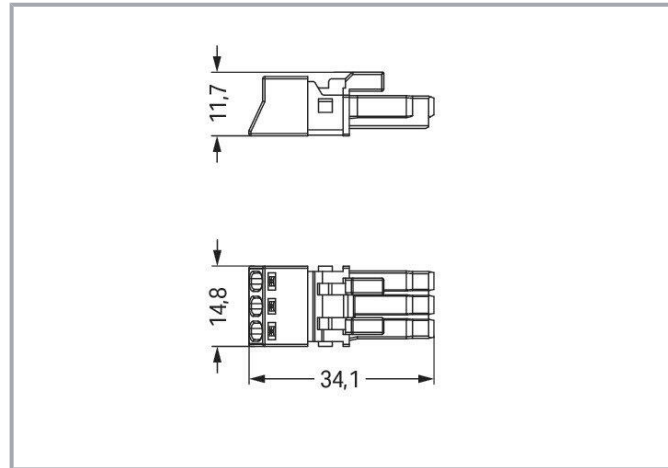
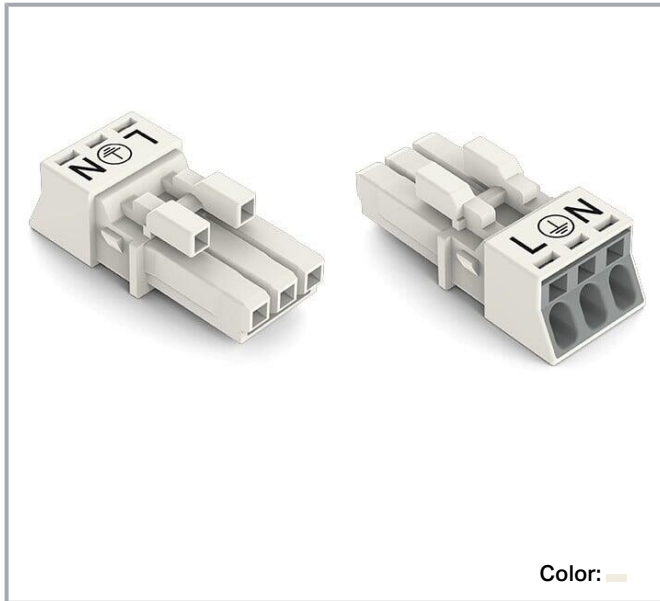


Data sheet | Item number: 890-223

Socket; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; white

[www.wago.com/890-223](http://www.wago.com/890-223)



## Item description

### Female connector/socket WINSTA® MINI A coding

For signal and power transmission: The WINSTA® MINI female connector/socket A coding. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow flexible, error-free installation in a large number of possible uses. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. The WINSTA® MINI pluggable installation connector with A coding in black or white is normally used for general mains applications in power distribution. WINSTA® MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is especially suitable for lights, for instance, since as a result of LED technology; due to complex systems, these offer significantly less space for the connection technology.

### Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose quality and durability – with protection against mismatching from WAGO makes the electrical installation of electrical components

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

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visibly easier.

- 
- pluggable installation connectors with protection against mismatching
- consistent IP40 protection
- with A coding for use in a large number of general mains applications
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

## Data

### Electrical data

#### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	16 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

#### Ratings per UL 1977

Note for the US market	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.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	14 A

#### General information

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

#### Connection data

Connection points	3
Total number of potentials	3

#### Connection 1

Connection technology

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



	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	1.5 mm <sup>2</sup> / 16 AWG
Solid conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Solid conductor; push-in termination	0.75 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Stranded conductor	0.25 ... 1 mm <sup>2</sup> / 22 ... 18 AWG
Fine-stranded conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm <sup>2</sup> / 22 ... 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm <sup>2</sup> / 22 ... 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm <sup>2</sup> / 20 AWG
Strip length	9 mm / 0.35 inches
Pole number	3
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	15 mm / 0.591 inches
Height	11.7 mm / 0.461 inches
Depth	34.1 mm / 1.343 inches

### Mechanical Data

Application	General mains applications
Coding	A
Variable coding	No
Marking	L ⊥ N
Potential marking	L ⊥ N
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
Protection type	IP20; IP40 with strain relief housing

### Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	Yes

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



## Note on mismatching protection

All WINSTA<sup>®</sup> 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

Locking lever	Can be retrofitted
Locking of plug-in connection	locking lever
Note on locking system	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).

