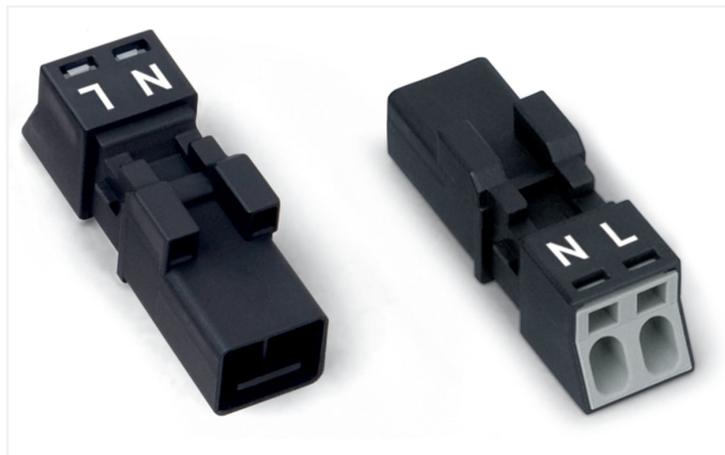


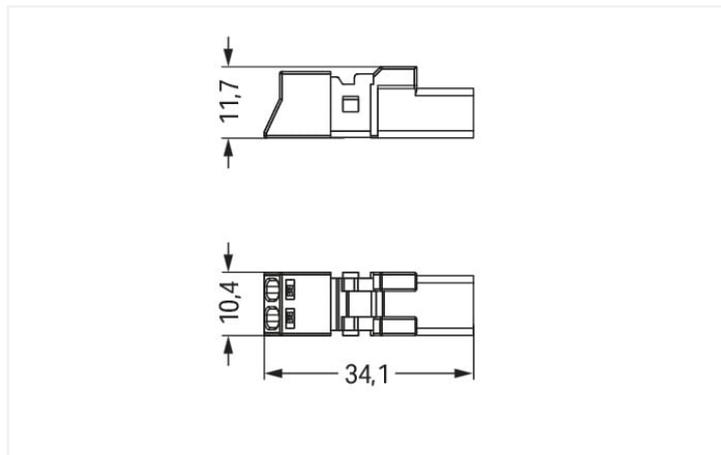
# Data Sheet | Item Number: 890-212

Plug; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black

<https://www.wago.com/890-212>



Color: ■ black



Dimensions in mm

Male connector/plug WINSTA® MINI A coding

For power and signal transmission: The WINSTA® MINI male connector/plug 2-pole. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow resource-efficient, error-free installation in numerous possible uses. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. Thanks to the color coding and mechanical A coding of WINSTA® MINI pluggable installation connectors, you can clearly distinguish different circuits. Due to its particularly compact dimensions, our WINSTA® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is very suitable in very restricted spaces, i.e., for installations when very little room is available.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Choose quality and durability – with marking from WAGO makes the installation of electrical components significantly easier.

- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- for any mains application
- flexible installation to save space
- convenient installation and commissioning

## Electrical data

Ratings per	IEC/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	-	-

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

## 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

Clamping units	2	<b>Connection 1</b>	
Total number of potentials	2	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 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	2
		Conductor entry direction to mating direction	0°

## Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	10.4 mm / 0.409 inches
Height	11.7 mm / 0.461 inches
Depth	34.1 mm / 1.343 inches

## Mechanical data

Use	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	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 <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)	<a href="#">Information on material specifications can be found here</a>
Color	black
Cover color	gray
Material group	I
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	0.08 MJ
Weight	2.5 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

## 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	Box
Country of origin	PL
GTIN	4055143548489
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123231
CCA DEKRA Certification B.V.	IEC 61535	NL-85020
cURus Underwriters Laboratories Inc.	UL 1977	E45171

### Declarations of conformity and manufacturer's declarations

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

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 890-212

Documentation

Bid Text			
890-212	19.02.2019	xml 2.96 KB	
890-212	08.06.2015	doc 23.00 KB	

CAD/CAE-Data

CAD data
2D/3D Models 890-212

CAE data
EPLAN Data Portal 890-212
WSCAD Universe 890-212
ZUKEN Portal 890-212

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



**Item No.: 891-8992/105-101**  
pre-assembled connecting cable; Eca;  
Socket/open-ended; 2-pole; Cod. A;  
H05VV-F 2 x 1.0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>;  
black

**Item No.: 891-8992/005-101**  
pre-assembled interconnecting cable;  
Eca; Socket/plug; 2-pole; Cod. A; H05VV-  
F 2 x 1.0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; black

### 1.1.2 Distribution connector



**Item No.: 890-1634**

h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



**Item No.: 890-1636**

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



**Item No.: 890-1606**

T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



**Item No.: 890-1615**

T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

### 1.1.3 Female connector/socket



**Item No.: 890-702**

Snap-in socket; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black



**Item No.: 890-802/011-000**

Socket for PCBs; angled; 2-pole; Cod. A; black



**Item No.: 890-802**

Socket for PCBs; straight; 2-pole; Cod. A; black



**Item No.: 890-202**

Socket; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black



**Item No.: 890-102**

Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black



**Item No.: 890-202/342-000**

Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; black

## 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

### 1.2.2 Strain relief

#### 1.2.2.1 Strain relief housing



**Item No.: 890-502/342-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 17.5 mm; black



**Item No.: 890-512/342-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 17.5 mm; white



**Item No.: 890-502**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 30 mm; black



**Item No.: 890-512**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 30 mm; 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 Tool

#### 1.3.3.1 Operating tool



**Item No.: 890-382**

Operating tool; 2-way; green

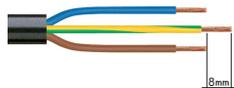


**Item No.: 210-719**

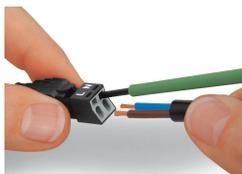
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

### Installation Notes

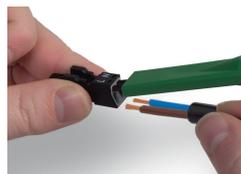
#### Conductor termination



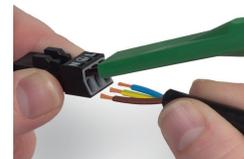
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.