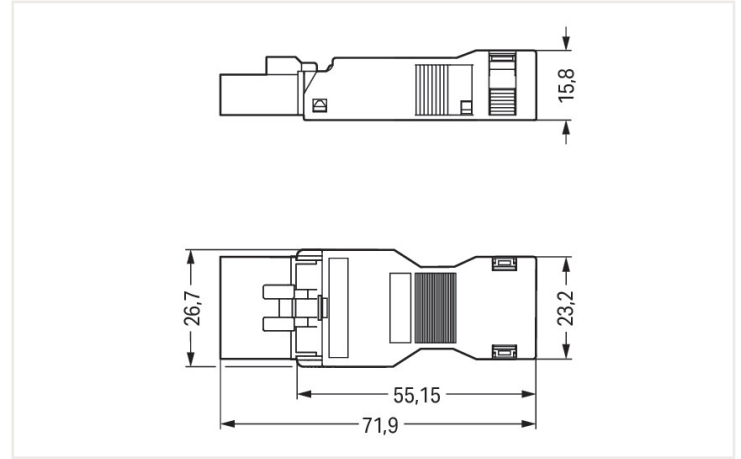


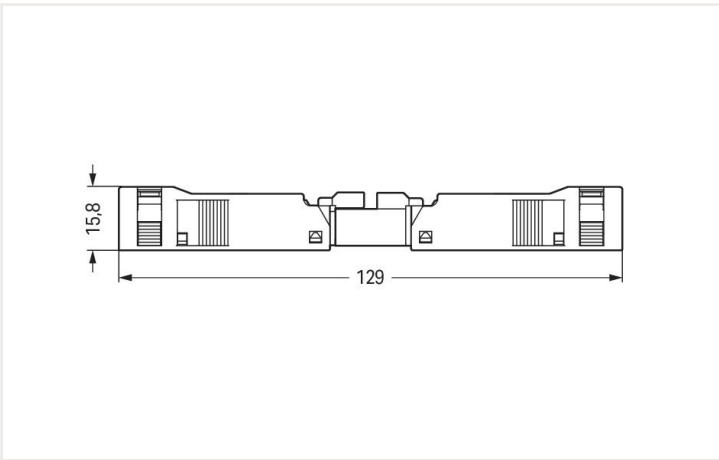
Data sheet | Item number: 890-115

Plug; with strain relief housing; 5-pole; 1,50 mm²; black

<https://www.wago.com/890-115>



Dimensions in mm



Dimensions in mm

Overall length when mated

Male connector/plug WINSTA® MINI with protection against mismatching

The WINSTA® MINI male connector/plug rated current 13 A is the pluggable solution for your use in control cabinets, for lighting connections or on PCBs. WAGO pluggable installation connectors can be used when specifications repeat or are planned on a defined pattern, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector offers protection against contact with wires or tools if they are smaller than 1 mm in accordance with protection type IP40. The WINSTA® MINI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. WINSTA® MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is especially suitable for lights, for instance, since due to LED technology, these offer much less space for the connection technology. 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 allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose quality and durability – the WINSTA® MINI pluggable installation connector with marking from WAGO makes the electrical installation of electrical components substantially easier.

- effective protection against mismatching
- easy tool-free operation, a wide range of coding options
- suitable for any application
- exact dimensions
- fast, secure installation

Item includes



Item no.: 890-215

1

Item no.: 890-505

1

Plug; 5-pole; 1,50 mm²; black

Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	13 A
Legend (ratings)	(III / 3) △ Overvoltage category III / Pollution degree 3

Ratings per UL

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 5 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	12 A

General

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
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Connection data

Total number of connection points	5
Total number of potentials	5

Connection 1

Connection technology	Push-in CAGE CLAMP®
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	5
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	26.7 mm / 1.051 inches
Height	15.8 mm / 0.622 inches
Depth	71.9 mm / 2.831 inches

Mechanical data

Application	General mains applications
Coding	A
Variable coding	No
Marking	3 2 1 ⊕ N
Potential marking	3 2 1 ⊕ N
Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)
Retention force of a plug-in connection	Locked:
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 data can be found here
Color	black
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
Fire load	0.307 MJ
Weight	11.6 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)
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 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4045454232924
Customs tariff number VKOrg Germany	85366990990

Approvals and certificates

Country specific Approvals



Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 61535	71-11299
CCA DEKRA Certification B.V.	IEC 61535	NL-64352

Ship Approvals



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)

UL-Approvals



Approval	Standard	Certificate name
cURus Underwriters Laboratories Inc.	UL 1977	E45171

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-115



Documentation

Bid Text

890-115	19.02.2019	xml 3.01 KB	
890-115	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 890-115		WSCAD Universe 890-115	
		ZUKEN Portal 890-115	

1 Compatible products

1.1 System counterpart

1.1.1 Cable assembly



Item no.: 891-8995/106-101
pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black

Item no.: 891-8995/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Distribution connector



Item no.: 890-929
h-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



Item no.: 890-930
h-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



Item no.: 890-621
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item no.: 890-622
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

1.1.3 Female connector/socket



Item no.: 890-705
Snap-in socket; 5-pole; Cod. A; 1,50 mm²; black



Item no.: 890-705/006-000
Snap-in socket; without locking lever; 5-pole; Cod. A; 1,50 mm²; black



Item no.: 890-805/011-000
Socket for PCBs; angled; 5-pole; Cod. A; black



Item no.: 890-805
Socket for PCBs; straight; 5-pole; Cod. A; black



Item no.: 890-205
Socket; 5-pole; Cod. A; 1,50 mm²; black



Item no.: 890-105
Socket; with strain relief housing; 5-pole; Cod. A; 1,50 mm²; black

1.2 Required accessories

1.2.1 Locking system

1.3 Optional accessories

1.3.1 Cover

1.2.1.1 Locking system



Item no.: 890-111



Item no.: 890-131



Item no.: 890-101



Item no.: 890-121

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.: 890-527
Shield connecting plate; 5-pole; for plugs

1.3.4 Tool

1.3.4.1 Operating tool



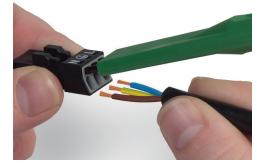
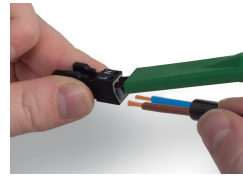
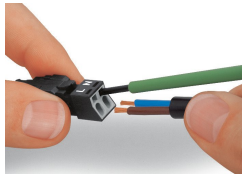
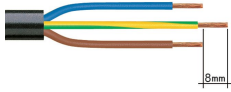
Item no.: 890-385
Operating tool; 5-way; green



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

Installation notes

Conductor termination



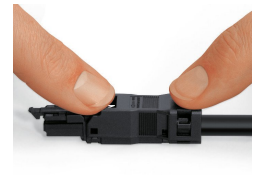
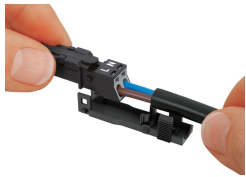
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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.

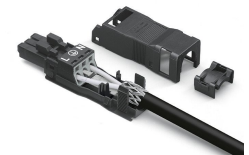
Push down strain relief clamp with 2.5 mm screwdriver alternately on both sides.

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.