**Material data**

## Note (material data)

Information on material specifications can be found here

Color	white
Cover color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.104 MJ
Weight	3.8 g

**Environmental requirements**

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

**Commercial data**

Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560

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ETIM 7.0	EC002560
ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4055143548526
Customs tariff number	85366990990

### Environmental Product Compliance



RoHS Compliance Status	Compliant, No Exemption
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### Approvals / Certificates

#### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61535	NL-85020
	CCA DEKRA Certification B.V.	EN 61535	71-123231
	cURus Underwriters Laboratories Inc.	UL 1977	E45171

#### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-




#### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name










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	<b>ABS</b> American Bureau of Shipping	Steel Vessel Rules	19- HG1869855- PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	<b>LR</b> Lloyds Register	EN 61535	08/20047 (E2)

### Counterpart

	<b>Item no.890-233</b> Plug; 3-pole; Cod. A; 1,50 mm <sup>2</sup> ; white	<a href="http://www.wago.com/890-233">www.wago.com/890-233</a>
	<b>Item no.890-133</b> Plug; with strain relief housing; 3-pole; 1,50 mm <sup>2</sup> ; white	<a href="http://www.wago.com/890-133">www.wago.com/890-133</a>
	<b>Item no.890-656</b> T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white	<a href="http://www.wago.com/890-656">www.wago.com/890-656</a>
	<b>Item no.890-665</b> T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white	<a href="http://www.wago.com/890-665">www.wago.com/890-665</a>
	<b>Item no.890-684</b> h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white	<a href="http://www.wago.com/890-684">www.wago.com/890-684</a>
	<b>Item no.890-686</b> h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white	<a href="http://www.wago.com/890-686">www.wago.com/890-686</a>
	<b>Item no.890-733</b> Snap-in plug; 3-pole; Cod. A; 1,50 mm <sup>2</sup> ; white	<a href="http://www.wago.com/890-733">www.wago.com/890-733</a>
	<b>Item no.890-833</b> Plug for PCBs; straight; 3-pole; Cod. A; white	<a href="http://www.wago.com/890-833">www.wago.com/890-833</a>
	<b>Item no.890-833/011-000</b> Plug for PCBs; angled; 3-pole; Cod. A; white	<a href="http://www.wago.com/890-833/011-000">www.wago.com/890-833/011-000</a>
	<b>Item no.891-8993/005-102</b> pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm <sup>2</sup> ; white	<a href="http://www.wago.com/891-8993/005-102">www.wago.com/891-8993/005-102</a>

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



Item no. 891-8993/205-102

pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm<sup>2</sup>; white

[www.wago.com/891-8993/205-102](http://www.wago.com/891-8993/205-102)

## Required accessories

### Strain relief

Strain relief housing



Item no.: 890-513

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white

[www.wago.com/890-513](http://www.wago.com/890-513)



Item no.: 890-503

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; black

[www.wago.com/890-503](http://www.wago.com/890-503)

### Locking levers

Locking system



Item no.: 890-111

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

[www.wago.com/890-111](http://www.wago.com/890-111)



Item no.: 890-101

Locking lever; for manual operation; black

[www.wago.com/890-101](http://www.wago.com/890-101)



Item no.: 890-121

Locking lever; for manual operation; white

[www.wago.com/890-121](http://www.wago.com/890-121)



Item no.: 890-131

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

[www.wago.com/890-131](http://www.wago.com/890-131)

## Optional accessories

### Mounting

Mounting accessories



Item no.: 890-310

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

[www.wago.com/890-310](http://www.wago.com/890-310)



Item no.: 890-311

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

[www.wago.com/890-311](http://www.wago.com/890-311)

### Cover

Cover

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

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**Item no.: 897-2001**  
Protective cap; Type1; for sockets and plugs; PVC; red

[www.wago.com/897-2001](http://www.wago.com/897-2001)

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### Shield termination

Shield termination



**Item no.: 890-523**  
Shield connecting plate; 3-pole; for sockets and plugs; silver-colored

[www.wago.com/890-523](http://www.wago.com/890-523)

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### Tool

Operating tool



**Item no.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)



**Item no.: 890-383**  
Operating tool; 3-way; green

[www.wago.com/890-383](http://www.wago.com/890-383)

## Downloads

### Documentation

#### Bid Text

890-223 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
890-223 doc - Datei	2015 Jun 8	doc 23.0 kB	Download

### CAD/CAE-Data

#### CAD data

2D/3D Models 890-223	URL	Download
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#### CAE data

EPLAN Data Portal 890-223	URL	Download
WSCAD Universe 890-223	URL	Download
ZUKEN Portal 890-223	URL	Download

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## Asset Administration Shell

Asset Administration Shell 890-223

[URL](#)

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 890-223

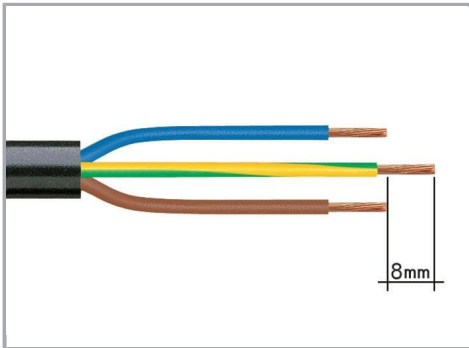
[URL](#)

