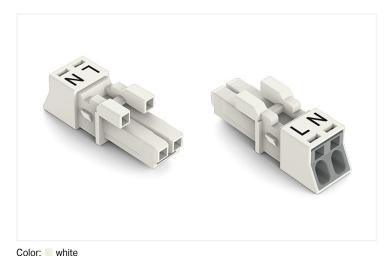
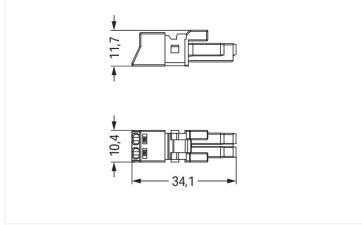
# Data Sheet | Item Number: 890-222 Socket; 2-pole; Cod. A; 1,50 mm<sup>2</sup>; white

https://www.wago.com/890-222







Dimensions in mm

Female connector/socket WINSTA® MINI with protection against mismating

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MINI female connector/socket 2-pole. WAGO pluggable installation connectors are useful when specifications repeat or are distributed on a specific grid, for example for installing grid lighting or flush-mount lighting. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. Thanks to the color coding and mechanical A coding of WINSTA® MINI pluggable installation connectors, you can clearly distinguish different circuits. WINSTA® MINI satisfies the demand for miniaturisation. Our smallest pluggable connection system is very good for lights, for instance, since as a result of LED technology; due to complex systems, these offer less and less space for the connection technology.

Push-in CAGE CLAMP® spring pressure connection technology - pluggable installation instead of laborious screw connections!

The WINSTA® Pluggable Connection System is ideally tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently faster, even more reliable, and error-free. Using this pre-assembled system decreases time spent on assembly and errors during installation at the construction site. Now you can also reduce installation expenses without compromising safety and quality: with marking eliminates the need for servicing and prevents unnecessary downtime.

- · effective protection against mismating
- compact design for conductors with a cross-section up to 1.5 mm<sup>2</sup>
- suitable for any application
- · exact dimensions
- · convenient installation and commissioning

Electrical data				
Ratings per	IEC	C/EN 60664	4-1	
Overvoltage category	III	III	II	
Pollution degree	3	2	2	
Nominal voltage	250 V	-	-	
Rated surge voltage	4 kV	-	-	
Rated current	16 A	-	-	
General information				
Note on contact resistance	approx. 1 mΩ o approx. 0.25 m socket			



nnection data			
onnection points	2	Connection 1	
Total number of potentials	2	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	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	
Application	General mains applications
Coding	A
Variable coding	No
Marking	LN
Potential marking	LN
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 with strain relief housing

Plug-in connection	
Contact type (pluggable connector)	Female connector/socket
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).

https://www.wago.com/890-222



<u>Information on material specifications can be found here</u>
white
gray
1
Polyamide (PA66)
VO
Chrome-nickel spring steel (CrNi)
Copper or copper alloy; surface-treated
Tin
0.058 MJ
2.6 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	4055143548465
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

KEMA c Sus		
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123231
CCA	IEC 61E2E	NI OEOOO

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 Conformity WAGO GmbH & Co. KG	-	-

https://www.wago.com/890-222



# 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 Llovds Register	EN 61535	08/20047 (E2)

# Downloads

#### **Environmental Product Compliance**

# Compliance Search Environmental Product

Compliance 890-222



#### Documentation

Bid Text			
890-222	19.02.2019	xml 2.95 KB	<u>↓</u>
890-222	08.06.2015	doc 22.50 KB	$\underline{\downarrow}$

#### CAD/CAE-Data

CAD data

2D/3D Models 890-222



EPLAN Data Portal 890-222



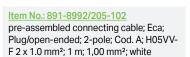
ZUKEN Portal 890-222



### 1 Compatible Products

#### 1.1 System counterpart

# 1.1.1 Cable assembly





Item No.: 891-8992/005-102
pre-assembled interconnecting cable;
Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; white

https://www.wago.com/890-222



#### 1.1.2 Distribution connector

Item No.: 890-1684

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

Item No.: 890-1686

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

To Vie

Item No.: 890-1656

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

Item No.: 890-1665

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

#### 1.1.3 Male connector/plug

Item No.: 890-832/011-000

Plug for PCBs; angled; 2-pole; Cod. A; white

Te da

Item No.: 890-832

Plug for PCBs; straight; 2-pole; Cod. A; white

Item No.: 890-232

Plug; 2-pole; 1,50 mm<sup>2</sup>; white

Item No.: 890-132

Plug; with strain relief housing; 2-pole; 1,50 mm²; white

Was Cir.

Item No.: 890-732

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

#### 1.2.2 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

https://www.wago.com/890-222



#### 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

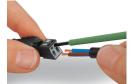
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

#### **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.

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

Current addresses can be found at::  $\underline{www.wago.com}$ 

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