

## Item description

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

The *WINSTA*® MINI female connector/socket B coding supports fast, reliable installation. WAGO pluggable installation connectors are useful when requirements repeat or are planned on a specified grid, for example for installing grid lighting or flush-mount lighting. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. B coding enables the *WINSTA*® MINI pluggable installation connectors to be used for application control in the domains of automation, robotics, and mechanical engineering. *WINSTA*® MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is especially suitable for lights, for example, since as a result of LED technology; due to complex systems, these offer much less space for the connection technology.

### *WINSTA*® MINI solutions for your electrical installation – protected against mismating and maintenance-free

The *WINSTA*® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and therefore more efficient, more reliable, and error-free. Using this pre-assembled system decreases assembly times 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 with marking from WAGO.



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



- protection against mismating eliminates errors
- consistent IP40 protection
- for automation controllers
- flexible installation to save space
- rapid, structured electrical installation

## Data

### Notes

Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## 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) $\triangleq$ Overvoltage category III / Pollution degree 3

### Ratings per IEC/EN – Notes

Note (rated current)	13 A for 3-pole load
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### 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 m $\Omega$ of contact resistance approx. 0.25 m $\Omega$ contact transition plug/socket
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## 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 mm² / 16 AWG
Solid conductor	0.25 ... 1.5 mm² / 22 ... 16 AWG
Solid conductor; push-in termination	0.75 ... 1.5 mm² / 20 ... 16 AWG
Stranded conductor	0.25 ... 1 mm² / 22 ... 18 AWG
Fine-stranded conductor	0.25 ... 1.5 mm² / 22 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm² / 22 ... 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm² / 22 ... 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm² / 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	Control technology
Coding	B
Variable coding	No
Marking	1 2 3
Potential marking	1 2 3
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)

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



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 <i>WINSTA</i> ® 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).

## Material data

Note (material data)	Information on material specifications can be found here
Color	gray
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	0.102 MJ
Weight	3.6 g

## Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C

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Note on continuous operating temperature

Insulating parts for temperatures  $\leq 105^{\circ}\text{C}$ 

## 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
Packaging type	box
Country of origin	PL
GTIN	4055143499910
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>CB</b> DEKRA Certification B.V.	IEC 61984	NL-64351
	<b>CB</b> DEKRA Certification B.V.	EN 61984	71-112993
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 60320	2148952.04

### Declarations of conformity and manufacturer's declarations

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

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UK-Declaration of Conformity  
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## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	<b>LR</b> Lloyds Register	EN 61535	08/20047 (E2)

## Counterpart



### Item no.890-1661

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray

[www.wago.com/890-1661](http://www.wago.com/890-1661)



### Item no.890-1761

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray

[www.wago.com/890-1761](http://www.wago.com/890-1761)



### Item no.890-853/011-000

Plug for PCBs; angled; 3-pole; Cod. B; gray

[www.wago.com/890-853/011-000](http://www.wago.com/890-853/011-000)



### Item no.890-253

Plug; 3-pole; Cod. B; 1,50 mm<sup>2</sup>; gray

[www.wago.com/890-253](http://www.wago.com/890-253)



### Item no.890-853

Plug for PCBs; straight; 3-pole; Cod. B; gray

[www.wago.com/890-853](http://www.wago.com/890-853)



### Item no.890-753

Snap-in plug; 3-pole; Cod. B; 1,50 mm<sup>2</sup>; gray

[www.wago.com/890-753](http://www.wago.com/890-753)



### Item no.891-8993/005-103

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; 1 m; 1,00 mm<sup>2</sup>; gray

[www.wago.com/891-8993/005-103](http://www.wago.com/891-8993/005-103)



### Item no.891-8993/205-103

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

[www.wago.com/891-8993/205-103](http://www.wago.com/891-8993/205-103)

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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.: 890-513**

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)

### 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)

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

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

Cover

Cover



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

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

Downloads  
Documentation

Bid Text

890-243 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
890-243 doc - Datei	2015 Jun 8	doc 23.6 kB	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 890-243	URL	Download
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ZUKEN Portal 890-243	URL	Download

CAD data

2D/3D Models 890-243	URL	Download
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Asset Administration Shell

Asset Administration Shell 890-243	URL	Download
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Environmental Product Compliance

Compliance Search

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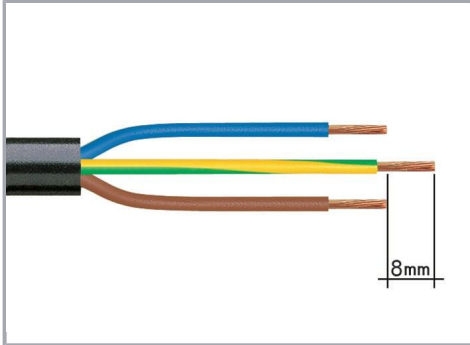
Subject to changes. Please also observe the further product documentation!



