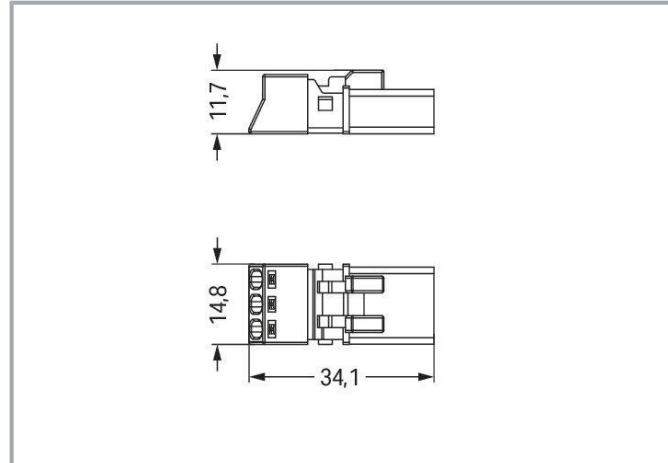
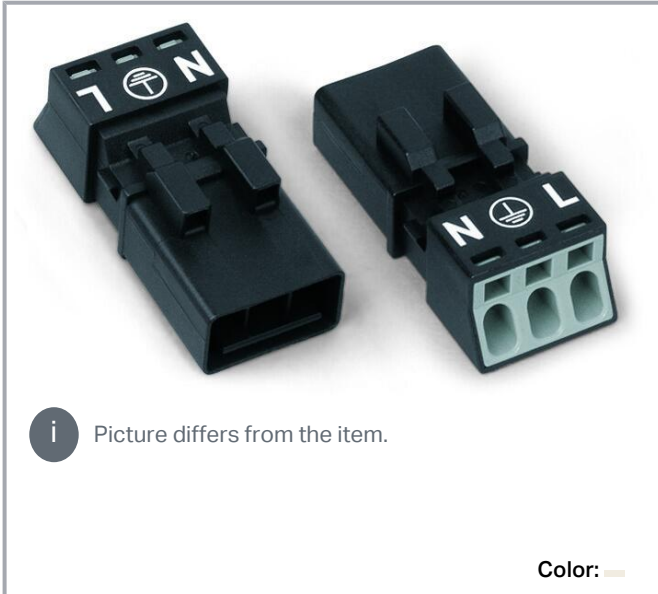


Data sheet | Item number: 890-233
Plug; 3-pole; Cod. A; 1,50 mm²; white

www.wago.com/890-233



Item description

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

For power and signal transmission: The *WINSTA*® MINI male connector/plug 3-pole. WAGO pluggable installation connectors are used when criteria repeat or are distributed on a specified grid, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. Standard mains applications for almost any domain of use can be implemented with *WINSTA*® MINI pluggable installation connectors with A coding. *WINSTA*® MINI satisfies the demand for miniaturisation. Our smallest pluggable connection system is very good 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.

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

The *WINSTA*® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Now you can also lower installation costs without compromising safety and quality: with protection against mismatching eliminates the need for servicing and prevents unnecessary downtime.

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

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-
- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- with A coding for use in many general mains applications
- flexible installation to save space
- fast, secure installation

Data

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	16 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	14 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

Connection points	3
Total number of potentials	3
PE function	Preceding PE contact

Connection 1

Connection technology	Push-in CAGE CLAMP®
-----------------------	---------------------

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



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	3
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	15 mm / 0.591 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	Yes
Marking	N $\frac{1}{2}$ L
Potential marking	N $\frac{1}{2}$ 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

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



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	0.093 MJ
Weight	3.6 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

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ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4055143548540
Customs tariff number	85366990990

Environmental Product Compliance



RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61535	NL-85020
	CCA DEKRA Certification B.V.	EN 61535	71- 123231
	cURus Underwriters Laboratories Inc.	UL 1977	E45171

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	Steel Vessel Rules	19- HG1869855-

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DNV GL

Det Norske Veritas, Germanischer Lloyd

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TAE00001Z6

LR

Lloyds Register

EN 61535

08/20047

(E2)

Counterpart



Item no.890-123

Socket; with strain relief housing; 3-pole; Cod. A; 1,50 mm²; whitewww.wago.com/890-123

Item no.890-223

Socket; 3-pole; Cod. A; 1,50 mm²; whitewww.wago.com/890-223

Item no.890-656

T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white

www.wago.com/890-656

Item no.890-665

T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white

www.wago.com/890-665

Item no.890-686

h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white

www.wago.com/890-686

Item no.890-684

h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white

www.wago.com/890-684

Item no.890-723

Snap-in socket; 3-pole; Cod. A; 1,50 mm²; whitewww.wago.com/890-723

Item no.890-823

Socket for PCBs; straight; 3-pole; Cod. A; white

www.wago.com/890-823

Item no.890-823/011-000

Socket for PCBs; angled; 3-pole; Cod. A; white

www.wago.com/890-823/011-000

Item no.891-8993/005-102

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm²; whitewww.wago.com/891-8993/005-102

