

**Data sheet | Item number: 890-102**

Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black

[www.wago.com/890-102](http://www.wago.com/890-102)



**Color:**

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

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## Item description

### Female connector/socket *WINSTA*® MINI with protection against mismatching

For signal and power transmission: The *WINSTA*® MINI female connector/socket rated current 16 A. 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. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. The pluggable installation connector offers protection against contact with wires or tools if they are smaller than 1 mm in accordance with protection type IP40. Thanks to the color coding and mechanical A coding of *WINSTA*® MINI pluggable installation connectors, you can clearly distinguish different circuits. Especially if only limited space is available, our smallest pluggable connection system, *WINSTA*® MINI, consistently displays its strengths. It saves space, and, with Push-in CAGE CLAMP® spring pressure connection

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technology, it also can be installed quickly, since the installation is low-maintenance and can be performed without screw connections. The strip length is 32 mm.

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

The WINSTA® Pluggable Connection System is ideally tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and thus faster, more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and installation errors at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MINI pluggable installation connectors with protection type IP40 from WAGO.

- protection against mismatching eliminates errors
- consistent IP40 protection
- with A coding for use in a large number of general mains applications
- ready to install and use immediately
- rapid, structured electrical installation

## 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

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## General information

Note on contact resistance

approx. 1 mΩ of contact resistance

approx. 0.25 mΩ contact transition plug/socket

## Connection data

Connection points

2

Total number of potentials

2

## 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

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

2

Conductor entry direction to mating direction

0°

Strip length (outer insulation)

32 mm

## Physical data

Pin spacing

4.4 mm / 0.173 inches

Width

15.6 mm / 0.614 inches

Height

13.2 mm / 0.52 inches

Depth

61.6 mm / 2.425 inches

## Mechanical Data

Application

General mains applications

Coding

A

Variable coding

No

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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	IP40

## 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 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).
Strain relief	strain relief housing

## 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

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



Fire load	0.216 MJ
Weight	5.7 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
PU (SPU)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4045454231729
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
	<b>CCA</b> DEKRA Certification B.V.	EN 61535	71-123231
	<b>CCA</b> DEKRA Certification B.V.	IEC 61535	NL-85020
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171

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

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

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**UK-Declaration of Conformity**  
WAGO GmbH & Co. KG

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### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<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.890-112</b> Plug; with strain relief housing; 2-pole; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-112">www.wago.com/890-112</a>
<b>Item no.890-1615</b> T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/890-1615">www.wago.com/890-1615</a>
<b>Item no.890-1606</b> T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	<a href="http://www.wago.com/890-1606">www.wago.com/890-1606</a>
<b>Item no.890-1634</b> h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black	<a href="http://www.wago.com/890-1634">www.wago.com/890-1634</a>
<b>Item no.890-212</b> Plug; 2-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-212">www.wago.com/890-212</a>
<b>Item no.890-1636</b> h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/890-1636">www.wago.com/890-1636</a>
<b>Item no.890-212/342-000</b> Plug; with strain relief housing; 2-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-212/342-000">www.wago.com/890-212/342-000</a>
<b>Item no.890-812</b> Plug for PCBs; straight; 2-pole; Cod. A; black	<a href="http://www.wago.com/890-812">www.wago.com/890-812</a>
<b>Item no.890-712</b> Snap-in plug; 2-pole; Cod. A; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/890-712">www.wago.com/890-712</a>
<b>Item no.890-812/011-000</b> Plug for PCBs; angled; 2-pole; Cod. A; black	<a href="http://www.wago.com/890-812/011-000">www.wago.com/890-812/011-000</a>
<b>Item no.891-8992/005-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm <sup>2</sup> ; 1 m; 1,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/891-8992/005-101">www.wago.com/891-8992/005-101</a>
<b>Item no.891-8992/205-101</b> pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm <sup>2</sup> ; 1 m; 1,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/891-8992/205-101">www.wago.com/891-8992/205-101</a>

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## Required accessories

### Locking levers

Locking system	
<b>Item no.: 890-111</b> Locking lever; for flying leads; for tool operation; black	<a href="http://www.wago.com/890-111">www.wago.com/890-111</a>
<b>Item no.: 890-101</b> Locking lever; for manual operation; black	<a href="http://www.wago.com/890-101">www.wago.com/890-101</a>
<b>Item no.: 890-121</b> Locking lever; for manual operation; white	<a href="http://www.wago.com/890-121">www.wago.com/890-121</a>
<b>Item no.: 890-131</b> Locking lever; for flying leads; for tool operation; white	<a href="http://www.wago.com/890-131">www.wago.com/890-131</a>

## Optional accessories

### Tool

Operating tool	
<b>Item no.: 210-719</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-719">www.wago.com/210-719</a>
<b>Item no.: 890-382</b> Operating tool; 2-way; green	<a href="http://www.wago.com/890-382">www.wago.com/890-382</a>

### Cover

Cover	
<b>Item no.: 897-2001</b> Protective cap; Type1; for sockets and plugs; PVC; red	<a href="http://www.wago.com/897-2001">www.wago.com/897-2001</a>

### Mounting

Mounting accessories	
<b>Item no.: 890-310</b> Mounting carrier; 2- to 5-pole; for flying leads; black	<a href="http://www.wago.com/890-310">www.wago.com/890-310</a>
<b>Item no.: 890-311</b> Mounting carrier; 2- to 5-pole; for flying leads; white	<a href="http://www.wago.com/890-311">www.wago.com/890-311</a>

## Downloads

### Documentation

#### Bid Text

890-102 X81 - Datei	2019 年2月19日	xml 3.1 kB	Download
890-102	2015 年6月8日	doc	Download

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doc - Datei

23.6 kB

## CAD/CAE-Data

### CAD data

2D/3D Models 890-102	<a href="#">URL</a>	<a href="#">Download</a>
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### CAE data

EPLAN Data Portal 890-102	<a href="#">URL</a>	<a href="#">Download</a>
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WSCAD Universe 890-102	<a href="#">URL</a>	<a href="#">Download</a>
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ZUKEN Portal 890-102	<a href="#">URL</a>	<a href="#">Download</a>
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## Environmental Product Compliance

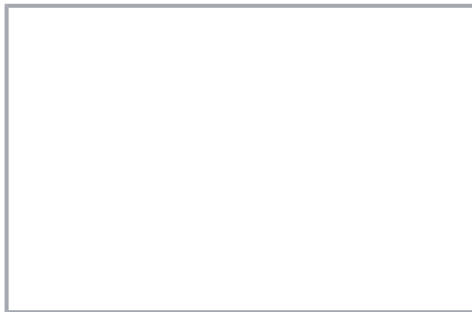
### Compliance Search

Environmental Product Compliance 890-102	<a href="#">URL</a>	<a href="#">Download</a>
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Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black

## 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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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.

## Product family

**WINSTA® MINI**

[Show all products from the family](#)

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