Plug; 2-pole; 1,50 mm<sup>2</sup>; gray

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#### Item description

#### Male connector/plug WINSTA® MINI 2-pole

For power and signal transmission: The WINSTA® MINI male connector/plug with protection type IP20. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in no time flat. For greater protection in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. Pluggable installation connectors with B coding from the WINSTA® MINI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Your own pole marking is possible as well. WINSTA® MINI follows the trend towards 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 significantly less space for the connection technology.

#### WINSTA® MINI solutions for your electrical installation – protected against mismating and maintenance-free

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Now you can also cut installation expenses without compromising safety and quality: with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- -
- protection against mismating eliminates errors
- easy tool-free operation, a wide range of coding options
- with B coding for use in process automation, such as lighting technology, for instance
- custom-engineered solutions
- rapid, structured electrical installation

# Data Notes

Variants:

Other pole markings
Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/.

#### Electrical data

#### Ratings per IEC/EN

Ratings per IEC/EN 60664-1
Nominal voltage (III/3) 250 V

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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

Total number of potentials

	approx. 0.25 m $\Omega$ contact transition plug/socket	
Connection data		

2

approx. 1 m $\Omega$  of contact resistance

# Connection 1

Connection points

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
	Push-in
Nominal cross-section	1.5 mm² / 16 AWG
Solid conductor	0.25 1.5 mm² / 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	2
Conductor entry direction to mating direction	0°

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# Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	10.4 mm / 0.409 inches
Height	11.7 mm / 0.461 inches
Depth	34.1 mm / 1.343 inches

#### **Mechanical Data**

Application	Control technology
Coding	В
Variable coding	No
Marking	2 1
Potential marking	2 1
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 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).

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#### **Material Data**

Note (material data)

Information on material specifications can be found here

Color	gray
Cover color	gray
Material group	1
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	0.08 MJ
Weight	2.5 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	4055143499675
Customs tariff number	85366990990

#### **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

### Approvals / Certificates

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#### General approvals

			Certificate name
Logo	Approval	Additional Approval Text	
	СВ	IEC 61984	NL-64351
	DEKRA Certification B.V.		
	СВ	EN 61984	71-112993
	DEKRA Certification B.V.		
	cURus	UL 1977	E45171
	Underwriters Laboratories Inc.		
	KEMA/KEUR	EN 60320	2148952.04
	DEKRA Certification B.V.		

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

			Certificate
Logo	Approval	Additional Approval Text	name
	DNV GL	-	TAE00001Z6
	Det Norske Veritas, Germanischer Lloyd		
	LR	EN 61535	08/20047
	Lloyds Register		(E2)

# Counterpart

Item no.890-1601 T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray	www.wago.com/890-1601
Item no.890-1701 T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray	www.wago.com/890-1701
Item no.890-242 Socket; 2-pole; Cod. B; 1,50 mm²; gray	www.wago.com/890-242
Item no.890-742 Snap-in socket; 2-pole; Cod. B; 1,50 mm²; gray	www.wago.com/890-742
Item no.890-842 Socket for PCBs; straight; 2-pole; Cod. B; gray	www.wago.com/890-842
Item no.890-842/011-000	www.wago.com/890-842
Socket for PCBs; angled; 2-pole; Cod. B; gray  Item no.891-8992/005-103	/011-000
	www.wago.com/891-8992

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pre-assembled interconnection; 1,00 mm²; gray	ng cable; Eca; Socket/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; 1	/005-103
ltem no.891-8992/105-103 pre-assembled connecting ca 1 m; 1,00 mm²; gray	ıble; Eca; Socket/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm²;	www.wago.com/891-8992 /105-103
ltem no.899-631/454-000 Distribution box; supply cable	entry; 8 outputs; Cod. B; MINI; black	www.wago.com/899-631 /454-000

# Required accessories

Str		

Strain re	lief housing	
	Item no.: 890-502	www.wago.com/890-502
	Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 30 mm; black	www.wago.com/690-50.
	Item no.: 890-502/342-000	www.wago.com/890-502
	Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 17.5 mm; black	/342-000
	Item no.: 890-512	www.wogo.com/000_F1/
	Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 30 mm; white	www.wago.com/890-512
	Item no.: 890-512/342-000	www.wago.com/890-512
	Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 17.5 mm; white	/342-000
Locking le	evers	
Locking	system	
	Item no.: 890-111	www.waga.com/000_111
	Locking lever; for flying leads; for tool operation; black	www.wago.com/890-111
	Item no.: 890-101	MANN WOOD COM/900 101
	Locking lever; for manual operation; black	www.wago.com/890-101
	Item no.: 890-121	www.wago.com/890-121
	Locking lever; for manual operation; white	www.wago.com/690-121
	Item no.: 890-131	www.wago.com/890-13
	Locking lever; for flying leads; for tool operation; white	**************************************

# Optional accessories

Tool

Operating tool	
<b>Item no.: 210-719</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719
Item no.: 890-382 Operating tool; 2-way; green	www.wago.com/890-382

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Cover		
	Item no.: 897-2001	
	Protective cap; Type1; for sockets and plugs; PVC; red	www.wago.com/897-2001
Mounting		
Mountin	ng 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**

890-252 X81 - Datei	2019 年2月19日	xml 3.0 kB	Download
890-252 doc - Datei	2015 年6月8日	doc 24.1 kB	Download

# CAD/CAE-Data

#### CAD data

2D/3D Models 890-252	URL	Download
CAE data		
EPLAN Data Portal 890-252	URL	Download
WSCAD Universe 890-252	URL	Download
ZUKEN Portal 890-252	URL	Download

# **Environmental Product Compliance**

# Compliance Search

Environmental Product Compliance 890-252 URL Download

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W/AGO

Plug; 2-pole; 1,50 mm²; gray

# Installation Notes Conductor termination 1. Strip length, outer insulation = 30 mm (2-To terminate fine-stranded conductors, open pole), 37 mm (3-pole), 45 mm (4- and 5-pole) the clamping unit via screwdriver – 2.5 mm blade width - and insert a stripped conductor 2. Strip length = 9 mm until it hits the backstop. Terminate solid conductors by simply pushing 3. Extended ground conductor = 8 mm them in. To terminate fine-stranded conductors, open To terminate fine-stranded conductors, open clamping units via operating tool (890-382) clamping units via operating tool (890-383) and insert stripped conductors until they hit and insert stripped conductors until they hit backstop. backstop. Terminate solid conductors by simply pushing Terminate solid conductors by simply pushing them in. them in. Installation Subject to changes. Please also observe the further product documentation!

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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.  Mismating protection
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
strain relief housing.  Push down strain relief clamp with 2.5 mm  Latch the top of the strain relief housing.
Strain relief housing.  Push down strain relief clamp with 2.5 mm  Latch the top of the strain relief housing.
strain relief housing.  Push down strain relief clamp with 2.5 mm  Latch the top of the strain relief housing.
Latch the wired connector into the base of the Push down strain relief clamp by hand.

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B-coded connectors with different colors can be plugged together.  Important note:  Different colors and/or pole markings are used for circuit identification.  Only connectors of the same color and same pole marking must be plugged together.	B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

**Product family** 

WINSTA® MINI

Show all products from the family

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