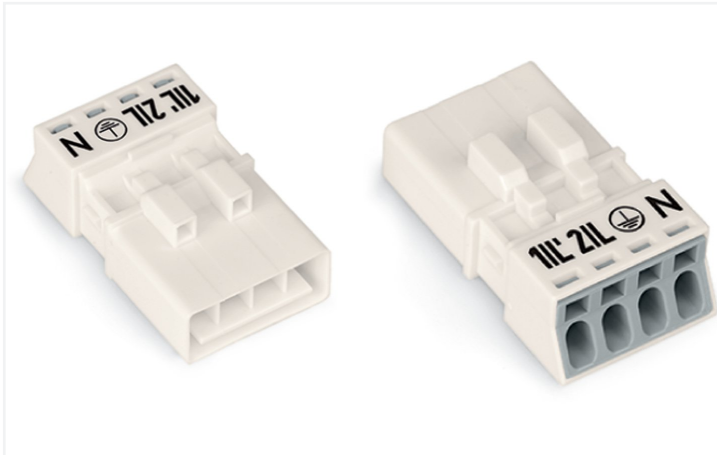


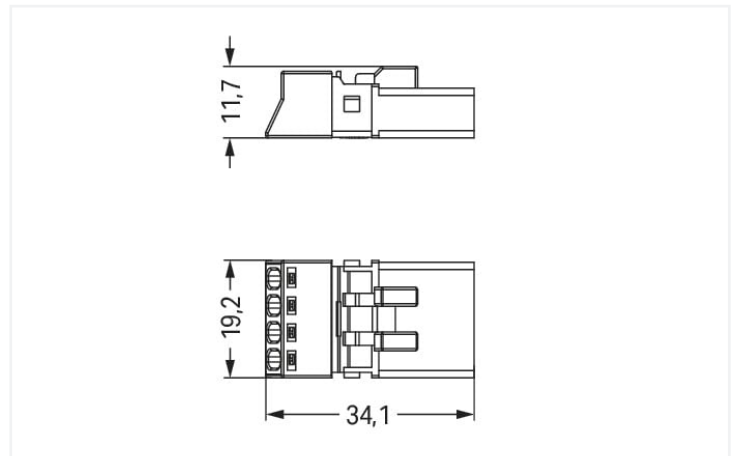
Data Sheet | Item Number: 890-234

Plug; 4-pole; Cod. A; 1,50 mm²; white

<https://www.wago.com/890-234>



Color: ■ white



Dimensions in mm

Male connector/plug *WINSTA*® MINI with protection type IP20

The *WINSTA*® MINI male connector/plug with protection against mismatching provides the foundation for assembly of fine-stranded and solid conductors. Our pluggable installation connectors with spring pressure connection technology function without screw connections. They allow flexible, error-free installation in a large number of applications. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. Thanks to the color coding and mechanical A coding of *WINSTA*® MINI pluggable installation connectors, you can clearly distinguish different circuits. *WINSTA*® MINI follows the trend towards 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.

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

The *WINSTA*® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, even more reliable, and error-free. Using this pre-assembled system decreases time spent on assembly and errors during installation at the construction site. Choose durability and quality – with protection against mismatching from WAGO makes the installation of electrical components substantially easier.

- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- with A coding for a great number of applications
- custom-engineered solutions
- rapid, structured electrical installation



Electrical data				
Ratings per		IEC/EN 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		400 V	-	-
Rated surge voltage		6 kV	-	-
Rated current		16 A	-	-
Approvals per				
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	white
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	0.113 MJ
Weight	7.1 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 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454233235
Customs tariff number	85366990990



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
CCA DEKRA Certification B.V.	EN 61535	71-123231	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	IEC 61535	NL-85020	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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 890-234	

Documentation

Bid Text			
890-234	19.02.2019	xml 2.93 KB	
890-234	08.06.2015	doc 23.50 KB	



CAD/CAE-Data	
CAD data 2D/3D Models 890-234 ↓	CAE data WSCAD Universe 890-234 ↓
	ZUKEN Portal 890-234 ↓

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 891-8994/106-102
pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

Item No.: 891-8994/006-102
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

1.1.2 Distribution connector



Item No.: 890-994
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white

Item No.: 890-995
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white

Item No.: 890-676
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white

Item No.: 890-677
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white

1.1.3 Female connector/socket



Item No.: 890-724
Snap-in socket; 4-pole; Cod. A; 1,50 mm²; white

Item No.: 890-824/011-000
Socket for PCBs; angled; 4-pole; Cod. A; white

Item No.: 890-824
Socket for PCBs; straight; 4-pole; Cod. A; white

Item No.: 890-224
Socket; 4-pole; Cod. A; 1,50 mm²; white



Item No.: 890-124
Socket; with strain relief housing; 4-pole; Cod. A; 1,50 mm²; 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.: 890-504
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



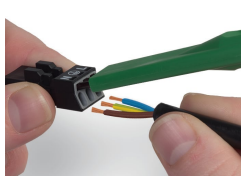
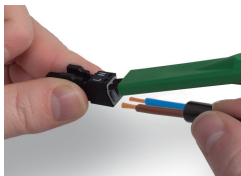
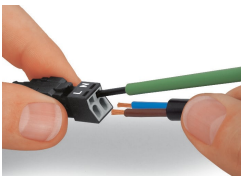
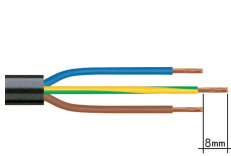
Item No.: 890-384
Operating tool; 4-way; green



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

Installation Notes

Conductor termination



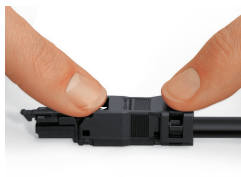
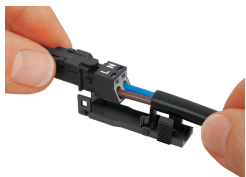
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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.

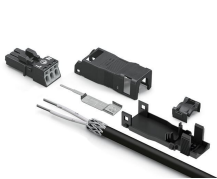
Push down strain relief clamp with 2.5 mm screwdriver alternately on both sides.

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.