

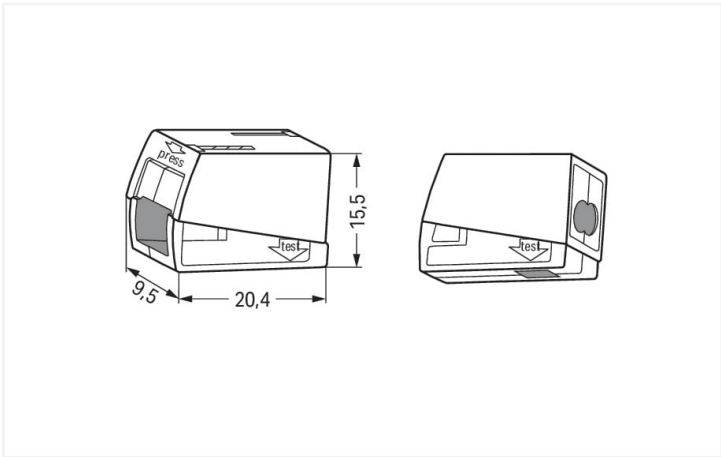
Data Sheet | Item Number: 224-112

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 mm²; Surrounding air temperature: max 60°C; 2,50 mm²; white

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



Color: white



Dimensions in mm

Lighting connector, 224 Series, PUSH WIRE®

Connect conductors quickly and securely with this lighting connector (item number 224-112). WAGO's 224 Series connectors make it quick and easy to safely connect lights, allowing you to turn darkness into light in no time at all. The 224 Series comes into its own whenever fine-stranded conductors need to be connected to solid conductors throughout buildings. Our splicing connector is rated for 400 V and is designed to handle a rated current of up to 24 A. As such, it is suitable for high-load applications. Strip lengths must be between 9 mm and 11 mm when connecting conductors to this lighting connector. Featuring conductor terminals along with PUSH WIRE® as well as CAGE CLAMP®, this product is highly versatile. Our PUSH WIRE® connection offers a simple and reliable solution for connecting solid conductors. Our highly-rated 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). This lighting connector is suitable for conductor cross sections ranging from 1 mm² to 2.5 mm² on one side and for conductor cross sections ranging from 0.5 mm² to 2.5 mm² 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 surge voltage	-	-	4 kV
Rated current	-	-	24 A

Connection data

Clamping units	3
Total number of potentials	1

Connection 1	
Connection type 1	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 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 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 mm² / 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 mm² / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 2.5 mm² / 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)	Information on material specifications can be found here
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.)
eCl@ss 10.0	27-14-11-03
eCl@ss 9.0	27-14-11-03
ETIM 9.0	EC000446
ETIM 8.0	EC000447
PU (SPU)	1000 (100) pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918583596
Customs tariff number	85369010000

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	UL 486C	E69654
UL UL International Germany GmbH	EN 60998	CCA-2617-A1
General approvals		
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 Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



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

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



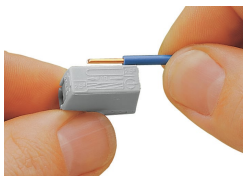
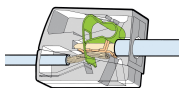
1 Compatible Products
1.1 Optional Accessories
1.1.1 Tool
1.1.1.1 "Alu-Plus" contact paste



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

Installation Notes

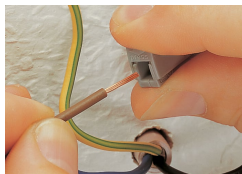
Conductor termination



Lighting Connectors (2.5 mm²), 224 Series

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

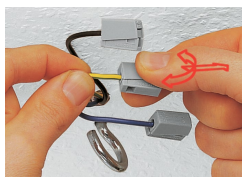
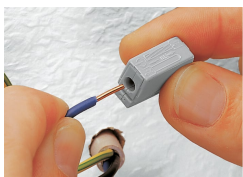
Conductor termination



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.

