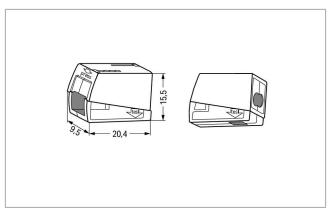
2-conductor lighting connector; push-button on lighting side; Lighting side: for all conductor types; Inst. side: for solid conductors; 224 Series; max. 2.5 mm²; Surrounding air temperature: max 60°C; 2,50 mm²; white



www.wago.com/224-112







Item description

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 is used for termination.

"Alu-Plus" Contact Paste Advantages:

Automatically destroys the oxide film during clamping.

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

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- 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.

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::

 $2.5 \text{ mm}^2 = 16 \text{ A}$

4 mm² = 22 A

Safety information 1:

in grounded power lines

Data

Electrical data

Ratings per IEC/EN 60664-1

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 technologyPUSH WIRE®Number of connection points (connection type)2Actuation typePush-inConnectable conductor materialsCopper AluminumSolid conductor1 2.5 mm² / 16 14 AWGStrip length9 11 mm / 0.35 0.43 inchConnection type 2Lighting sideConnection technology 2CAGE CLAMP®Number of connection points1Solid conductor 20.5 2.5 mm² / 20 14 AWG	Connection type (1)	Installation side
Actuation type Connectable conductor materials Copper Aluminum Solid conductor 1 2.5 mm²/16 14 AWG Strip length 9 11 mm/0.35 0.43 inch Connection type 2 Lighting side Connection technology 2 CAGE CLAMP® Number of connection points 1	Connection technology	PUSH WIRE [®]
Connectable conductor materials Copper Aluminum Solid conductor 1 2.5 mm² / 16 14 AWG Strip length 9 11 mm / 0.35 0.43 inch Connection type 2 Lighting side Connection technology 2 CAGE CLAMP® Number of connection points	Number of connection points (connection type)	2
Aluminum Solid conductor 1 2.5 mm² / 16 14 AWG Strip length 9 11 mm / 0.35 0.43 inch Connection type 2 Lighting side Connection technology 2 CAGE CLAMP® Number of connection points 1	Actuation type	Push-in
Strip length 9 11 mm / 0.35 0.43 inch Connection type 2 Lighting side Connection technology 2 CAGE CLAMP® Number of connection points 1	Connectable conductor materials	• •
Connection type 2 Lighting side Connection technology 2 CAGE CLAMP® Number of connection points 1	Solid conductor	1 2.5 mm² / 16 14 AWG
Connection technology 2 CAGE CLAMP® Number of connection points 1	Strip length	9 11 mm / 0.35 0.43 inch
Number of connection points 1	Connection type 2	Lighting side
·	Connection technology 2	CAGE CLAMP®
Solid conductor 2 0.5 2.5 mm² / 20 14 AWG	Number of connection points	1
	Solid conductor 2	0.5 2.5 mm² / 20 14 AWG

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

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Fine-stranded conductor 2	0.5 2.5 mm² / 20 16 AWG
Total number of connection points	3
Total number of potentials	1
Wiring type	Side-entry wiring

Physical data

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

Material Data

Color	white
Fire load	0.046 MJ
Weight	2.1 g

Environmental Requirements

Surrounding air temperature (operation)	60 60 °C
Continuous operating temperature	105 105 ℃

Commercial data

Product Group	7 (Push Wire Conn.)
Packaging type	BOX
Country of origin	CH
GTIN	4044918583596
Customs tariff number	85369010000

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA	C22.2	1053495
SA	DEKRA Certification B.V.		

EN 60998



VDE Prüf- und Zertifizierungsinstitut

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VDE

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Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	-	18- HG1755093- PDA
SUREAU VERITAS	BV Bureau Veritas S.A.	EN 60998	11914/D0 BV
DNV-GL MARITIME	DNV GL Det Norske Veritas, Germanischer Lloyd	EN 60998	TAE000015T
DO LO TENENT	LR Lloyds Register	EN 60998	04/20013 (E8)
UL-Approvals	S		
Logo	Approval	Additional Approval Text	Certificate name
CCA	UL UL International Germany GmbH	EN 60998	CCA- 2617-A1
(D)	UL UL International Germany GmbH	EN 60998	D-05895- A1 (EN60998- 1 EN60998- 2-2)
LISTED WIRE CONNECTOR	UL UL International Germany GmbH	UL 486C	E69654

Counterpart

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

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Compatible products

General accessories

Arrange

Item no.: 249-130

Syringe; Contents: 20 ml Alu-Plus contact paste

www.wago.com/249-130

Downloads Documentation

Bid Text

224-112 docx - Datei	21-Feb-2019	docx 15.9 kB	Download
224-112 X81 - Datei	19-Feb-2019	xml 3.5 kB	Download
Additional Information Technical explanations	03-Apr-2019	pdf 2.2 MB	Download

CAD/CAE-Data

CAD data

2D/3D Models 224-112	URL	Download
CAE data		
EPLAN Data Portal 224-112	URL	Download
WSCAD Universe 224-112	URL	Download
ZUKEN Portal 224-112	URL	Download

Installation Notes

Conductor termination

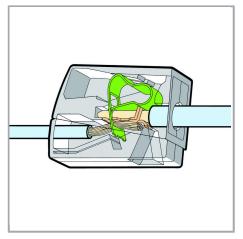
 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$

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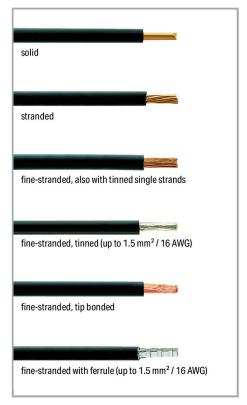
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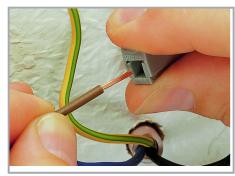
Strip conductor to 9 ... 11 mm (0.35 ... 0.43 inch).

Lighting Connectors, 2.5 mm² (12 AWG), 224 Series





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



To remove: Press button and withdraw conductor.

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

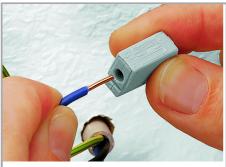
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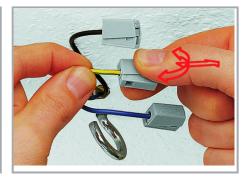
www.wago.com/224-112







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.

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$

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