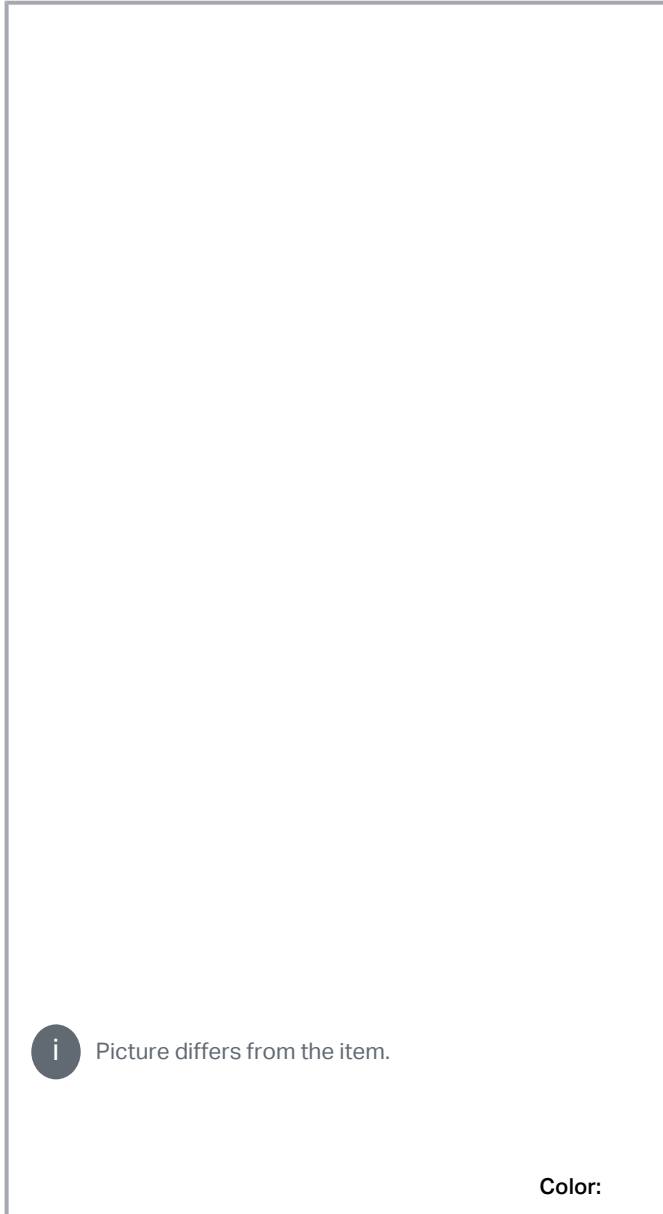


Data sheet | Item number: 890-233
Plug; 3-pole; Cod. A; 1,50 mm²; white

www.wago.com/890-233



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

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Item description

Male connector/plug *WINSTA*® MINI with protection against mismatching

For power and signal transmission: The *WINSTA*® MINI male connector/plug with protection against mismatching. WAGO pluggable installation connectors can be used when criteria repeat or are distributed on a defined grid, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, secure wiring of all components. Thanks to the color coding and mechanical A coding of *WINSTA*® MINI pluggable installation connectors, you can clearly distinguish different circuits. Due to its particularly compact dimensions, our *WINSTA*® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is specifically suitable in very tight spaces, i.e., for connections when very little room is available.

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. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with *WINSTA*® MINI pluggable installation connectors with protection against mismatching from WAGO.

- 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
- ready to install and use immediately
- convenient installation and commissioning

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

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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

Connection data

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

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	3
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	15 mm / 0.591 inches

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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 \neq L
Potential marking	N \neq 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 <i>WINSTA</i> [®] components are 100% protected against mismating when: <ul style="list-style-type: none"> 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

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



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
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

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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- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	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 mm ² ; white	www.wago.com/890-123
Item no.890-223 Socket; 3-pole; Cod. A; 1,50 mm ² ; white	www.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 mm ² ; white	www.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	www.wago.com/891-8993

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pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; 1 m; 1,00 mm²; white

/005-102

Item no. 891-8993/105-102www.wago.com/891-8993pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; 1 m; 1,00 mm²; white

/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

Cover

Cover

Item no.: 897-2001

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

www.wago.com/897-2001

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

Shield termination

Shield termination

Item no.: 890-523

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

www.wago.com/890-523

Tool

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

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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.: 890-383**

Operating tool; 3-way; green

www.wago.com/890-383**Downloads****Documentation****Bid Text**

890-233 X81 - Datei	2019 年2月19日	xml 3.0 kB	Download
890-233 doc - Datei	2015 年6月8日	doc 24.1 kB	Download

CAD/CAE-Data**CAD data**

2D/3D Models 890-233		URL	Download
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CAE data

EPLAN Data Portal 890-233		URL	Download
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WSCAD Universe 890-233		URL	Download
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ZUKEN Portal 890-233		URL	Download
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Environmental Product Compliance**Compliance Search**

Environmental Product Compliance 890-233 Plug; 3-pole; Cod. A; 1,50 mm ² ; white		URL	Download
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Installation Notes**Conductor termination**

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

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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

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



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



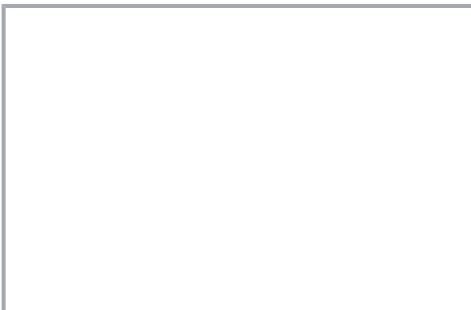
Connector with shield termination



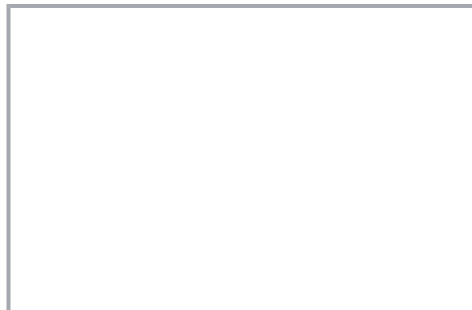
Apply the shield to the sheathed cable.

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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