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Item no. 891-8993/105-102

pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm²; white

www.wago.com/891-8993/105-102

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

Strain relief

Strain relief housing



Item no.: 890-513

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; white

www.wago.com/890-513



Item no.: 890-503

Strain relief housing; 3-pole; with locking clip; for 1 cable; 4.5 ... 10.0 mm; 37 mm; black

www.wago.com/890-503

Optional accessories

Shield termination

Shield termination



Item no.: 890-523

Shield connecting plate; 3-pole; for sockets and plugs; silver-colored

www.wago.com/890-523

Cover

Cover



Item no.: 897-2001

Protective cap; Type1; for sockets and plugs; PVC; red

www.wago.com/897-2001

Tool

Operating tool

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

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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.: 890-383

Operating tool; 3-way; green

www.wago.com/890-383

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

Downloads

Documentation

Bid Text

890-233 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
890-233 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

CAD/CAE-Data

CAD data

2D/3D Models 890-233 [URL](#) [Download](#)

CAE data

EPLAN Data Portal 890-233 [URL](#) [Download](#)

WSCAD Universe 890-233 [URL](#) [Download](#)

ZUKEN Portal 890-233 [URL](#) [Download](#)

Asset Administration Shell

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-233

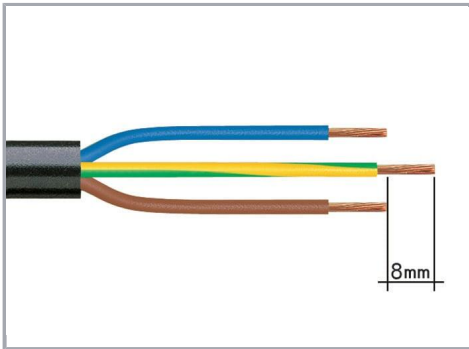
[URL](#)

[Download](#)

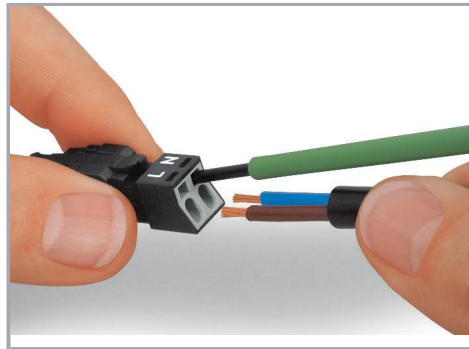
Plug; 3-pole; Cod. A; 1,50 mm²; white

Installation Notes

Conductor termination

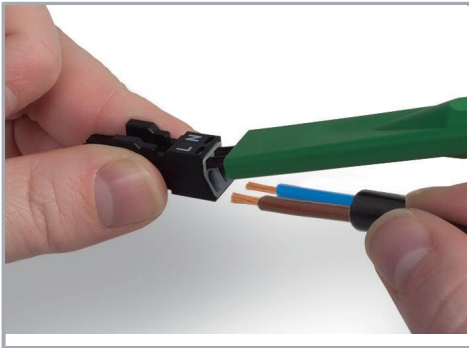


1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

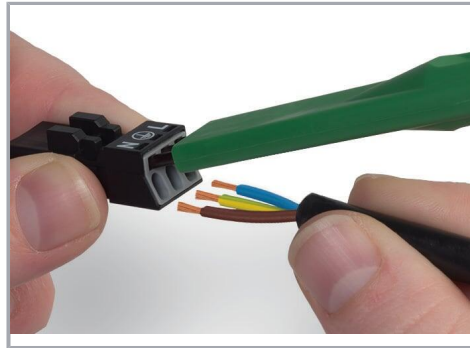


To terminate fine-stranded conductors, open the clamping unit via screwdriver – 2.5 mm blade width – and insert a stripped conductor until it hits the backstop. Terminate solid conductors by simply pushing them in.

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



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



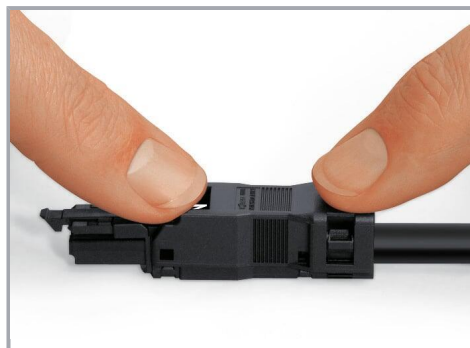
Latch the wired connector into the base of the strain relief housing.



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.

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



The printed marking of the connector is clearly visible in the openings of the strain relief housing.

Shield termination



Connector with shield termination

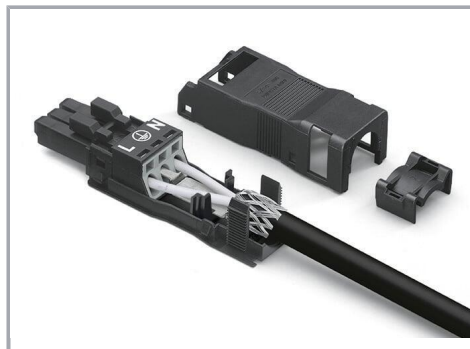


Apply the shield to the sheathed cable.

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.

Product family

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



WINSTA® MINI

[Show all products from the family](#)

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