

**Data sheet | Item number: 890-853**

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

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



**Color:**

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

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Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Item description

### Male connector/plug *WINSTA*® MINI rated current 16 A

The *WINSTA*® MINI male connector/plug with locking latch offers easy, secure handling to support drive and control technology tasks. Our pluggable PCB connectors provide a versatile pluggable connection system for your devices that meets all the requirements for a robust device connection that is easy to put into operation. The mechanical coding and color coding of the pcb connectors ensure error-free installation of the individual components – including protection against mismatching. B coding enables the *WINSTA*® MINI pcb connectors to be used for control in applications in the domains of automation, mechanical engineering and robotics. Especially where space is tight, our smallest pluggable connection system, *WINSTA*® MINI, conveniently displays its advantageous properties. It saves space, and, with Push-in CAGE CLAMP® spring pressure connection technology, it additionally saves time, since the installation is low-maintenance and requires no screw connections.

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## 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 durability and quality – with marking from WAGO makes the electrical installation of electrical components significantly easier.

- effective protection against mismatching
- compact design for conductors with a cross-section up to 1.5 mm<sup>2</sup>
- for automation controllers
- fast, secure 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
Note (rated current)	13 A for 3-pole load
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

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



## General information

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

Total number of potentials	3
Number of levels	1

## Connection 1

Pole number	3
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## Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	14.8 mm / 0.583 inches
Height	31.9 mm / 1.256 inches
Height from the surface	28.4 mm / 1.118 inches
Depth	12.2 mm / 0.48 inches
Solder pin length	3.5 mm
Solder pin dimensions	1 x 0.8 mm
Drilled hole diameter with tolerance	1.3 <sup>(+0.1)</sup> mm

## Mechanical Data

Application	Control technology
Coding	B
Variable coding	No
Marking	3 2 1
Potential marking	3 2 1
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 100, with resistive load $I_N = 16$ A, tested (1.5 mm <sup>2</sup> )

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Design	straight
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### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	Yes
Note on mismating protection	All <i>WINSTA</i> <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
Mating direction to the PCB	90 °
Locking lever	yes
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).

### PCB contact

PCB contact	THT
Solder pin arrangement	2 in-line solder pins/pole
Number of solder pins per potential	2

### 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	0.07 MJ

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



Weight	3.2 g
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### 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
ETIM 7.0	EC002560
PU (SPU)	100 pcs
Packaging type	box
Country of origin	PL
GTIN	4050821695844
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
	<b>EU-Declaration of Conformity</b>	-	-

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

**Counterpart**

<b>Item no.890-243</b> Socket; 3-pole; Cod. B; 1,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/890-243">www.wago.com/890-243</a>
<b>Item no.891-8993/005-103</b> pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; 1 m; 1,00 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/891-8993/005-103">www.wago.com/891-8993/005-103</a>
<b>Item no.891-8993/105-103</b> pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. B; 1 m; 1,00 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/891-8993/105-103">www.wago.com/891-8993/105-103</a>

**Downloads****CAD/CAE-Data****CAD data**

2D/3D Models 890-853 URL [Download](#)

**PCB Design**

Symbol and Footprint 890-853 URL [Download](#)

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

**Supported formats:**

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation

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- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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#### CAE data

ZUKEN Portal 890-853	<a href="#">URL</a>	<a href="#">Download</a>
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#### Environmental Product Compliance

##### Compliance Search

Environmental Product Compliance 890-853 Plug for PCBs; straight; 3-pole; Cod. B; gray	<a href="#">URL</a>	<a href="#">Download</a>
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#### Installation Notes

#### Product family

**WINSTA® MINI**

[Show all products from the family](#)

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