

## Data Sheet | Item Number: 224-114

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 75°C; 2,50 mm<sup>2</sup>; black

<https://www.wago.com/224-114>



Color: ■ black

Lighting connector, 224 Series, Push-in

Quick and easy connections are guaranteed with this lighting connector (item number 224-114). WAGO's 224 Series lighting connectors make connecting lights a breeze—and completely safe. Light up any space quickly and reliably. If you need to connect a fine-stranded conductor with a solid conductor, choose the 224 Series for performance you can trust. Strip lengths must be between 9 and 11 mm when connecting conductors to this lighting connector. Our splicing connector is rated for 400 V and is designed for use with a rated current of up to 24 A. It is therefore suitable for high-load applications. Featuring conductor terminals along with PUSH WIRE® as well as CAGE CLAMP®, this connector outperforms the competition. Our trusted PUSH WIRE® connection offers the fastest method for clamping conductors. It utilizes the conductor's stiffness to overcome the clamping spring's contact force. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's 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 suitable 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	black
Fire load	0.051 MJ
Weight	2.5 g

### Environmental requirements

Ambient temperature (operation)	+75 °C
Continuous operating temperature	120 °C

### Commercial data

PU (SPU)	100 pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918583787
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
------------------------	-------------------------

### 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)
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 Ship- ping	-	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 224-114 <a href="#">↓</a>

Documentation

Bid Text			
224-114	19.02.2019	xml 3.51 KB	<a href="#">↓</a>
224-114	21.02.2019	docx 15.71 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data
2D/3D Models 224-114 <a href="#">↓</a>

CAE data
EPLAN Data Portal 224-114 <a href="#">↓</a>
WSCAD Universe 224-114 <a href="#">↓</a>
ZUKEN Portal 224-114 <a href="#">↓</a>

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Tool

##### 1.1.1.1 "Alu-Plus" contact paste

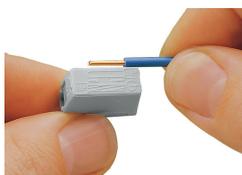


Item No.: 249-130

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.

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

---

Current addresses can be found at: [www.wago.com](http://www.wago.com)