[Download](#)

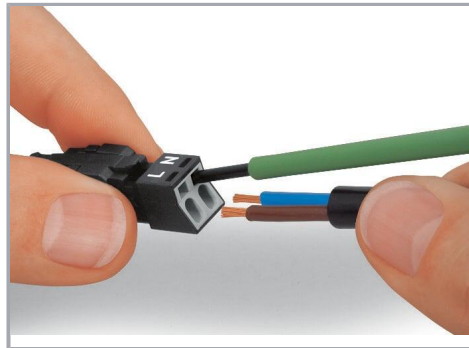
Socket; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; white

## Installation Notes

### Conductor termination



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 the backstop. Terminate solid conductors by simply pushing them in.

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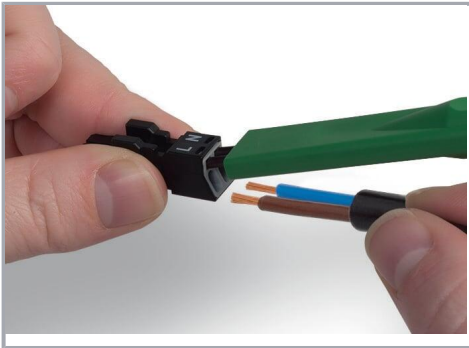
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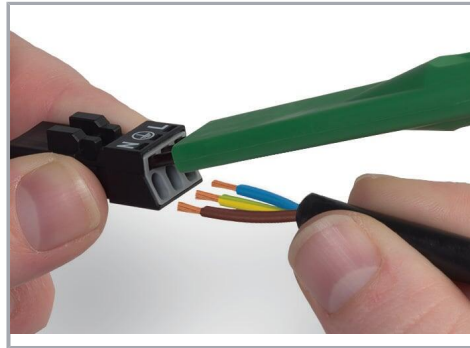
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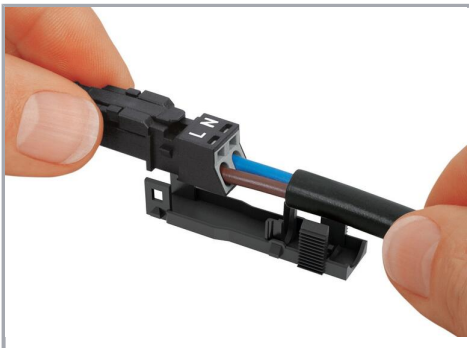


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.



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



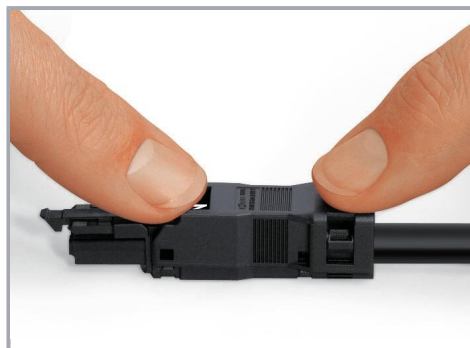
Latch the wired connector into the base of the strain relief housing.



Push down strain relief clamp by hand.



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



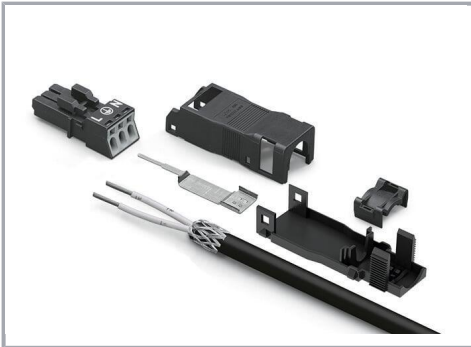
Latch the top of the strain relief housing.

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



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

### Shield termination



Connector with shield termination

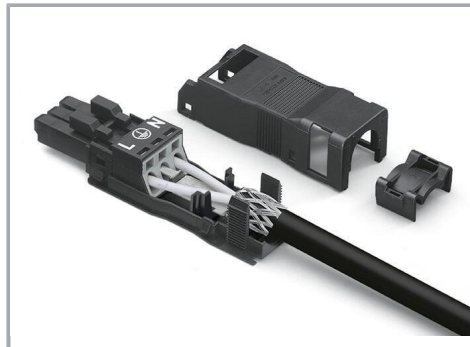


Apply the shield to the sheathed cable.

Strip length, outer insulation = 30 mm  
Shield length = 8 mm



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



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

### Product family

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

Data sheet | Item number: 890-223

[www.wago.com/890-223](http://www.wago.com/890-223)



**WINSTA® MINI**

[Show all products from the family](#)

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