

Male connector/plug WINSTA® MINI with protection type IP20

The WINSTA® MINI male connector/plug rated current 16 A supports rapid, correct installation. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow resource-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. Pluggable installation connectors with B coding from the WINSTA® MINI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Customer-specific pole marking is possible, too. Where space is tight, our smallest plug-

gable connection system, WINSTA® MINI, consistently displays its advantages. It saves space, and, with Push-in CAGE CLAMP® spring pressure con-

nection technology, it additionally can be installed quickly, since the installation is low-maintenance and requires no screw connections.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MINION Pluggable installation connectors with protection against mismating from WAGO.

- · effective protection against mismating
- easy tool-free operation, a wide range of coding options
- with B coding for controllers such as sun blinds and lighting fixtures
- · ready to install and use immediately
- quick replacement of defective units during ongoing operation

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 UL 1977	
Ratings per	IEC/EN 60664-1	Note for the US market	Some versions may also be used for cur-
Nominal voltage (III/3)	250 V		rent interruption in accordance with the UL certificate in select applications with
Rated impulse voltage (III/3)	4 kV		currents below 5 A and voltages up to
Rated current	16 A		600 V. For further information, please contact your local sales office.
Note (rated current)	13 A for 3-pole load	Rated voltage (UL 1977)	600 V
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Polluti- on degree 3	Rated current UL 1977	14 A

# Data Sheet | Item Number: 890-253

https://www.wago.com/890-253



General

Note on contact resistance

approx. 1  $m\Omega$  of contact resistance approx. 0.25  $m\Omega$  contact transition plug/ socket

Connection data			
Connection points	3	Connection 1	
Total number of potentials 3	3	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 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

Mechanical data	
Application	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

# Data Sheet | Item Number: 890-253 https://www.wago.com/890-253



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	gray
Cover color	gray
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.111 MJ
Weight	3.6 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

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	PL
GTIN	4055143499859
Customs tariff number	85366990990

# Approvals / Certificates

# Data Sheet | Item Number: 890-253

https://www.wago.com/890-253



## 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 Confor- mity 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)

# Downloads

# **Environmental Product Compliance**

# Compliance Search

Environmental Product Compliance 890-253



## Documentation

Bid Text			
890-253	19.02.2019	xml 2.98 KB	$\underline{\downarrow}$
890-253	08.06.2015	doc 23.50 KB	$\underline{\downarrow}$

## CAD/CAE-Data

# CAD data

2D/3D Models 890-253



# CAE data

EPLAN Data Portal 890-253



ZUKEN Portal 890-253





## 1 Compatible Products

#### 1.1 System counterpart

#### 1.1.1 Cable assembly





#### Item No.: 891-8993/105-103

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

#### Item No.: 891-8993/005-103

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

## 1.1.2 Distribution connector

#### Item No.: 890-1661

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

#### 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

#### 1.1.3 Female connector/socket

#### Item No.: 890-743

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

#### Item No.: 890-843/011-000

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

## Item No.: 890-843

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

# Item No.: 890-243

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

#### 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

(B)

#### 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

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## 1.3 Optional Accessories

#### 1.3.1 Cover

https://www.wago.com/890-253



#### 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

#### **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 backston.

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.

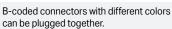
# Data Sheet | Item Number: 890-253

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# Mismating protection





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.



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



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