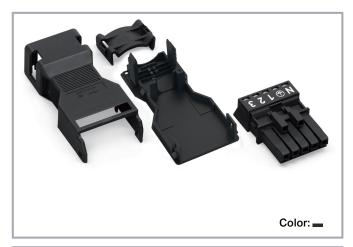
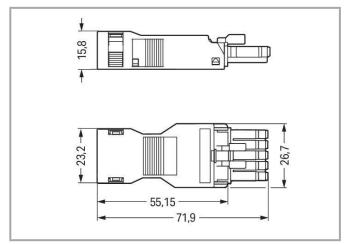
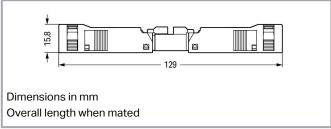
Socket; with strain relief housing; 5-pole; Cod. A; 1,50 mm<sup>2</sup>; black

www.wago.com/890-105









# Item description

#### Female connector/socket WINSTA® MINI 5-pole

For power and signal transmission: The *WINSTA*® MINI female connector/socket 5-pole. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in seconds. The coding options reduce installation errors, allowing fast, secure 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. General mains applications for almost any domain of use can be realised with *WINSTA*® MINI pluggable installation connectors with A coding. *WINSTA*® MINI is our response to the trend toward miniaturisation. Our smallest pluggable connection system is primarily suited for lights, for example, since as a result of LED technology; due to complex systems, these offer less and less space for the connection technology. A range up to 45 mm can be used for the strip length.

Subject to changes. Please also observe the further product documentation!

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# Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It allows error-free installation of cables and components, quickly and reliably. Now you can also cut installation expenses without compromising safety and quality: The WINSTA® MINI pluggable installation connector with protection against mismating eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismating
- consistent IP40 protection
- suitable for any application
- ready for immediate use
- rapid, structured electrical installation

# Data 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 1977

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 m $\Omega$ of contact resistance
	approx. $0.25~\text{m}\Omega$ contact transition plug/socket

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#### Connection data

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 <sup>2</sup> / 16 AWG
Solid conductor	0.25 1.5 mm <sup>2</sup> / 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	5
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	N
Potential marking	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)

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Number of mating cycles	200, without resistive load
Protection type	IP40

## Plug-in connection

Contact type (pluggable connector)	Female connector/socket
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	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.344 MJ
Weight	11.9 g

# **Environmental requirements**

Processing temperature -5 ... +40 °C

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Continuous	s operating temperature	-35 +85 °C	
Note on co	ntinuous operating temperature	Insulating parts for temperatures ≤ 105 °C	
Commerci	al data		
Product Gr	oup	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	DE	
GTIN		4045454232870	
Customs ta	ariff number	85366990990	
	ental Product Compliance	Compliant,No Exemption	
Korio Com	pliance Status	Compilant, No Exemption	
Approvals  General appr	/ Certificates		
<b>Сепегагарр</b> і	Ovais		Certificate
Logo	Approval	Additional Approval Text	name
	CCA	EN 61535	71-
KEMA	DEKRA Certification B.V.		123231
	CCA	IEC 61535	NL-85020
	DEKRA Certification B.V.	120 0 1000	NE 00020
	cURus	UL 1977	E45171
c <b>SU</b> °us	Underwriters Laboratories Inc.		
Declarations	of conformity and manufacturer's declarations		
		A 1 100 - 1 A 1 - 2 - 3	Certificate
Logo	Approval	Additional Approval Text	name
$\epsilon$	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Cubicat to ab	nanges. Please also observe the further product docu		

05.06.2023 Page 5/12

Do you have any questions about our products?





