

## Item description

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

For signal and power transmission: The *WINSTA*® MINI female connector/socket rated current 16 A. WAGO pluggable installation connectors are useful when criteria repeat or are distributed on a defined pattern, for example for installing grid lighting or flush-mount lighting. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismatching. Standard 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 very good for lights, for instance, since due to LED technology, these offer much less space for the connection technology.

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

*WINSTA*® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It offers error-free installation of cables and components, quickly and reliably. Choose durability and quality – the *WINSTA*® MINI pluggable installation connector with protection against mismatching from WAGO makes the installation of electrical components visibly easier.

■

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

WAGO GmbH & Co. KG

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Do you have any questions about our products?

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- pluggable installation connectors with protection against mismatching
- compact design for conductors with a cross-section up to 1.5 mm<sup>2</sup>
- 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)	400 V
Rated impulse voltage (III/3)	6 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	12 A

### General

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
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### Connection data

Connection points	4
Total number of potentials	4

### 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	4
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	19.2 mm / 0.756 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	N $\frac{2}{L}$ 1/L'
Potential marking	N $\frac{2}{L}$ 1/L'
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	0.109 MJ
Weight	4.9 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

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



Country of origin	PL
GTIN	4055143548557
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.	EN 61535	71- 123231
	CCA DEKRA Certification B.V.	IEC 61535	NL-85020
	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
	DNV GL	-	TAE00001Z6

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Det Norske Veritas, Germanischer Lloyd

LR  
Lloyds Register

EN 61535

08/20047  
(E2)

## Counterpart



**Item no.890-114**  
Plug; with strain relief housing; 4-pole; 1,50 mm<sup>2</sup>; black

[www.wago.com/890-114](http://www.wago.com/890-114)

**Item no.890-214**  
Plug; 4-pole; Cod. A; 1,50 mm<sup>2</sup>; black

[www.wago.com/890-214](http://www.wago.com/890-214)

**Item no.890-626**  
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black

[www.wago.com/890-626](http://www.wago.com/890-626)

**Item no.890-627**  
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

[www.wago.com/890-627](http://www.wago.com/890-627)

**Item no.890-714**  
Snap-in plug; 4-pole; Cod. A; 1,50 mm<sup>2</sup>; black

[www.wago.com/890-714](http://www.wago.com/890-714)

**Item no.890-814**  
Plug for PCBs; straight; 4-pole; Cod. A; black

[www.wago.com/890-814](http://www.wago.com/890-814)

**Item no.890-944**  
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black

[www.wago.com/890-944](http://www.wago.com/890-944)

**Item no.890-814/011-000**  
Plug for PCBs; angled; 4-pole; Cod. A; black

[www.wago.com/890-814/011-000](http://www.wago.com/890-814/011-000)

**Item no.890-945**  
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black

[www.wago.com/890-945](http://www.wago.com/890-945)

**Item no.891-8994/006-101**  
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

[www.wago.com/891-8994/006-101](http://www.wago.com/891-8994/006-101)

**Item no.891-8994/206-101**  
pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

[www.wago.com/891-8994/206-101](http://www.wago.com/891-8994/206-101)

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## Required accessories

### 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)

### Strain relief

#### Strain relief housing



**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](http://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](http://www.wago.com/890-514)

## Optional accessories

### 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.: 890-384**  
Operating tool; 4-way; green

[www.wago.com/890-384](http://www.wago.com/890-384)

### Mounting

#### Mounting accessories

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



**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



**Item no.: 897-2003**  
Protective cap; Type2; for sockets and plugs; PVC; red

[www.wago.com/897-2003](http://www.wago.com/897-2003)

#### Shield termination

Shield termination



**Item no.: 890-524**  
Shield connecting plate; 4-pole; for sockets

[www.wago.com/890-524](http://www.wago.com/890-524)

## Downloads

### Documentation

#### Bid Text

890-204 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
890-204 doc - Datei	2015 Jun 8	doc 23.6 kB	Download

### CAD/CAE-Data

#### CAD data

2D/3D Models 890-204	URL	Download
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#### CAE data

WSCAD Universe 890-204	URL	Download
ZUKEN Portal 890-204	URL	Download

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## Environmental Product Compliance

