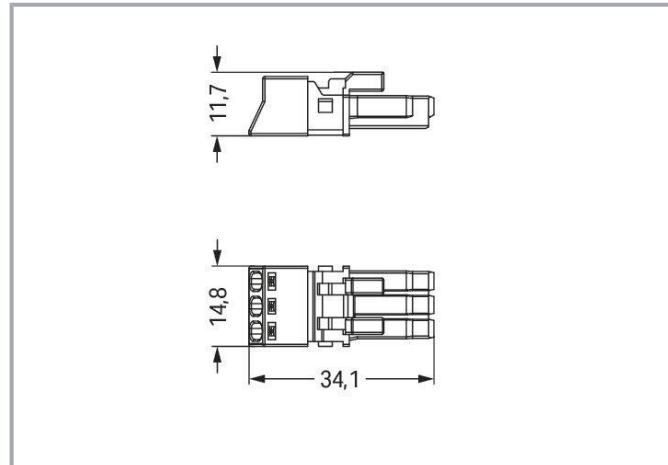
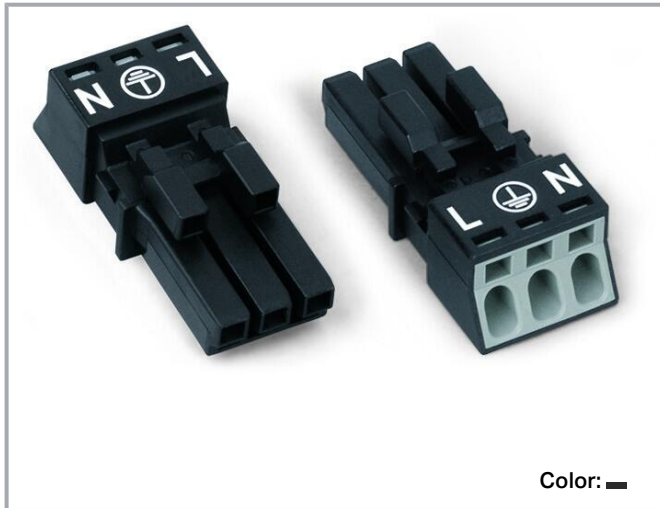


Data sheet | Item number: 890-203

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

[www.wago.com/890-203](http://www.wago.com/890-203)



## Item description

### Female connector/socket *WINSTA*® MINI with protection type IP20

The *WINSTA*® MINI female connector/socket rated current 16 A provides the foundation for installation of fine-stranded and solid conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to various requirements in no time flat. The coding options reduce installation errors, allowing fast, secure wiring of all components. General mains applications for almost any domain of use can be realised with *WINSTA*® MINI pluggable installation connectors with A coding. *WINSTA*® MINI is our response to the trend toward miniaturisation. Our smallest pluggable connection system is primarily suited for lights, for instance, since as a result of LED technology; due to complex systems, these offer less and less space for the connection technology.

### Lower costs through fast commissioning and elimination of service expenses – solutions from *WINSTA*® MINI

The *WINSTA*® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently faster, even more reliable, and error-free. Use of this pre-assembled system reduces assembly times and errors during installation at the construction site. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection type IP20 from WAGO.

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

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We are always happy to take your call at +49 (571) 887-44222.



- effective protection against mismatching
- easy tool-free operation, a wide range of coding options
- with A coding for use in a large number of general mains applications
- custom-engineered solutions
- convenient installation and commissioning

## 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	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	1.5 mm <sup>2</sup> / 16 AWG

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



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 $\perp$ N
Potential marking	L $\perp$ 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
Note on mismating protection	All WINSTA <sup>®</sup> components are 100% protected against mismating when: a.) plugging different numbers of poles b.) plugging while rotated 180

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



	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	black
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	0.088 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 $\leq 105$ °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
ETIM 7.0	EC002560
ECCN	NO DATA
PU (SPU)	50 pcs

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

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Packaging type	box
Country of origin	PL
GTIN	4055143548519
Customs tariff number	85366990990

## Environmental Product Compliance



RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

## 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
	ABS American Bureau of Shipping	Steel Vessel Rules	19-HG1869855-PDA

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

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TAE00001Z6











**LR**  
Lloyds Register

EN 61535

08/20047  
(E2)

## Counterpart

	<b>Item no.890-606</b> T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	<a href="http://www.wago.com/890-606">www.wago.com/890-606</a>
	<b>Item no.890-213</b> Plug; 3-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-213">www.wago.com/890-213</a>
	<b>Item no.890-113</b> Plug; with strain relief housing; 3-pole; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-113">www.wago.com/890-113</a>
	<b>Item no.890-615</b> T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/890-615">www.wago.com/890-615</a>
	<b>Item no.890-634</b> h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black	<a href="http://www.wago.com/890-634">www.wago.com/890-634</a>
	<b>Item no.890-636</b> h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/890-636">www.wago.com/890-636</a>
	<b>Item no.890-713</b> Snap-in plug; 3-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-713">www.wago.com/890-713</a>
	<b>Item no.890-813/011-000</b> Plug for PCBs; angled; 3-pole; Cod. A; black	<a href="http://www.wago.com/890-813/011-000">www.wago.com/890-813/011-000</a>
	<b>Item no.890-813</b> Plug for PCBs; straight; 3-pole; Cod. A; black	<a href="http://www.wago.com/890-813">www.wago.com/890-813</a>
	<b>Item no.891-8993/005-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/891-8993/005-101">www.wago.com/891-8993/005-101</a>
	<b>Item no.891-8993/205-101</b> pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/891-8993/205-101">www.wago.com/891-8993/205-101</a>

## Required accessories

### Locking levers

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

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### 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)

### 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)

### 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)

#### 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)

#### Cover

##### Cover

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



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

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

**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**

890-203 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
890-203 doc - Datei	2015 Jun 8	doc 23.6 kB	Download

**CAD/CAE-Data**

**CAE data**

EPLAN Data Portal 890-203	URL	Download
WSCAD Universe 890-203	URL	Download
ZUKEN Portal 890-203	URL	Download

**CAD data**

2D/3D Models 890-203	URL	Download
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**Asset Administration Shell**

Asset Administration Shell 890-203	URL	Download
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Subject to changes. Please also observe the further product documentation!



