

Data Sheet | Item Number: 890-102

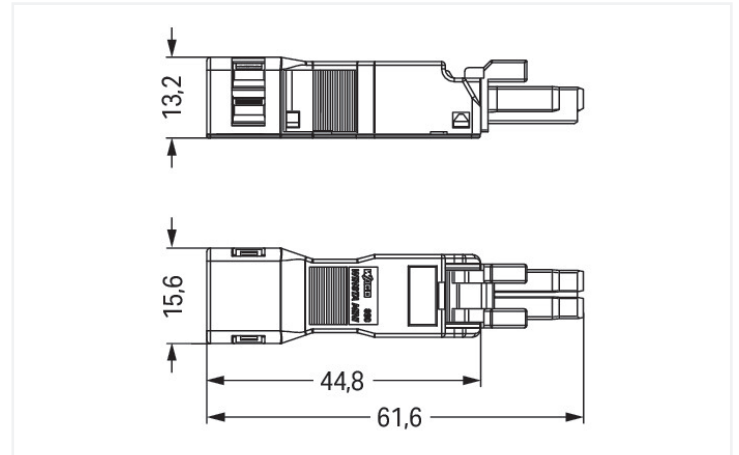
Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black



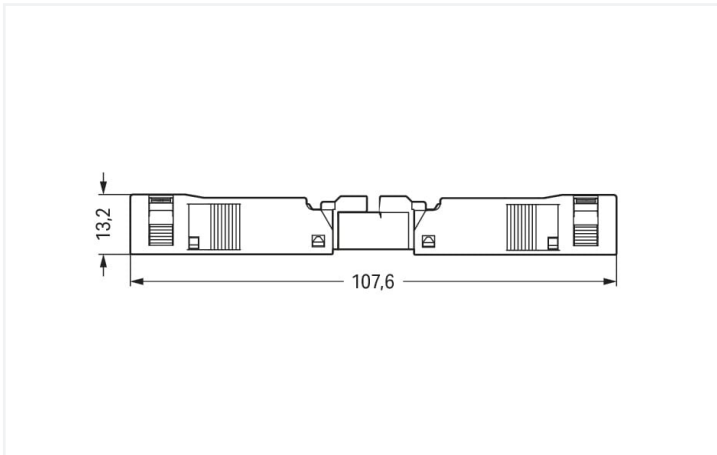
<https://www.wago.com/890-102>



Color:  black



Dimensions in mm



Dimensions in mm

Overall length when mated

Female connector/socket WINSTA® MINI with protection against mismatching

For signal and power transmission: The WINSTA® MINI female connector/socket rated current 16 A. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow flexible, error-free installation in a large number of 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. 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. Thanks to the color coding and mechanical A coding of WINSTA® MINI pluggable installation connectors, you can clearly distinguish different circuits. Especially if only limited space is available, our smallest pluggable connection system, WINSTA® MINI, consistently displays its strengths. It saves space, and, with Push-in CAGE CLAMP® spring pressure connection technology, it also can be installed quickly, since the installation is low-maintenance and can be performed without screw connections. The strip length is 32 mm.

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 thus faster, more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and installation errors at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MINI pluggable installation connectors with protection type IP40 from WAGO.

- protection against mismatching eliminates errors
- consistent IP40 protection
- with A coding for use in a large number of general mains applications
- ready to install and use immediately
- rapid, structured electrical installation



This item includes:



Item No.: 890-202	1	Item No.: 890-502	1
Socket; 2-pole; Cod. A; 1,50 mm ² ; black		Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 30 mm; black	

Electrical data

Ratings per IEC/EN	
Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	16 A
Legend (ratings)	(III / 3) △ Overvoltage category III / Pollution degree 3

Ratings per UL 1977	
Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 5 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	14 A

General

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
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Connection data

Connection points	2
Total number of potentials	2

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	1.5 mm ² / 16 AWG
Solid conductor	0.25 ... 1.5 mm ² / 22 ... 16 AWG
Solid conductor; push-in termination	0.75 ... 1.5 mm ² / 20 ... 16 AWG
Stranded conductor	0.25 ... 1 mm ² / 22 ... 18 AWG
Fine-stranded conductor	0.25 ... 1.5 mm ² / 22 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm ² / 22 ... 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm ² / 22 ... 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm ² / 20 AWG
Strip length	9 mm / 0.35 inches
Pole number	2
Connectable sheathed cable diameter	3.8 ... 8.2 mm
Conductor entry direction to mating direction	0 °
Strip length (outer insulation)	32 mm

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	15.6 mm / 0.614 inches
Height	13.2 mm / 0.52 inches
Depth	61.6 mm / 2.425 inches

Mechanical Data

Application	General mains applications
Coding	A
Variable coding	No
Marking	L N
Potential marking	L N
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)	Female connector/socket
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).
Strain relief	Strain relief housing

Material Data

Note (material data)	Information on material specifications can be found here
Color	black
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	0.151 MJ
Weight	5.7 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	4045454231729
Customs tariff number	85366990990

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

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 890-102	↓

Documentation

Bid Text			
890-102	08.06.2015	doc 23.00 KB	↓
890-102	19.02.2019	xml 3.03 KB	↓

CAD/CAE-Data



CAD data	CAE data
2D/3D Models 890-102 	EPLAN Data Portal 890-102 
	WSCAD Universe 890-102 
	ZUKEN Portal 890-102 

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 891-8992/205-101
pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; black



Item No.: 891-8992/005-101
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; 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 Male connector/plug



Item No.: 890-812/011-000
Plug for PCBs; angled; 2-pole; Cod. A; black



Item No.: 890-812
Plug for PCBs; straight; 2-pole; Cod. A; black



Item No.: 890-212
Plug; 2-pole; Cod. A; 1,50 mm²; black



Item No.: 890-112
Plug; with strain relief housing; 2-pole; 1,50 mm²; black



Item No.: 890-212/342-000
Plug; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black



Item No.: 890-712
Snap-in plug; 2-pole; Cod. A; 1,50 mm²; 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

1.3 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



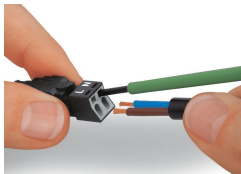
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

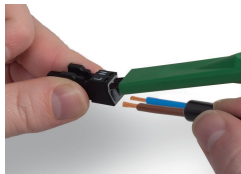
Conductor termination



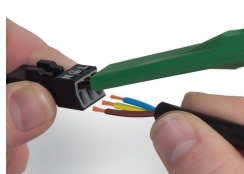
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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



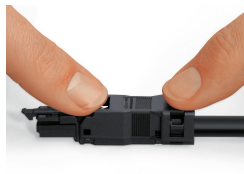
Latch the wired connector into the base of the strain relief housing.



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.

