

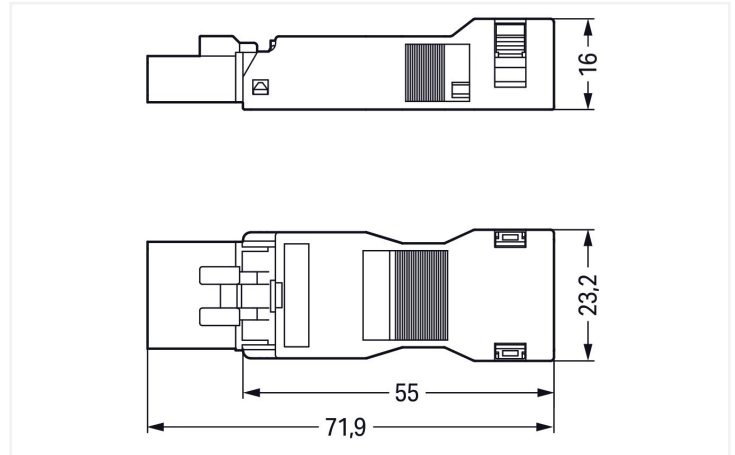
Data Sheet | Item Number: 890-114

Plug; with strain relief housing; 4-pole; 1,50 mm²; black

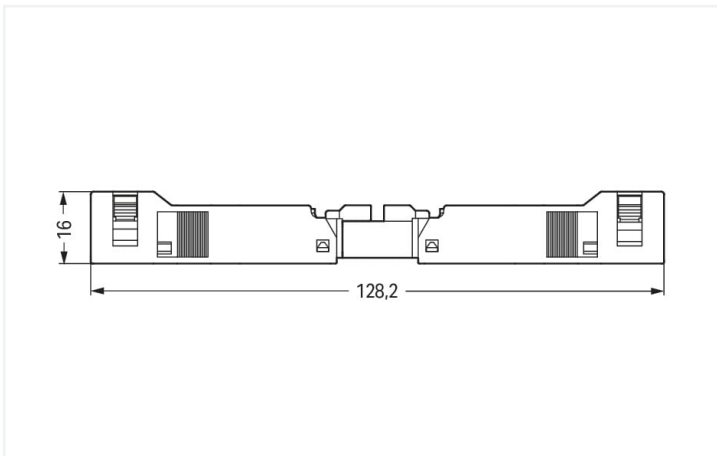
<https://www.wago.com/890-114>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

Male connector/plug WINSTA® MINI A coding

The WINSTA® MINI male connector/plug with protection against mismatching supports fast, reliable installation. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to an enormous variety of requirements in no time flat. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. The pluggable installation connector is protected against ingress by solid granular objects with a diameter of less 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. Thanks 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 restricted spaces, i.e., for installations when very little room is available. A range up to 45 mm can be used for the strip length.

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. Use of this pre-assembled system reduces time spent on assembly and errors during installation at the construction site. Choose quality and durability – with protection against mismatching from WAGO makes the electrical installation of electrical components substantially easier.

- pluggable installation connectors with protection against mismatching
- consistent IP40 protection
- with A coding for a large number of uses
- custom-engineered solutions
- convenient installation and commissioning



This item includes:



Item No.: 890-214	1	Item No.: 890-504	1
Plug; 4-pole; Cod. A; 1,50 mm ² ; black		Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black	

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	12 A
Nominal voltage				400 V	-	-			
Rated surge voltage				6 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
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Connection data

Clamping units	4	Connection 1	
Total number of potentials	4	Connection technology	Push-in CAGE CLAMP®
PE function	Preceding PE contact	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	4
		Connectable sheathed cable diameter	6.5 ... 10.5 mm
		Conductor entry direction to mating direction	0 °
		Strip length (outer insulation)	45 mm

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	23.2 mm / 0.913 inches
Height	16 mm / 0.63 inches
Depth	71.9 mm / 2.831 inches

Mechanical data

Use	General mains applications
Coding	A
Variable coding	No
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	IP40

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).
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 (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	0.319 MJ
Connector color	black
Strain relief color	black
Weight	10.4 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	4045454232917
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
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
		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 890-114			

Documentation

Bid Text			
890-114	19.02.2019	xml 3.01 KB	
890-114	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 890-114	

CAE data	
WSCAD Universe 890-114	
ZUKEN Portal 890-114	

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

1.3 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

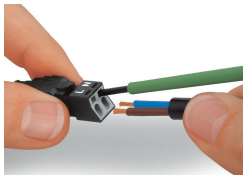
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

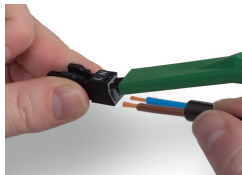
Conductor termination



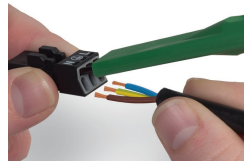
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

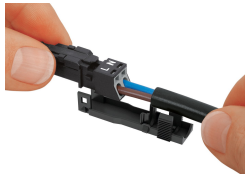


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.



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



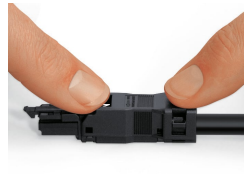
Latch the wired connector into the base of the strain relief housing.



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.