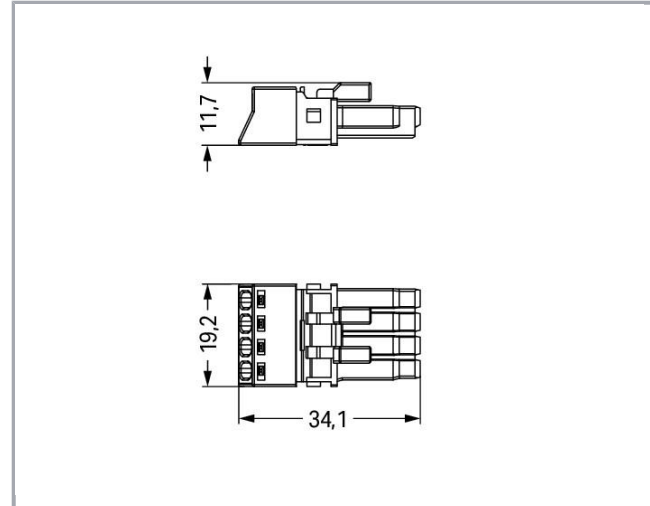
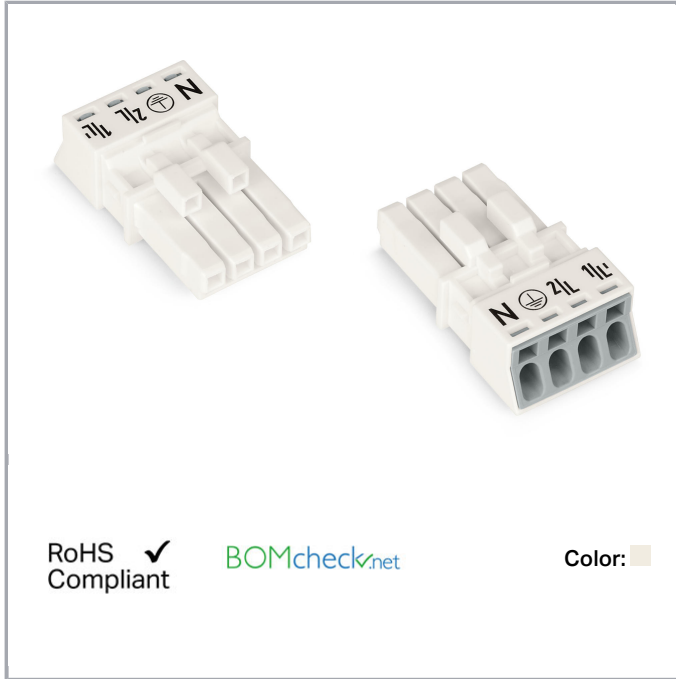


Data sheet | Item number: 890-224
Socket; 4-pole; Cod. A; 1,50 mm²; white

www.wago.com/890-224



Item description

- Protected against mismatching and maintenance-free
- Push-in CAGE CLAMP® spring pressure connection technology allows solid conductors to be simply pushed into a unit
- Compact design with 4.4 mm pole spacing
- When assembled, the installation connectors complies with IP40 and are suitable for easily accessible areas

Note:

All connectors for mounted installations (snap-in versions for lighting fixtures or devices, all types of PCB and distribution connectors) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for flying leads (plug /socket).

Note on mismatching protection:

All WINSTA® components are 100% protected against mismatching when:

- a.) plugging different numbers of poles
- b.) plugging while rotated 180
- c.) plugging while laterally staggered
- d.) plugging one pole

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.

**Safety information 1:**

Application note for the U.S. market (USR): Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 5 A and voltages up to 600 V. For further information, please contact your local sales office.

