

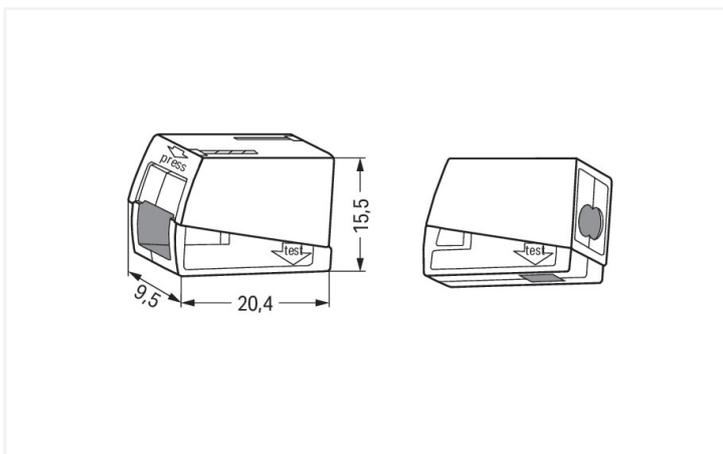
## Data Sheet | Item Number: 224-112

2-conductor 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>; white

<https://www.wago.com/224-112>



Color: ■ white



Dimensions in mm

### Lighting connector, 224 Series, white

This lighting connector (item number 224-112) is designed to connect conductors quickly and easily. WAGO's 224 Series lighting connectors simplify the connection of fine-stranded and solid conductors. Connecting lights is a piece of cake—for quick, easy, and reliable connections. Wherever you need this type of connection, e.g., in office buildings, homes, or other locations, our 224 Series is sure to impress. Ensure that the strip lengths are between 9 and 11 mm when connecting conductors to this lighting connector. Rated current and voltage are key factors to consider when selecting a splicing connector, as they indicate how the product can be used. This product has a rated voltage of 400 V and a rated current of 24 A, making it suitable for high-load applications. This product incorporates conductor terminals and utilizes PUSH WIRE® and CAGE CLAMP®. Our PUSH WIRE® connection is the quick and easy method for connecting solid conductors. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (9.5 x 15.5 x 20.5) mm (width x height x depth). Depending on the type of conductor, this lighting connector is designed for conductor cross sections ranging from 1 mm<sup>2</sup> to 2.5 mm<sup>2</sup> on one side and for conductor cross sections from 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup> on the other side.

## Notes

Safety Information

in grounded power lines

## Electrical data

Ratings per	EN 60664		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	400 V
Rated impulse withstand voltage	-	-	4 kV
Rated current	-	-	24 A

## General information

Wiring direction Side-entry wiring

## Connection Data

Clamping units	3
Total number of potentials	1

## Connection 1

Connection type	Installation side
Connection technology	PUSH WIRE®
Number of connection points	2
Actuation type	Push-in
Connectable conductor materials	Copper Aluminum

Connectable conductor materials (note) **Terminating Aluminum Conductors (not for use in North America)** WAGO Spring-Clamp Terminal Blocks are also 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.

"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 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> / 16 ... 14 AWG
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Wiring direction	Side-entry wiring

### Connection 2

Connection type	Lighting side
Connection technology	CAGE CLAMP®
Number of connection points	1
Solid conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 16 AWG

### Physical data

Width	9.5 mm / 0.374 inches
Height	15.5 mm / 0.61 inches
Depth	20.5 mm / 0.807 inches

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	white
Fire load	0.047 MJ
Weight	2.1 g

### Environmental requirements

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

### Commercial data

Product Group	7 (Push Wire Conn.)
PU (SPU)	1000 (100) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918583596
Customs tariff number	85369010000

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-14-11-03
eCl@ss 9.0	27-14-11-03
ETIM 9.0	EC000446
ETIM 10.0	EC000446
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
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

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

#### Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	23-2417173-PDA
LR Lloyds Register	EN 60998	LR22207029TA
PRS Polski Rejestr Statków	EN 60998	TE/1093/880590/23

### Downloads

#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance 224-112



### Documentation

#### Bid Text

224-112	19.02.2019	xml 3.46 KB	
224-112	21.02.2019	docx 15.55 KB	

CAD/CAE-Data

**CAD data**  
2D/3D Models 224-112

**CAE data**  
EPLAN Data Portal 224-112

WSCAD Universe 224-112

ZUKEN Portal 224-112

1 Compatible Products

1.1 Optional Accessories

1.1.1 Tool

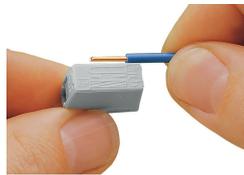
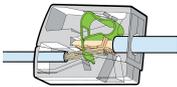
1.1.1.1 "Alu-Plus" contact paste



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

Installation Notes

Conductor termination



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