UK-Declaration of Conformity WAGO GmbH & Co. KG

#### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	Steel Vessel Rules	19- HG1869855- PDA
ONV COM/AF	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
OD RESIDENCE THE AMERICAN.	LR Lloyds Register	EN 61535	08/20047 (E2)

# Counterpart

FRE	Item no.890-115 Plug; with strain relief housing; 5-pole; 1,50 mm²; black	www.wago.com/890-115
	Item no.890-215 Plug; 5-pole; Cod. A; 1,50 mm²; black	www.wago.com/890-215
	Item no.890-715 Snap-in plug; 5-pole; Cod. A; 1,50 mm²; black	www.wago.com/890-715
*	Item no.890-622 T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	www.wago.com/890-622
	Item no.890-621 T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	www.wago.com/890-621
Ø.	Item no.890-815 Plug for PCBs; straight; 5-pole; Cod. A; black	www.wago.com/890-815
	Item no.890-815/011-000 Plug for PCBs; angled; 5-pole; Cod. A; black	www.wago.com/890-815/011- 000

Item no.890-929

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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h-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black

www.wago.com/890-929



Item no.890-930

1,50 mm<sup>2</sup>; black

h-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for www.wago.com/890-930 flying leads; black

Item no.891-8995/006-101

www.wago.com/891-8995 pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m;

/006-101

Item no.891-8995/206-101

pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm<sup>2</sup>; black

www.wago.com/891-8995

/206-101

Required accessories

Locking levers

Locking system



Item no.: 890-111

Locking lever; for flying leads; for tool operation; black

www.wago.com/890-111



Item no.: 890-101

Locking lever; for manual operation; black

www.wago.com/890-101



Item no.: 890-121

Locking lever; for manual operation; white

www.wago.com/890-121



Item no.: 890-131

Locking lever; for flying leads; for tool operation; white

www.wago.com/890-131

Optional accessories

Mounting

Mounting accessories



Item no.: 890-310

Mounting carrier; 2- to 5-pole; for flying leads; black

www.wago.com/890-310



Item no.: 890-311

Mounting carrier; 2- to 5-pole; for flying leads; white

www.wago.com/890-311

Tool

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#### Operating tool



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719



Item no.: 890-385

Operating tool; 5-way; green

www.wago.com/890-385

#### Shield termination

Shield termination



Item no.: 890-526

Shield connecting plate; 5-pole; for sockets

www.wago.com/890-526

Cover

Cover



Item no.: 897-2003

Protective cap; Type2; for sockets and plugs; PVC; red

www.wago.com/897-2003

# Downloads

#### **Documentation**

# **Bid Text**

890-105 X81 - Datei	2019 Feb 19	xml 3.1 kB	Download
890-105 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

#### CAD/CAE-Data

#### **CAE** data

WSCAD Universe 890-105	URL	Download
ZUKEN Portal 890-105	URL	Download
CAD data		

# 2D/3D Models 890-105

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URL

Download



#### **Environmental Product Compliance**

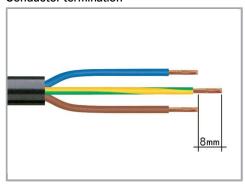
Compliance Search

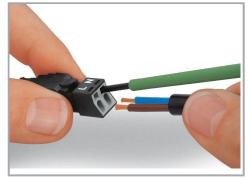
Environmental Product Compliance 890-105 Socket; with strain relief housing; 5-pole; Cod. A; 1,50 mm²; black URL

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#### **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.

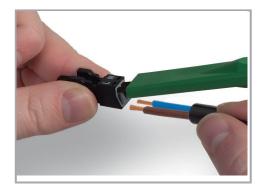
 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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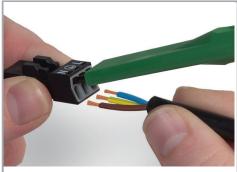
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To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.

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.

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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

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Apply the shield to the sheathed cable.

Push the shield connecting plate into the connector until fully inserted.

Strip length, outer insulation = 30 mm

Shield length = 8 mm



First insert the wired connector into strain relief housing, then snap clamp and cover.

#### **Product family**

WINSTA® MINI Show all products from the family

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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