

Dimensions in mm

### Male connector/plug WINSTA® MINI B coding

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MINI male connector/plug B coding. The pluggable installation connectors with spring pressure connection technology function entirely without screw connections. They allow fast, efficient, error-free installation in a large number of possible uses. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. Solutions like the WINSTA® MINI pluggable installation connectors with B coding are suitable for applications involving process control, such as for lighting or in data networks. Particularly where space is tight, our smallest pluggable connection system, WINSTA® MINI, conveniently displays its advantages. It is very compact, and, thanks to Push-in CAGE CLAMP® spring pressure connection technology, it also saves time, since the connection is low-maintenance and can be performed without screw connections.

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. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection type IP20 from WAGO.

- · effective protection against mismating
- consistent IP40 protection
- with B coding for controllers, for example lighting fixtures and sun blinds
- ready to install and use immediately
- · convenient installation and commissioning

https://www.wago.com/890-293



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	IE	C/EN 60664	-1
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated surge voltage	4 kV	-	-
Rated current	16 A	-	-

Ratings per IEC/EN – Notes	
Rated current (note)	13 A for 3-pole load

Approvals per	UL 1977
Rated voltage	600 V
Rated current	14 A

General information	
Note on contact resistance	approx. 1 m $\Omega$ of contact resistance approx. 0.25 m $\Omega$ contact transition plug/ socket

ection data			
nping units	3	Connection 1	
Total number of potentials 3	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 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 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

## Data Sheet | Item Number: 890-293 https://www.wago.com/890-293



Mechanical data	
Use	Control technology
Coding	В
Variable coding	No
Marking	321
Potential marking	321
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 when mated with strain relief housing

Plug-in connection	
Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All WINSTA® 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	pink
Cover color	gray
Material group	1
Insulation material (main housing)	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	0.092 MJ
Weight	3.5 g

Environmental requirements	
Processing temperature	-5 +40 °C
Continuous operating temperature	-35 +85 °C
Note on continuous operating temperature	Insulating parts for temperatures ≤ 105 °C

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Commercial data	
Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	50 pcs
Packaging type	Вох
Country of origin	PL
GTIN	4055143499941
Customs tariff number	85366990990

## **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

## Approvals / Certificates

## General approvals







Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-64351
CB DEKRA Certification B.V.	EN 61984	71-112993
cURus Underwriters Laboratories Inc.	UL 1977	E45171
KEMA/KEUR DEKRA Certification B.V.	EN 60320	2148952.04

## Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

## Approvals for marine applications





Approval	Standard	Certificate Name
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	08/20047 (E2)

https://www.wago.com/890-293



#### **Downloads**

#### **Environmental Product Compliance**

#### Compliance Search

**Environmental Product** Compliance 890-293

#### Documentation

Bid Text			
890-293	19.02.2019	xml 2.94 KB	$\underline{\downarrow}$
890-293	08.06.2015	doc 23.50 KB	$\underline{\downarrow}$

#### CAD/CAE-Data

#### CAD data

2D/3D Models 890-293



#### CAE data

WSCAD Universe 890-293



#### 1 Compatible Products

## 1.1 System counterpart

#### 1.1.1 Cable assembly





## Item No.: 891-8993/105-107

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

## Item No.: 891-8993/005-107

pre-assembled interconnecting cable; Socket/plug; 3-pole; Cod. B; 1 m; 1,00 mm²; pink

## 1.1.2 Distribution connector





#### Item No.: 890-1663

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

#### Item No.: 890-1763

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

## 1.1.3 Female connector/socket













#### Item No.: 890-783

Snap-in socket; 3-pole; Cod. B; 1,50 mm²; pink

#### Item No.: 890-883/011-000

Socket for PCBs; angled; 3-pole; Cod. B;

## Item No.: 890-883

Socket for PCBs; straight; 3-pole; Cod. B; pink

Item No.: 890-283

Socket; 3-pole; Cod. B; 1,50 mm²; pink

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## 1.2 Required Accessories

#### 1.2.1 Locking system

#### 1.2.1.1 Locking system



Item No.: 890-111

Locking lever; for flying leads; for tool operation; black

Item No.: 890-131

Locking lever; for flying leads; for tool operation; white

(P)

Item No.: 890-101

Locking lever; for manual operation; black

Item No.: 890-121

Locking lever; for manual operation; white

#### 1.2.2 Strain relief

#### 1.2.2.1 Strain relief housing



Item No.: 890-503

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; black

## Item No.: 890-513

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white

63 60

#### 1.3 Optional Accessories

#### 1.3.1 Cover

#### 1.3.1.1 Cover



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

#### 1.3.2 Installation

#### 1.3.2.1 Mounting accessories



Item No.: 890-310

Mounting carrier; 2- to 5-pole; for flying leads; black

Item No.: 890-311

Mounting carrier; 2- to 5-pole; for flying leads; white

#### 1.3.3 Tool

## 1.3.3.1 Operating tool



Item No.: 890-383

Operating tool; 3-way; green

Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

# W/AGO

#### **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



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.

#### Mismating protection



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

#### 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.

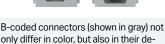


other coded connectors.





sign, making them incompatible with





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