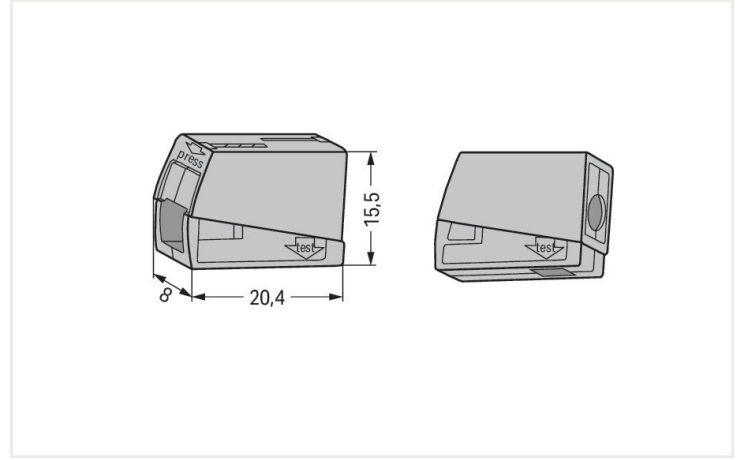


Data sheet | Item number: 224-101

Lighting connector; push-button on lighting side; Lighting side: for all conductor types; Inst. side: for solid conductors; 224 Series; max. 2.5 mm²; Surrounding air temperature: max 60°C; 2,50 mm²; gray

<https://www.wago.com/224-101>



Dimensions in mm

Notes

Safety information 1

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

Total number of connection points	2
Total number of potentials	1

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

Connection 1

Connectable conductor materials (note)

Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste [249-130](#) 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.

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 mm² = 16 A

4 mm² = 22 A

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

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 ² / 20 ... 16 AWG
Fine-stranded conductor 2	0.5 ... 2.5 mm ² / 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 data 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) Stück
Packaging type	Box
Country of origin VKOrg Germany	CH
GTIN	4044918583817
Customs tariff number VKOrg Germany	85369010000

Approvals and certificates

General approvals



Approval	Standard	Certificate name
CSA DEKRA Certification B.V.	C22.2	1053495
UL UL International Germany GmbH	UL 486C	E69654
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)
VDE VDE Prüf- und Zertifizierungsinstitut	EN 60998	40022792

Approvals for marine applications



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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 224-101



Documentation

Additional Information

Technical Section	pdf 2142.18 KB	↓
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Bid Text

224-101	19.02.2019	xml 3.44 KB	↓
224-101	21.02.2019	docx 15.52 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 224-101	↓
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CAE data

EPLAN Data Portal 224-101	↓
WSCAD Universe 224-101	↓
ZUKEN Portal 224-101	↓

1 Compatible products

1.1 Optional accessories

1.1.1 Tool

1.1.1.1 "Alu-Plus" contact paste

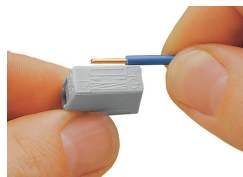


Item no.: 249-130

Syringe; Contents: 20 ml Alu-Plus contact paste

Installation notes

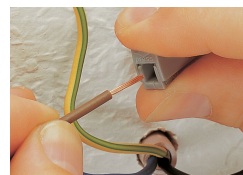
Conductor termination



Lighting Connectors (2.5 mm²), 224 Series

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

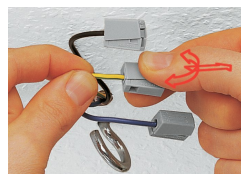
Conductor termination



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

To remove: Press button and withdraw conductor.

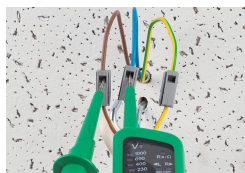
Conductor termination



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.



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