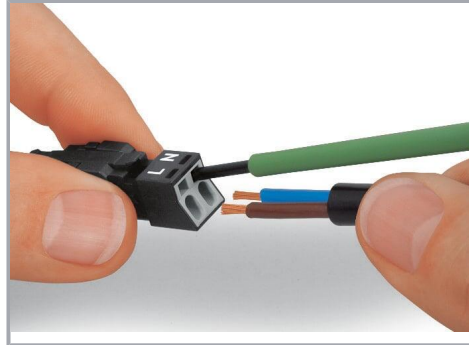
Socket; 3-pole; Cod. B; 1,50 mm<sup>2</sup>; gray

## Installation Notes

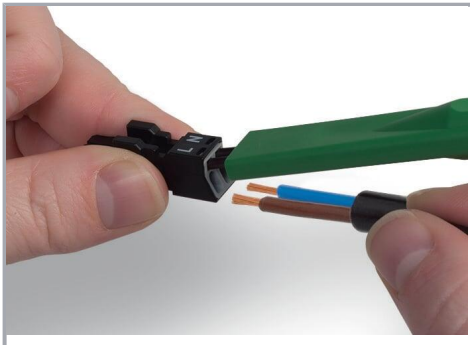
### Conductor termination



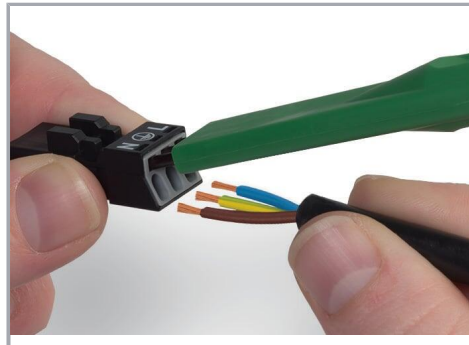
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



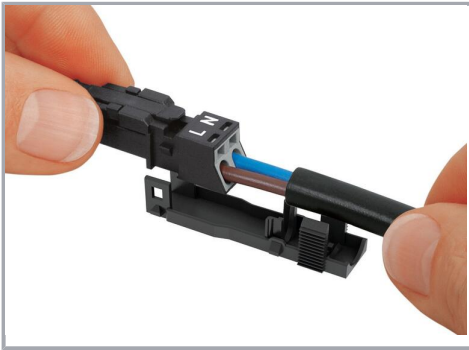
To terminate fine-stranded conductors, open clamping units via operating tool (890-383) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.

### Installation

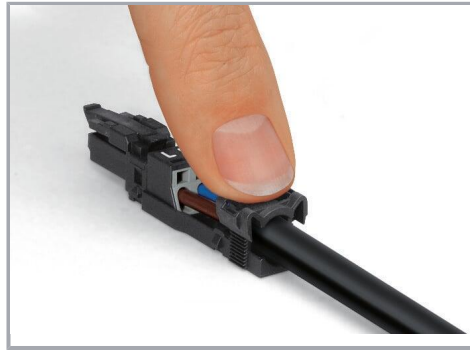
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Latch the wired connector into the base of the strain relief housing.



Push down strain relief clamp by hand.



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



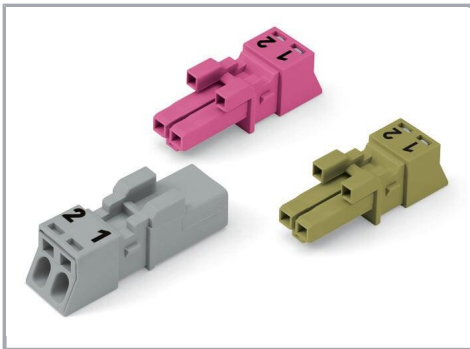
Latch the top of the strain relief housing.

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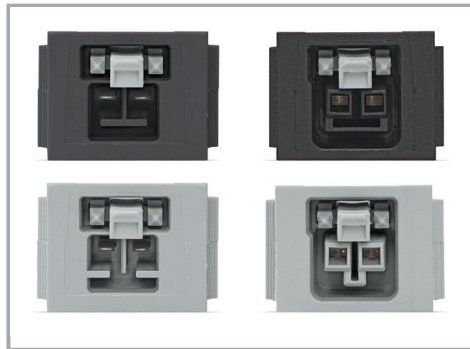


The printed marking of the connector is clearly visible in the openings of the strain relief housing.

#### Mismating protection



B-coded connectors with different colors can be plugged together.

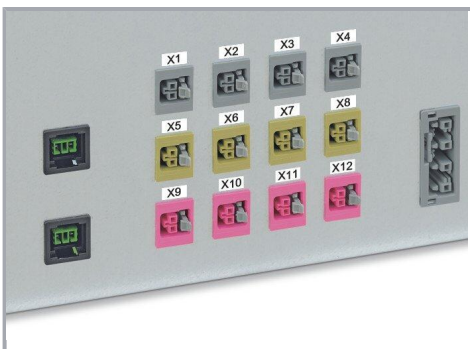


B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

#### Important note:

Different colors and/or pole markings are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.



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



## Product family

### WINSTA® MINI

[Show all products from the family](#)

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