## Environmental Product Compliance

### Compliance Search

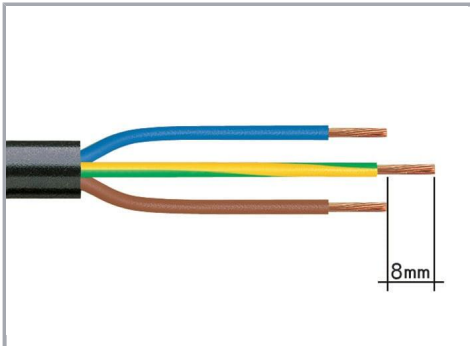
Environmental Product Compliance 890-203  
Socket; 3-pole; Cod. A; 1,50 mm<sup>2</sup>; black

URL

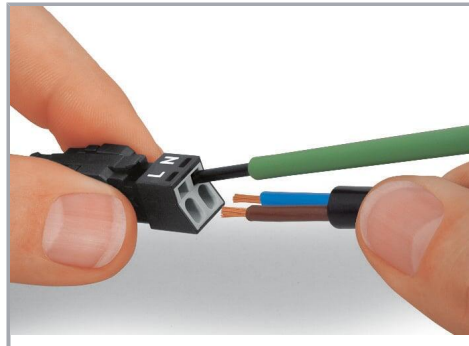
Download

## Installation Notes

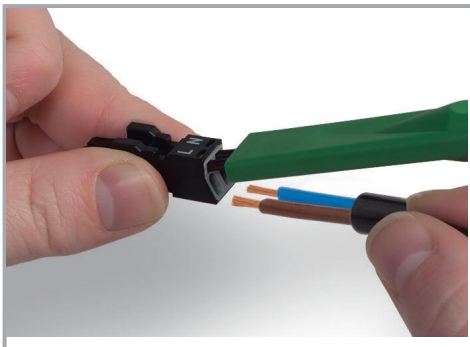
### Conductor termination



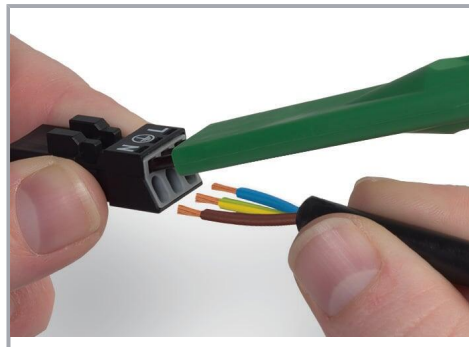
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



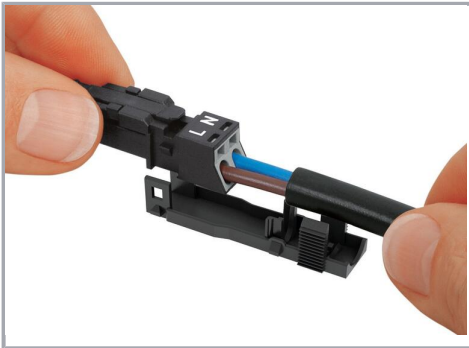
To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.  
Terminate solid conductors by simply pushing them in.



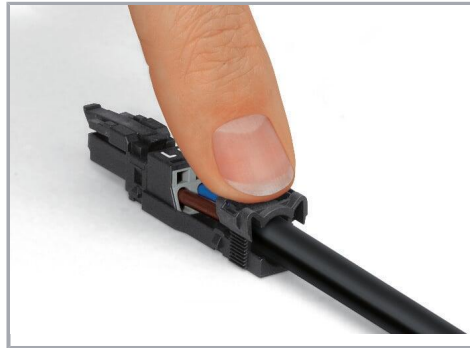
To terminate fine-stranded conductors, open clamping units via operating tool (890-383) and insert stripped conductors until they hit backstop.  
Terminate solid conductors by simply pushing them in.

## Installation

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



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.



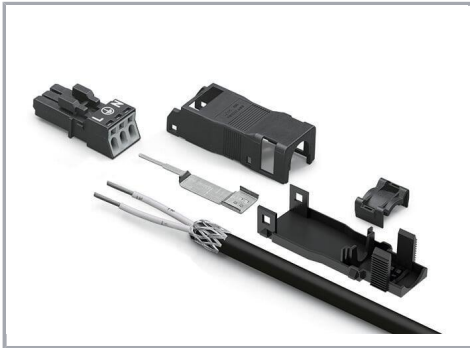
Latch the top of the strain relief housing.



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

#### Shield termination

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



Connector with shield termination

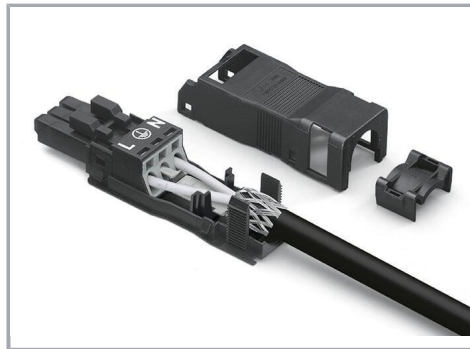


Apply the shield to the sheathed cable.

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

**WINSTA® MINI**

[Show all products from the family](#)

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