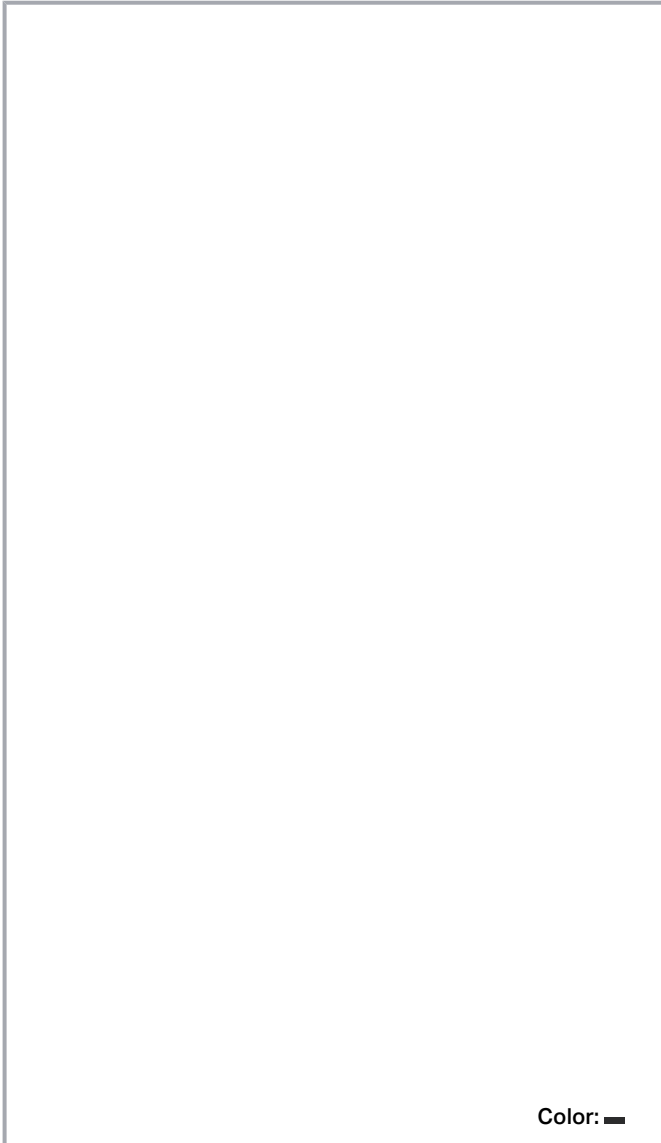


Data sheet | Item number: 224-104

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 75°C; 2,50 mm²; black



www.wago.com/224-104



Data

Notes

Safety information 1

in grounded power lines

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

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



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

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
Connectable conductor materials (note)	Terminating Aluminum Conductors WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm ² /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.

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



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	black
Fire load	0.046 MJ
Weight	2.2 g

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

Environmental requirements

Continuous operating temperature up to	120 °C
Ambient temperature (operation)	+75 °C
Continuous operating temperature	120 °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)	100 Stück
Packaging type	box
Country of origin VKOrg Germany	CH
GTIN	4044918584050
Customs tariff number VKOrg Germany	85369010000

Approvals / Certificates

General approvals




Logo	Approval	Additional Approval Text	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

Approvals for marine applications

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

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Logo	Approval	Additional Approval Text	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

Optional accessories

Tool

"Alu-Plus" contact paste

Item no.: 249-130

Syringe; Contents: 20 ml Alu-Plus contact paste

www.wago.com/249-130

Downloads

Documentation

Bid Text

224-104 docx - Datei	Feb 21, 2019	docx 15.9 kB	Download
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224-104 X81 - Datei	Feb 19, 2019	xml 3.6 kB	Download
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Additional Information

Technical Section Technical explanations		pdf 2.2 MB	Download
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Subject to changes. Please also observe the further product documentation!

CAD/CAE-Data

CAD data

2D/3D Models 224-104	URL	Download
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CAE data

WSCAD Universe 224-104	URL	Download
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ZUKEN Portal 224-104	URL	Download
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EPLAN Data Portal 224-104	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 224-104	URL	Download
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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 75°C; 2,50 mm²; black

Installation Notes

Conductor termination



Lighting Connectors (2.5 mm²), 224 Series



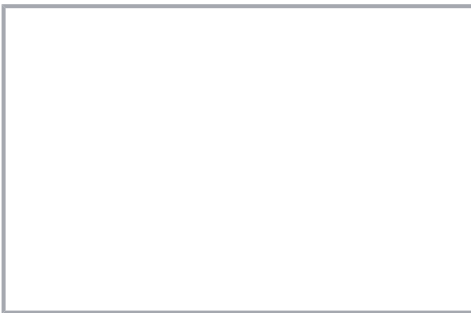
Strip conductor to 9 ... 11 mm (0.35 ... 0.43 inch).

Conductor termination

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

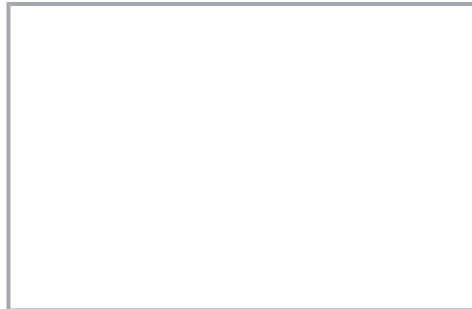


To connect: Press button fully, insert stripped conductor into square entry and release.



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.

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



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!