Data**Electrical data**

Note on Contact Resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
----------------------------	---

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	400 V
Rated impulse voltage (III / 3)	6 kV
Rated current	16 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	12 A

Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross section	1,5 mm ²
Solid conductor	0,25 ... 1,5 mm ² / 22 ... 16 AWG
Solid conductor, push-in termination	0,75 ... 1,5 mm ² / 20 ... 16 AWG
Stranded conductor	0,25 ... 1 mm ² / 22 ... 18 AWG
Fine-stranded conductor	0,25 ... 1,5 mm ² / 22 ... 16 AWG
Fine-stranded conductor with ferrule with plastic collar	0,25 ... 0,75 mm ² / 22 ... 20 AWG
Fine-stranded conductor with ferrule without plastic collar	0,25 ... 0,75 mm ² / 22 ... 20 AWG
Fine-stranded conductor with ferrule, push-in termination, from	0,75 mm ² / 20 AWG
Strip length	9 mm / 0.35 inch
Note (strip length)	see also packaging or instructions
No. of poles	4
Total number of connection points	4
Total number of potentials	4

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



Conductor entry direction to mating direction	0°
---	----

Geometrical Data

Pin spacing	4,4 mm / 0.173 inch
Width	19,2 mm / 0.756 inch
Height	11,7 mm / 0.461 inch
Depth	34,1 mm / 1.343 inch

Mechanical data

Coding	A
Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)
Retention force of a plug-in connection	Locked: > 80 N
Unmating force of a plug-in connection	Unlocked: approx. 20 ... 70 N (depending on pole number)
Number of mating cycles	200, without resistive load 100, with resistive load $I_N = 16$ A, tested (1.5 mm ² /AWG 16)
Marking	N 2/L 1/L'
Protection class	IP20
Note on protection class	IP40 with strain relief housing
Potential marking	N 2/L 1/L'
Application	General mains applications

Plug connection

Contact type (pluggable connector)	Female connector/socket
Connector connection type	for conductor
Mismating protection	Yes
Locking of plug-in connection	locking lever
Locking lever	no

Material Data

Color	white
Insulating material	Polyamide 66 (PA 66)
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper or copper alloy (surface-treated)
Fire load	0.095 MJ

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

Weight	5 g
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Environmental Requirements


Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on Continuous Service Temperature	Insulating parts for temperatures ≤ 105 °C

Commercial data




Product Group	20 (WINSTA)
Packaging type	BOX
Country of origin	DE
GTIN	4045454233198
Customs Tariff No.	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61535	71-102984
	CCA DEKRA Certification B.V.	IEC 61535	NL-49482

Ship Approvals


Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	Steel Vessel Rules	19-HG1869855-PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	EN 61535	08/20047 (E2)

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UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	cURus Underwriters Laboratories Inc.	UL 1977	E45171

Counterpart

	Item no.890-234 Plug; 4-pole; 1,50 mm ² ; white	www.wago.com/890-234
	Item no.890-134 Plug; with strain relief housing; 4-pole; 1,50 mm ² ; white	www.wago.com/890-134
	Item no.890-676 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white	www.wago.com/890-676
	Item no.890-677 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white	www.wago.com/890-677
	Item no.890-734 Snap-in plug; 4-pole; Cod. A; 1,50 mm ² ; white	www.wago.com/890-734
	Item no.890-834 Plug for PCBs; straight; 4-pole; Cod. A	www.wago.com/890-834
	Item no.890-834/011-000 Plug for PCBs; angled; 4-pole; Cod. A	www.wago.com/890-834/011-000
	Item no.890-994 h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white	www.wago.com/890-994
	Item no.890-995 h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white	www.wago.com/890-995