### Compliance Search

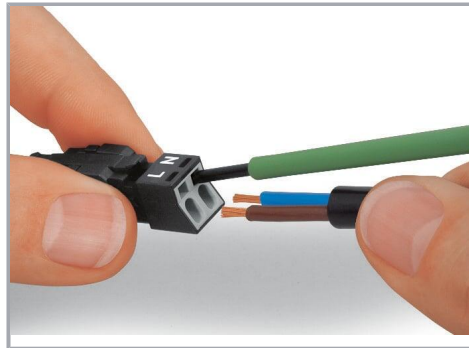
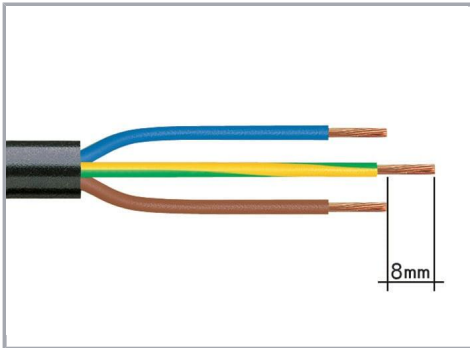
Environmental Product Compliance 890-204  
Socket; 4-pole; Cod. A; 1,50 mm<sup>2</sup>; black

URL

Download

## Installation Notes

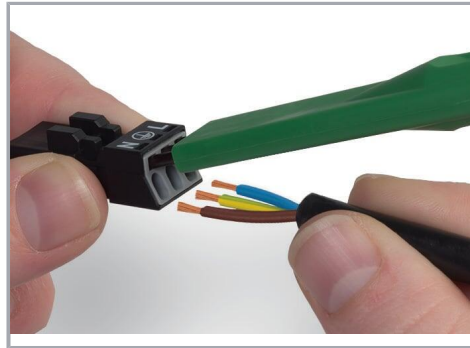
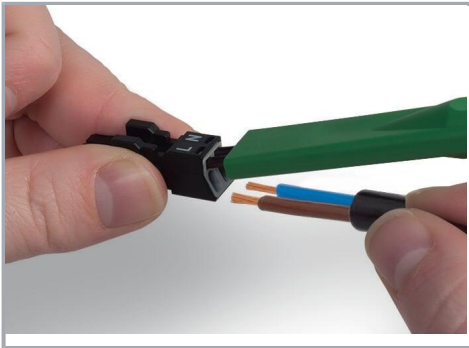
### Conductor termination



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.

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



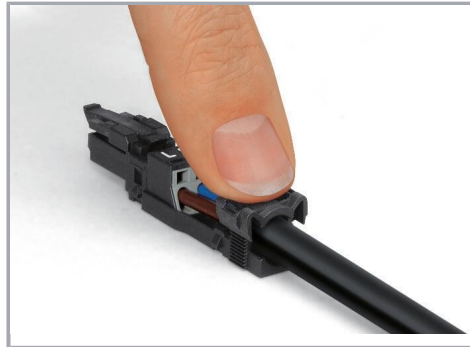
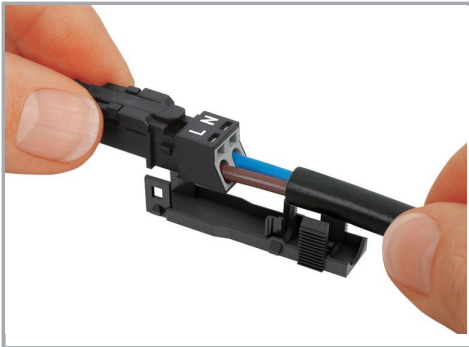
To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.

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.

Terminate solid conductors by simply pushing them in.

#### Installation



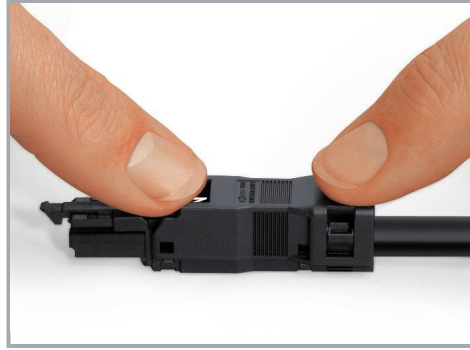
Latch the wired connector into the base of the strain relief housing.

Push down strain relief clamp by hand.

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



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



Connector with shield termination

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



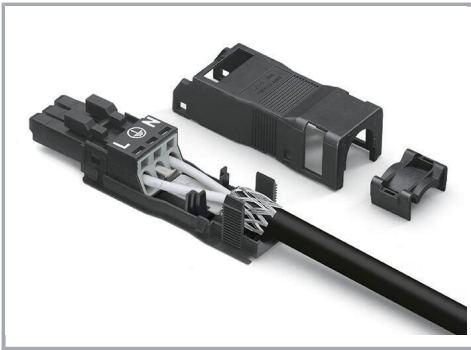
Apply the shield to the sheathed cable.

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!