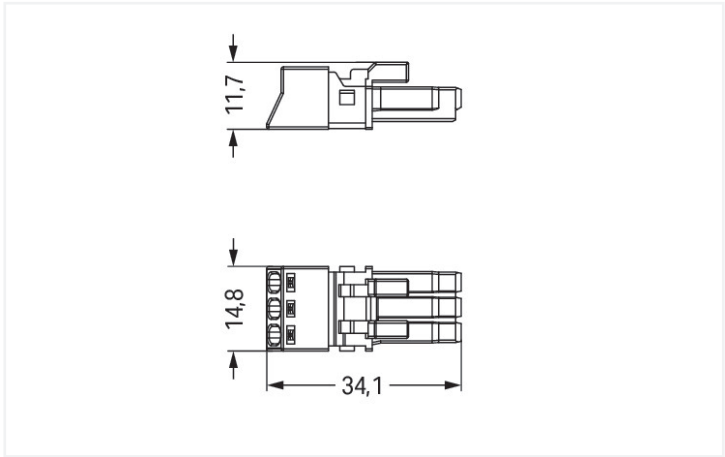


Color: ■ black



Dimensions in mm

Female connector/socket WINSTA® MINI with protection type IP20

The WINSTA® MINI female connector/socket rated current 16 A provides the foundation for installation of fine-stranded and solid conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to various requirements in no time flat. The coding options reduce installation errors, allowing fast, secure wiring of all components. General mains applications for almost any domain of use can be realised with WINSTA® MINI pluggable installation connectors with A coding. WINSTA® MINI is our response to the trend toward miniaturisation. Our smallest pluggable connection system is primarily suited 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.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently faster, even more reliable, and error-free. Use of this pre-assembled system reduces assembly times and errors during installation at the construction site. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection type IP20 from WAGO.

- effective protection against mismatching
- easy tool-free operation, a wide range of coding options
- with A coding for use in a large number of general mains applications
- custom-engineered solutions
- convenient installation and commissioning

Electrical data					
Ratings per		IEC/EN 60664-1		Approvals per	
Overvoltage category	III	III	II	UL 1977	
Pollution degree	3	2	2	Rated voltage	
Nominal voltage	250 V	-	-	600 V	
Rated surge voltage	4 kV	-	-	Rated current	
Rated current	16 A	-	-	14 A	
General information					
Note on contact resistance		approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket			

Connection data

Clamping units	3	Connection 1	
Total number of potentials	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 mm² / 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

Use	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	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 <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)		Information on material specifications can be found here
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		0.104 MJ
Weight		3.8 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)
PU (SPU)		50 pcs
Packaging type		Box
Country of origin		PL
GTIN		4055143548519
Customs tariff number		85366990990

Product classification		
UNSPSC		39121402
eCl@ss 10.0		27-44-06-05
eCl@ss 9.0		27-44-06-05
ETIM 9.0		EC002560
ETIM 8.0		EC002560
ECCN		NO US CLASSIFICATION

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	EU-Declaration of Confor-	-	-
CCA	EN 61535	71-123231	mity		
DEKRA Certification B.V.			WAGO GmbH & Co. KG		
CCA	IEC 61535	NL-85020	UK-Declaration of Confor-	-	-
DEKRA Certification B.V.			mity		
cURus	UL 1977	E45171	WAGO GmbH & Co. KG		
Underwriters Laboratories Inc.					



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 890-203



Documentation

Bid Text			
890-203	19.02.2019	xml 2.95 KB	
890-203	08.06.2015	doc 23.00 KB	

CAD/CAE-Data

CAD data
2D/3D Models 890-203



CAE data	
EPLAN Data Portal 890-203	
WSCAD Universe 890-203	
ZUKEN Portal 890-203	

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



[Item No.: 891-8993/205-101](#)
pre-assembled connecting cable; Eca;
Plug/open-ended; 3-pole; Cod. A; 1 m;
1,00 mm²; black



[Item No.: 891-8993/005-101](#)
pre-assembled interconnecting cable;
Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00
mm²; black



1.1.2 Distribution connector



Item No.: 890-634
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



Item No.: 890-636
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



Item No.: 890-606
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 890-615
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

1.1.3 Male connector/plug



Item No.: 890-813/011-000
Plug for PCBs; angled; 3-pole; Cod. A; black



Item No.: 890-813
Plug for PCBs; straight; 3-pole; Cod. A; black



Item No.: 890-213
Plug; 3-pole; Cod. A; 1,50 mm²; black



Item No.: 890-113
Plug; with strain relief housing; 3-pole; 1,50 mm²; black



Item No.: 890-713
Snap-in plug; 3-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

1.2.2 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

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



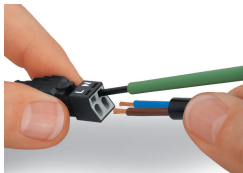
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

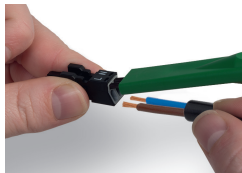
Conductor termination



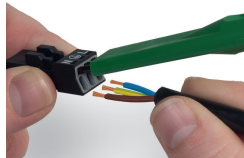
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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



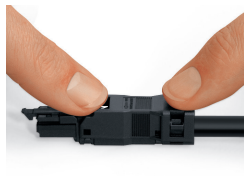
Latch the wired connector into the base of the strain relief housing.



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.

Installation



The printed marking of the connector is clearly visible in the openings of the strain relief housing.

Shield termination



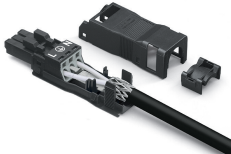
Connector with shield termination



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.