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



Item no.891-8994/006-102

pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

www.wago.com/891-8994/006-102



Item no.891-8994/206-102

pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

www.wago.com/891-8994/206-102

Compatible products

Strain relief plate



Item no.: 890-504

Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black

www.wago.com/890-504



Item no.: 890-514

Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; white

www.wago.com/890-514

shield connection



Item no.: 890-524

Shield connecting plate; 4-pole; for sockets

www.wago.com/890-524

Locking lever

Item no.: 890-101

Locking lever; for manual operation; black

www.wago.com/890-101

Item no.: 890-111

Locking lever; for flying leads; for tool operation; black

www.wago.com/890-111

Item no.: 890-121

Locking lever; for manual operation; white

www.wago.com/890-121

Item no.: 890-131

Locking lever; for flying leads; for tool operation; white

www.wago.com/890-131

assembling



Item no.: 890-310

Mounting carrier; 2- to 5-pole; for flying leads; black

www.wago.com/890-310



Item no.: 890-311

Mounting carrier; 2- to 5-pole; for flying leads; white

www.wago.com/890-311

tools



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719

Item no.: 890-384

Operating tool; 4-way; green

www.wago.com/890-384

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

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Downloads

CAD/CAE-Data

CAD data

2D/3D Models 890-224

[URL](#)

[Download](#)

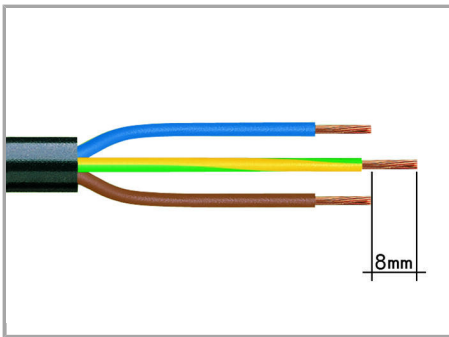
CAE data

WSCAD Universe 890-224

[URL](#)

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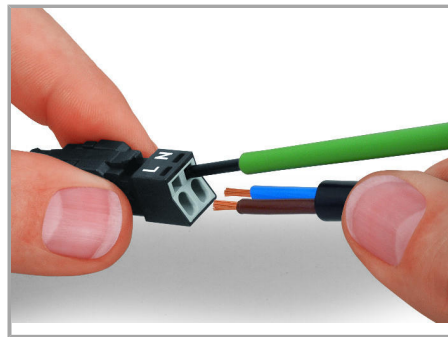
Installation Notes



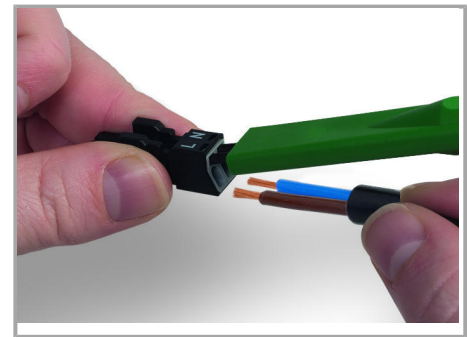
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)

2. Strip length = 9 mm

3. Extended ground conductor = 8 mm



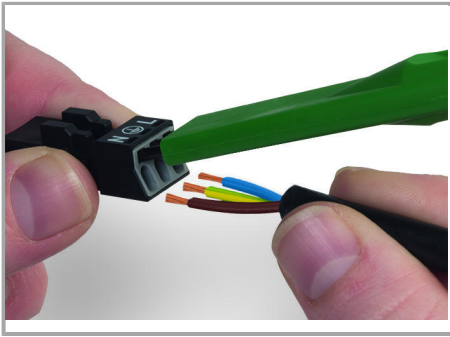
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits backstop. Terminate solid conductors by simply pushing them in.



To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.

Terminate solid conductors by simply pushing them in.

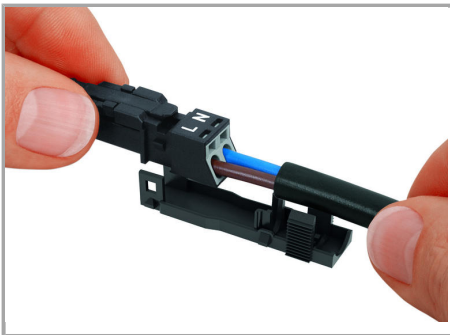
Subject to changes. Please also observe the further product documentation!



