Data sheet | Item number: 890-252 Plug; 2-pole; 1,50 mm<sup>2</sup>; gray www.wago.com/890-252







# Item description

# Male connector/plug WINSTA® MINI 2-pole

The *WINSTA®* MINI male connector/plug with protection type IP20 is the pluggable solution for your application in control cabinets, for lighting connections or on PCBs. WAGO pluggable installation connectors are used when criteria repeat or are distributed on a specified pattern, for example for installing grid lighting or flush-mount lighting. 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 pink, light green, or gray, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Usage-specific pole marking is possible in addition. Especially where space is tight, our smallest pluggable connection system, *WINSTA®* MINI, conveniently displays its advantages. It saves space, and, thanks to Push-in CAGE CLAMP® spring pressure connection technology, it also can be installed quickly, since the connection is low-maintenance and can be performed without screw connections.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers

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costs. 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 mismating from WAGO.

- effective protection against mismating
- consistent IP40 protection
- with B coding for controllers such as lighting fixtures and sun blinds
- ready for immediate use
- convenient installation and commissioning

# 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
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

Note on contact resistance	approx. 1 m $\Omega$ of contact resistance
	approx. 0.25 m $\Omega$ contact transition plug/socket

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# **Connection data**

Connection points	2
Total number of potentials	2

#### **Connection 1**

Connection technology	
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 °

# 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)

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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> <sup>®</sup> 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).

# Material Data

Note (material data)

Information on material specifications can be found here

Color	gray
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	0.08 MJ
Weight	2.5 g

# Environmental requirements

Processing temperature	-5 +40 ℃
Continuous operating temperature	-35 +85 °C

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Note on continuous operating temperature

Insulating parts for temperatures  $\leq$  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

Compliant,No Exemption

# **Environmental Product Compliance**

# Approvals / Certificates

#### **General approvals**

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-64351
KEUR	<b>CB</b> DEKRA Certification B.V.	EN 61984	71-112993
c <b>FN</b> u	cURus Underwriters Laboratories Inc. S	UL 1977	E45171
KEUR	KEMA/KEUR DEKRA Certification B.V.	EN 60320	2148952.04
Declaration	s of conformity and manufacturer's declarations		
Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity	-	-
Subject to c	hanges. Please also observe the further product	documentation!	
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 UK-Declaration of Cont

UK-Declaration of Conformity WAGO GmbH & Co. KG

#### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name	
DNV GL Det Norske Veritas, Germanischer Lloyd		-	TAE00001Z6	
THE AMENA	<b>LR</b> Lloyds Register	EN 61535	08/20047 (E2)	
Counterpar				
P	Item no.890-1601 T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray		www.wago.com/890-1601	
4 4	<b>Item no.890-1701</b> T-distribution connector; 2-pole; Cod. B; 1 input; 2	outputs; 3 locking levers; for flying leads; gray	www.wago.com/890-1701	
	<b>Item no.890-242</b> Socket; 2-pole; Cod. B; 1,50 mm²; gray		www.wago.com/890-242	
	<b>Item no.890-742</b> Snap-in socket; 2-pole; Cod. B; 1,50 mm²; gray		www.wago.com/890-742	
6	<b>Item no.890-842</b> Socket for PCBs; straight; 2-pole; Cod. B; gray		www.wago.com/890-842	
and	<b>Item no.890-842/011-000</b> Socket for PCBs; angled; 2-pole; Cod. B; gray		www.wago.com/890-842 /011-000	
200 <b>0 - 2</b> 002-9	<b>Item no.891-8992/005-103</b> pre-assembled interconnecting cable; Eca; Socke m; 1,00 mm²; gray	t/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; 1	www.wago.com/891-8992 /005-103	

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www.wago.com/891-8992



#### ltem no.891-8992/105-103

pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; /105-103 1 m; 1,00 mm²; gray



#### Item 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**

Locking	levers

Locking level	S	
Locking sys	tem	
	<b>Item no.: 890-111</b> Locking lever; for flying leads; for tool operation; black	www.wago.com/890-111
APP-	<b>Item no.: 890-101</b> Locking lever; for manual operation; black	www.wago.com/890-101
12	<b>Item no.: 890-121</b> Locking lever; for manual operation; white	www.wago.com/890-121
	<b>Item no.: 890-131</b> Locking lever; for flying leads; for tool operation; white	www.wago.com/890-131
Strain relief Strain relief	housing	
	Item no.: 890-502 Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 30 mm; black	www.wago.com/890-502
	ltem no.: 890-502/342-000 Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 17.5 mm; black	www.wago.com/890-502 /342-000
66	<b>Item no.: 890-512</b> Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 30 mm; white	www.wago.com/890-512
66	<b>Item no.: 890-512/342-000</b> Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 8.2 mm; 17.5 mm; white	www.wago.com/890-512 /342-000

# **Optional accessories**

Cover

Cover

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	ltem no.: 897-2001 Protective cap; Type1; for sockets and plugs; PVC; red		www.wago	.com/897-200
Tool				
Operating	tool			
Ø	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.: 890-382		www.waqo	.com/890-382
4	Operating tool; 2-way; green			
Mounting				
Mounting	accessories			
K	<b>Item no.: 890-310</b> Mounting carrier; 2- to 5-pole; for flying leads; black		www.wago	.com/890-310
C. C.	ltem no.: 890-311		www.wago.com/890-311	
1.1.1	Mounting carrier; 2- to 5-pole; for flying leads; white			
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WSCAD Universe 890-252	URL	Download
ZUKEN Portal 890-252	URL	Download
Environmental Product Compliance		
Environmental Product Compliance		
Compliance Search		
Environmental Product Compliance 890-252	URL	Download
Plug; 2-pole; 1,50 mm²; gray		

# 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.

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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.

**Mismating protection** 

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# Data sheet | Item number: 890-252 www.wago.com/890-252







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<sup>®</sup> MINI Show all products from the family

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