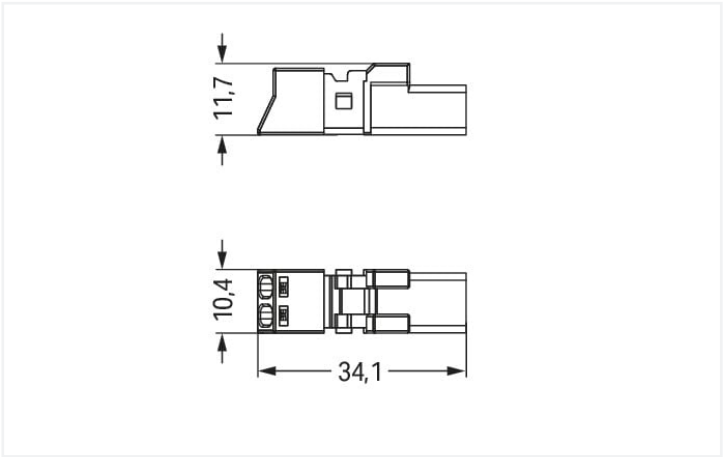


Color: ■ white



Dimensions in mm

Male connector/plug WINSTA® MINI rated current 16 A

The WINSTA® MINI male connector/plug with protection against mismatching is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. The pluggable installation connectors with spring pressure connection technology function without screw connections. They allow flexible, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, secure wiring of all components. The WINSTA® MINI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. Due to its particularly minimal dimensions, our WINSTA® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is especially suitable in very tight spaces, i.e., for installations when very little room is available.

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 more efficient, more reliable, and error-free. Using this pre-assembled system decreases assembly times and installation errors at the construction site. Now you can also reduce installation expenses without compromising safety and quality: with protection type IP20 reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- consistent IP40 protection
- with A coding for a large number of uses
- flexible installation to save space
- convenient installation and commissioning

Electrical data						
Ratings per		IEC/EN 60664-1			Approvals per	UL 1977
Overvoltage category		III	III	II	Rated voltage	600 V
Pollution degree		3	2	2	Rated current	14 A
Nominal voltage	250 V	-	-	-		
Rated surge voltage	4 kV	-	-	-		
Rated current	16 A	-	-	-		

General information	
Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket



Connection data																												
Connection points	2	<div>Connection 1</div> <table><tr><td>Connection technology</td><td>Push-in CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool Push-in</td></tr><tr><td>Nominal cross-section</td><td>1.5 mm² / 16 AWG</td></tr><tr><td>Solid conductor</td><td>0.25 ... 1.5 mm² / 22 ... 16 AWG</td></tr><tr><td>Solid conductor; push-in termination</td><td>0.75 ... 1.5 mm² / 20 ... 16 AWG</td></tr><tr><td>Stranded conductor</td><td>0.25 ... 1 mm² / 22 ... 18 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.25 ... 1.5 mm² / 22 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 0.75 mm² / 22 ... 20 AWG</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 0.75 mm² / 22 ... 20 AWG</td></tr><tr><td>Fine-stranded conductor; with ferrule; push-in termination</td><td>0.75 mm² / 20 AWG</td></tr><tr><td>Strip length</td><td>9 mm / 0.35 inches</td></tr><tr><td>Pole number</td><td>2</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0°</td></tr></table>	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	2	Conductor entry direction to mating direction	0°
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	2																											
Conductor entry direction to mating direction	0°																											
Total number of potentials	2																											
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	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 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		white
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		0.08 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 8.0		EC002560
ETIM 7.0		EC002560
PU (SPU)		50 pcs
Packaging type		Box
Country of origin		PL
GTIN		4055143548496
Customs tariff number		85366990990

Environmental Product Compliance		
RoHS Compliance Status		Compliant, No Exemption

Approvals / Certificates														
General approvals		Declarations of conformity and manufacturer's declarations												
<div><div></div><table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>CCA DEKRA Certification B.V.</td><td>EN 61535</td><td>71-123231</td></tr><tr><td>CCA DEKRA Certification B.V.</td><td>IEC 61535</td><td>NL-85020</td></tr><tr><td>cURus Underwriters Laboratories Inc.</td><td>UL 1977</td><td>E45171</td></tr></table></div>			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
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	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 890-232



CAD/CAE-Data

CAD data
2D/3D Models 890-232



CAE data
EPLAN Data Portal 890-232
WSCAD Universe 890-232
ZUKEN Portal 890-232



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



[Item No.: 891-8992/105-102](#)
pre-assembled connecting cable; Eca;
Socket/open-ended; 2-pole; Cod. A;
H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; whi-
te

[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

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

[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 Female connector/socket

<div><div>Item No.: 890-722</div><div>Snap-in socket; 2-pole; Cod. A; 1,50 mm²; white</div></div>	<div><div>Item No.: 890-822/011-000</div><div>Socket for PCBs; angled; 2-pole; Cod. A; white</div></div>	<div><div>Item No.: 890-822</div><div>Socket for PCBs; straight; 2-pole; Cod. A; white</div></div>	<div><div>Item No.: 890-222</div><div>Socket; 2-pole; Cod. A; 1,50 mm²; white</div></div>
<div><div>Item No.: 890-122</div><div>Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; white</div></div>			

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system

<div><div>Item No.: 890-111</div><div>Locking lever; for flying leads; for tool operation; black</div></div>	<div><div>Item No.: 890-131</div><div>Locking lever; for flying leads; for tool operation; white</div></div>	<div><div>Item No.: 890-101</div><div>Locking lever; for manual operation; black</div></div>	<div><div>Item No.: 890-121</div><div>Locking lever; for manual operation; white</div></div>

1.2.2 Strain relief

1.2.2.1 Strain relief housing

<div><div>Item No.: 890-502/342-000</div><div>Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 17.5 mm; black</div></div>	<div><div>Item No.: 890-512/342-000</div><div>Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 17.5 mm; white</div></div>	<div><div>Item No.: 890-502</div><div>Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 30 mm; black</div></div>	<div><div>Item No.: 890-512</div><div>Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 30 mm; white</div></div>

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover

<div><div>Item No.: 897-2001</div><div>Protective cap; Type1; for sockets and plugs; PVC; red</div></div>

1.3.2 Installation

1.3.2.1 Mounting accessories

<div><div>Item No.: 890-310</div><div>Mounting carrier; 2- to 5-pole; for flying leads; black</div></div>	<div><div>Item No.: 890-311</div><div>Mounting carrier; 2- to 5-pole; for flying leads; white</div></div>

1.3.3 Tool

1.3.3.1 Operating tool



Item No.: 890-382
Operating tool; 2-way; green



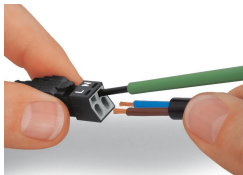
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

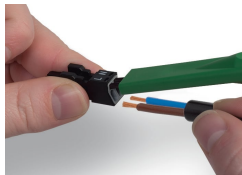
Conductor termination



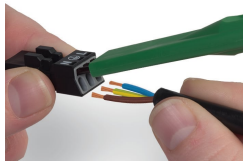
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

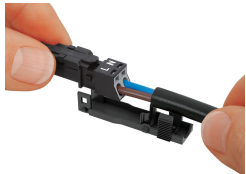


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.



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



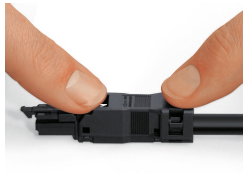
Latch the wired connector into the base of the strain relief housing.



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.