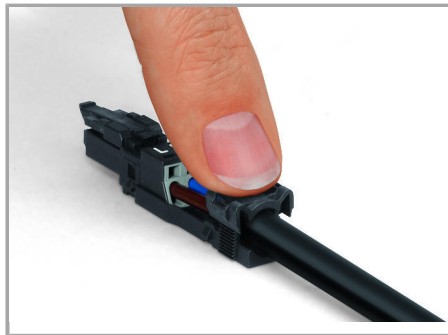
To terminate fine-stranded conductors, open clamping units via operating tool (890-383) and insert stripped conductors until they hit backstop.

Terminate solid conductors by simply pushing them in.

Installation



Latch wired connector onto the base of the strain relief housing.



Push down strain relief clamp by hand.

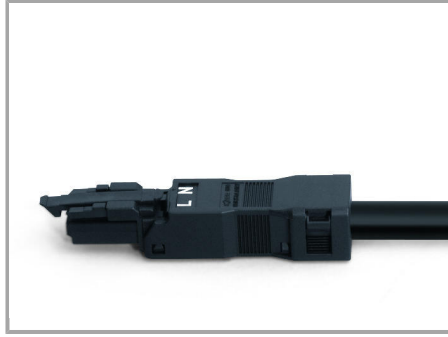


Push down strain relief clamp via 2.5 mm screwdriver alternately on both sides.

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

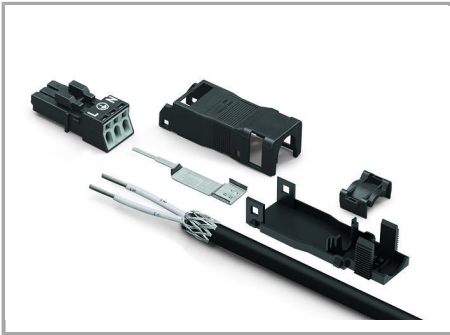


Latch the top of the strain relief housing.

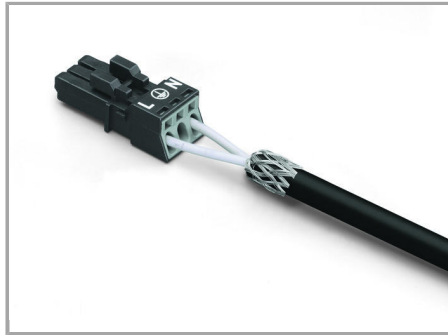


The printed marking of the connector is clearly visible in the openings of the strain relief housing.

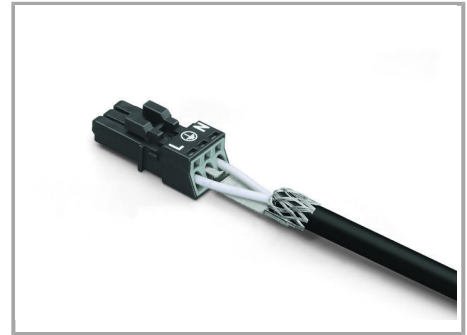
Shield Connection



Connector with shield termination



Apply the shield to the rubber cable.

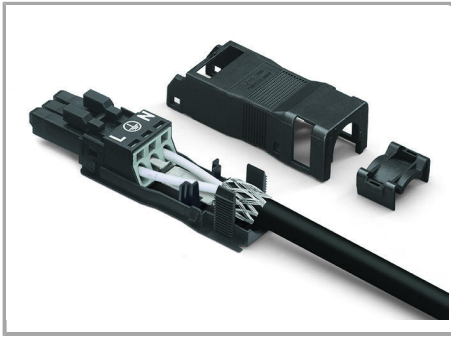


Push the shield connecting plate into the connector until fully inserted.

Strip length, outer insulation = 30 mm

Shield length = 8 mm

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



First insert wired connector into strain relief housing, then snap the clamp and cover.

Product family

WINSTA® MINI

[Show all products from the family](#)

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