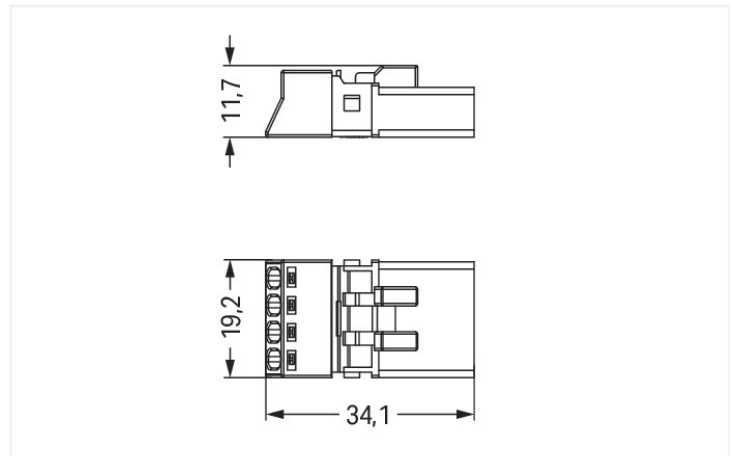




Color: ■ black



Dimensions in mm

Male connector/plug WINSTA® MINI 4-pole

The WINSTA® MINI male connector/plug rated current 16 A allows assembly of solid and fine-stranded conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to many different requirements in no time flat. The color coding and mechanical 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. Particularly if only limited space is available, our smallest pluggable connection system, WINSTA® MINI, consistently displays its advantages. It is very compact, and, thanks to Push-in CAGE CLAMP® spring pressure connection technology, it also saves time, since the connection is low-maintenance and can be performed without screw connections.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus faster, even more reliable, and error-free. Using this pre-assembled system reduces assembly times and installation errors at the construction site. Now you can also lower installation costs without compromising quality and safety: with marking eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismating eliminates errors
- consistent IP40 protection
- with A coding for use in many general mains applications
- custom-engineered solutions
- convenient installation and commissioning



Notes

General safety information

NOTICE: Observe installation and safety instructions!

- Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden!
- Nicht unter Spannung/Last installieren!
- Nur für bestimmungsgemäßen Gebrauch einsetzen!
- Nationale Vorschriften/Normen/Richtlinien beachten!
- Technische Daten der Produkte beachten!
- Auf die richtige Polbelegung achten!
- Keine beschädigten/verschmutzten Komponenten verwenden!
- Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten!
- Leiter bis zum Anschlag einführen!
- Nur mit Verriegelungsklinke und Zugentlastung verwenden!
- Originalzubehör verwenden!

To be sold only with installation instructions!

Electrical data				
Ratings per		IEC/EN 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage	400 V	-	-	-
Rated impulse withstand voltage	6 kV	-	-	-
Rated current	16 A	-	-	-

Approvals per		UL 1977
Rated voltage		600 V
Rated current		12 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	4	
Total number of potentials	4	
PE function	Preceding PE contact	

Connection 1	
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	4
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	19.2 mm / 0.756 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	Yes
Marking	1/L' 2/L ⊕ N
Potential marking	1/L' 2/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 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 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).

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	0.099 MJ
Weight	4.6 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)
PU (SPU)	50 (19) pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143548564
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 10.0	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									
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									
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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	24-0095973-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	LR23317167TA
PRS Polski Rejestr Statków	-	TE/1096/880590/23



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 890-214			

Documentation

Bid Text			
890-214	19.02.2019	xml 2.93 KB	
890-214	08.06.2015	doc 23.00 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 890-214	

CAE data	
WSCAD Universe 890-214	
ZUKEN Portal 890-214	

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 891-8994/106-101
pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black



Item No.: 891-8994/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Distribution connector



Item No.: 890-944
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



Item No.: 890-945
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



Item No.: 890-626
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 890-627
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black



1.1.3 Female connector/socket



Item No.: 890-704
Snap-in socket; 4-pole; Cod. A; 1,50 mm²; black



Item No.: 890-804/011-000
Socket for PCBs; angled; 4-pole; Cod. A; black



Item No.: 890-804
Socket for PCBs; straight; 4-pole; Cod. A; black



Item No.: 890-204
Socket; 4-pole; Cod. A; 1,50 mm²; black



Item No.: 890-104
Socket; with strain relief housing; 4-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.: 890-504
Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black



Item No.: 890-514
Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 897-2003
Protective cap; Type2; 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.: 890-525
Shield connecting plate; 4-pole; for plugs

1.3.4 Tool

1.3.4.1 Operating tool



Item No.: 890-384
Operating tool; 4-way; green



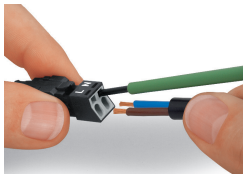
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

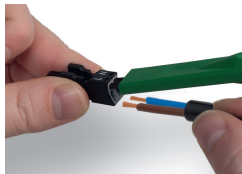
Conductor termination



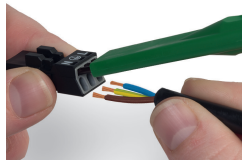
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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



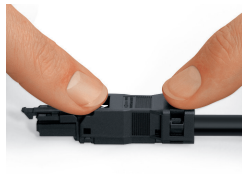
Latch the wired connector into the base of the strain relief housing.



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.