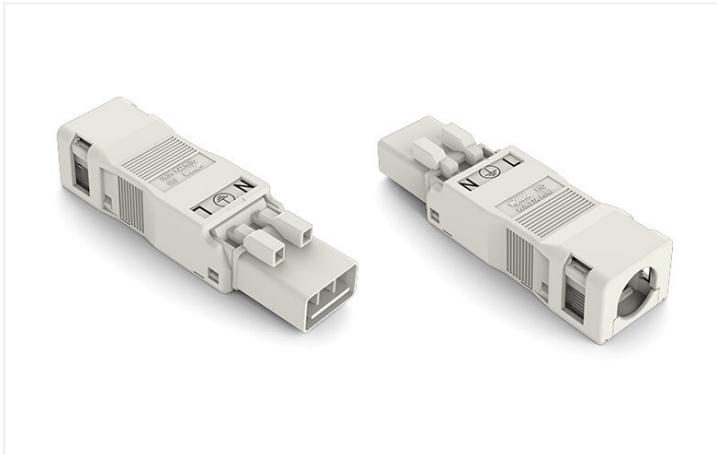


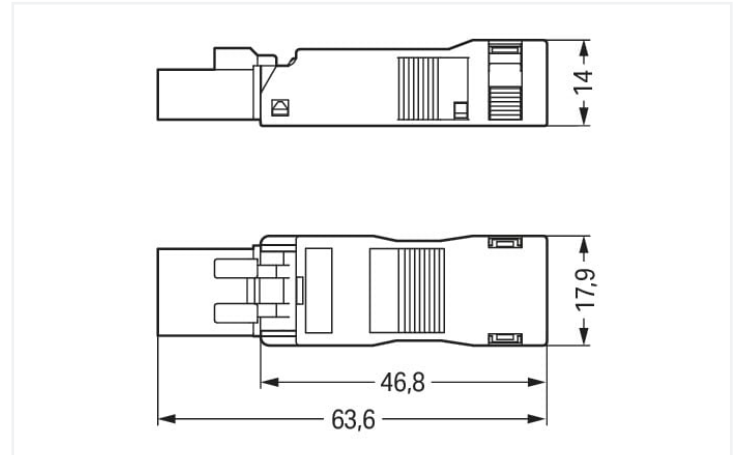
## Data Sheet | Item Number: 890-133

Plug; with strain relief housing; 3-pole; 1,50 mm<sup>2</sup>; white

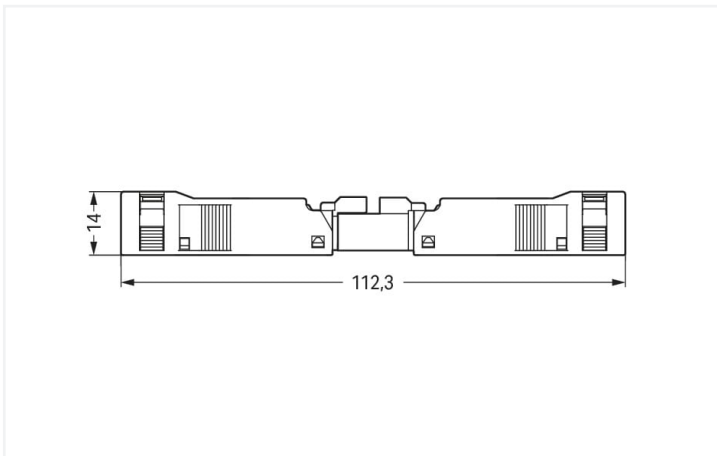
<https://www.wago.com/890-133>



Color: ■ white



Dimensions in mm



Dimensions in mm

Overall length when mated

### Male connector/plug WINSTA® MINI with protection against mismatching



Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MINI male connector/plug A coding. The pluggable installation connectors with spring pressure connection technology function without screw connections. They allow fast, efficient, error-free installation in numerous possible uses. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector offers protection against contact with wires or tools if they are smaller than 1 mm in accordance with protection type IP40. The WINSTA® MINI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. Especially where space is tight, our smallest pluggable connection system, WINSTA® MINI, consistently displays its advantageous properties. It saves space, and, thanks to Push-in CAGE CLAMP® spring pressure connection technology, it also can be installed quickly, since the connection is low-maintenance and requires no screw connections. A range up to 40 mm can be used for the strip length.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismatching from WAGO.

- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- with A coding for a large number of uses
- ready to install and use immediately
- convenient installation and commissioning

This item includes:

			
<a href="#">Item No.: 890-233</a>	1	<a href="#">Item No.: 890-513</a>	1
Plug; 3-pole; Cod. A; 1,50 mm <sup>2</sup> ; white		Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white	

Electrical data

Ratings per				IEC/EN 60664-1		Approvals per		UL 1977	
Overvoltage category				III	III	II		Rated voltage	600 V
Pollution degree				3	2	2		Rated current	14 A
Nominal voltage				250 V	-	-			
Rated surge voltage				4 kV	-	-			
Rated current				16 A	-	-			

General information	
Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket

Connection data

Connection points	3	Connection 1	
Total number of potentials	3	Connection technology	Push-in CAGE CLAMP®
PE function	Preceding PE contact	Actuation type	Operating tool Push-in
		Nominal cross-section	1.5 mm <sup>2</sup> / 16 AWG
		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	3
		Connectable sheathed cable diameter	4.5 ... 10 mm
		Conductor entry direction to mating direction	0 °
		Strip length (outer insulation)	40 mm



Physical data	
Pin spacing	4.4 mm / 0.173 inches
Width	17.9 mm / 0.705 inches
Height	14 mm / 0.551 inches
Depth	63.6 mm / 2.504 inches

Mechanical data	
Application	General mains applications
Coding	A
Variable coding	No
Marking	N L
Potential marking	N 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	IP40

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).
Strain relief	Strain relief housing

Material data	
Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	white
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	0.284 MJ
Connector color	white
Strain relief color	white
Weight	6.6 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	DE
GTIN	4045454233013
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
 					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123231	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	IEC 61535	NL-85020	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
cURus Underwriters Laboratories Inc.	UL 1977	E45171			

Approvals for marine applications

  		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	Steel Vessel Rules	19-HG1869855-PDA
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 890-133

↓

Documentation

Bid Text			
890-133	19.02.2019	xml 3.03 KB	↓
890-133	08.06.2015	doc 23.00 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 890-133

↓

CAE data

EPLAN Data Portal 890-133

↓

WSCAD Universe 890-133

↓


ZUKEN Portal 890-133

↓


1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly




**Item No.: 891-8993/105-102**  
pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm²; white




**Item No.: 891-8993/005-102**  
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm²; white


1.1.2 Distribution connector




**Item No.: 890-684**  
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white



**Item No.: 890-686**  
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white



**Item No.: 890-656**  
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white



**Item No.: 890-665**  
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white



1.1.3 Female connector/socket



**Item No.: 890-723**  
Snap-in socket; 3-pole; Cod. A; 1,50 mm²; white



**Item No.: 890-823/011-000**  
Socket for PCBs; angled; 3-pole; Cod. A; white



**Item No.: 890-823**  
Socket for PCBs; straight; 3-pole; Cod. A; white



**Item No.: 890-223**  
Socket; 3-pole; Cod. A; 1,50 mm²; white



**Item No.: 890-123**  
Socket; with strain relief housing; 3-pole; Cod. A; 1,50 mm²; white

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



**Item No.: 890-101**  
Locking lever; for manual operation; black



**Item No.: 890-121**  
Locking lever; for manual operation; white

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 Shield termination

1.3.3.1 Shield termination



**Item No.: 890-523**  
Shield connecting plate; 3-pole; for sockets and plugs; silver-colored

1.3.4 Tool

1.3.4.1 Operating tool



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



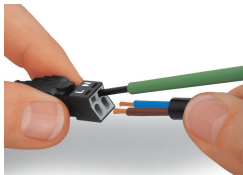
Item No.: 210-719  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

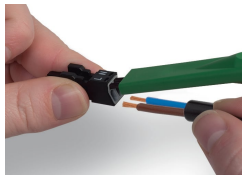
Conductor termination



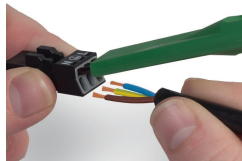
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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 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



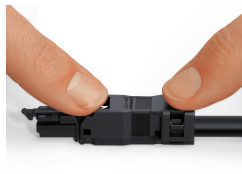
Latch the wired connector into the base of the strain relief housing.



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.

Shield termination



Connector with shield termination



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.