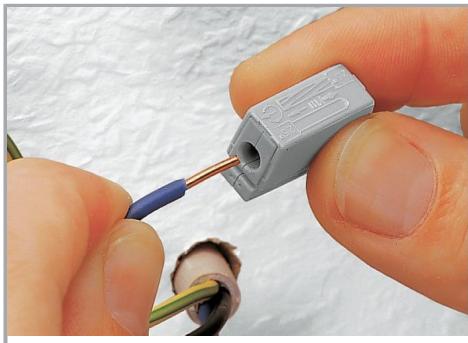
32423 Minden

Phone: +49 571 887-0 | Fax: +49 571 887-169

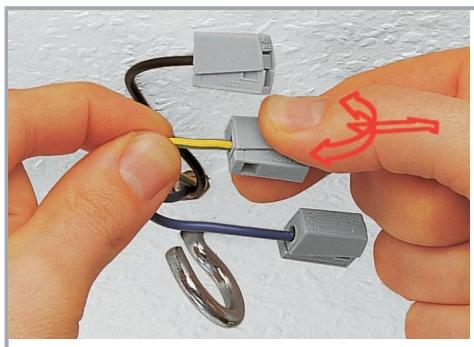
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

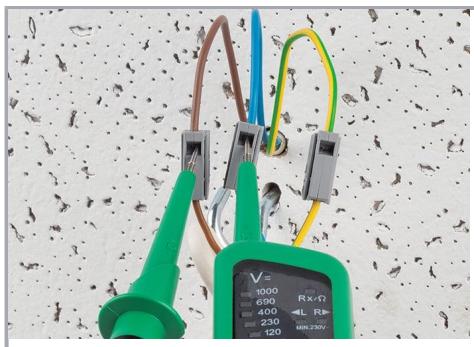


To connect: Insert stripped solid conductor into circular entry and push until it hits the backstop.



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

#### Testing



Testing via separate test ports.

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

WAGO GmbH & Co. KG

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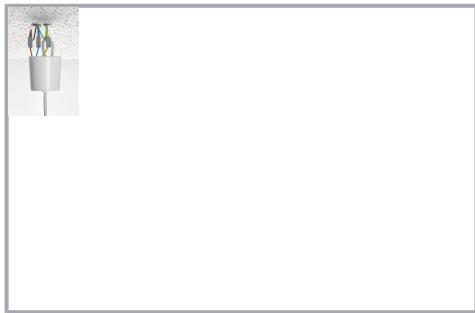
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Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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

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

WAGO GmbH & Co. KG

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