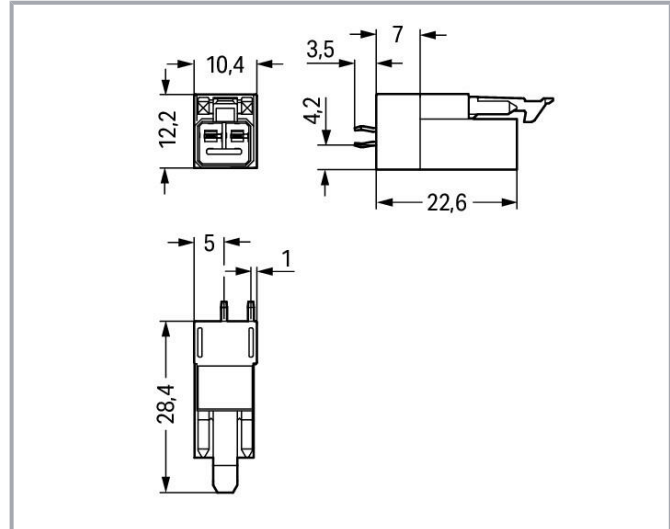


Data sheet | Item number: 890-812

Plug for PCBs; straight; 2-pole; Cod. A; black

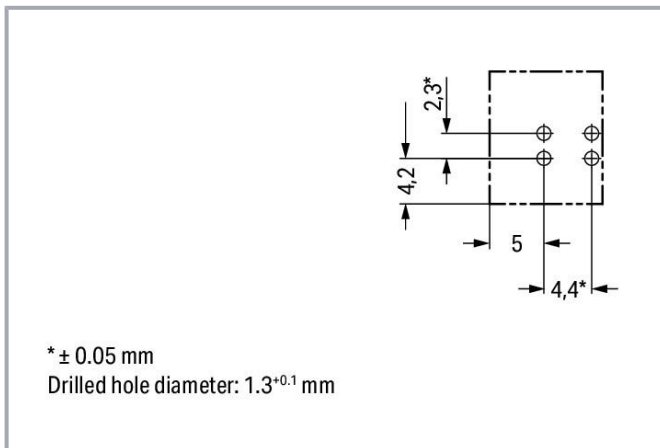
www.wago.com/890-812



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

WAGO GmbH & Co. KG
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32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

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

The *WINSTA®* MINI male connector/plug with protection against mismatching offers very secure handling to support drive and control technology tasks. Our enormous selection of pluggable PCB connectors with various insertion directions and operating variants offers you the perfect solution for your application at all times. 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 pcb connectors, you can clearly distinguish different circuits. Thanks to its particularly small dimensions, our *WINSTA®* MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is very suitable in very tight spaces, i.e., for connections when very little room is available.

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

The *WINSTA®* Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus faster, even more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and installation errors at the construction site. Now you can also lower installation costs without compromising quality and safety: with marking eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- consistent IP40 protection
- for any mains application
- quick replacement of defective units during ongoing operation

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



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) $\hat{=}$ 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 m Ω of contact resistance approx. 0.25 m Ω contact transition plug/socket
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Connection data

Total number of potentials	2
Number of levels	1

Connection 1

Pole number	2
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Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	10.4 mm / 0.41 inches
Height	31.9 mm / 1.256 inches
Height from the surface	28.4 mm / 1.118 inches
Depth	12.2 mm / 0.48 inches

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Solder pin length	3.5 mm
Solder pin dimensions	1 x 0.8 mm
Drilled hole diameter with tolerance	1.3 ^(+0.1) mm

Mechanical Data

Application	General mains applications
Coding	A
Variable coding	No
Marking	N L
Potential marking	N 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
Design	straight

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	Yes
Note on mismating protection	All <i>WINSTA</i> ® 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
Mating direction to the PCB	90 °
Locking lever	yes
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).

PCB contact

PCB contact	THT
Solder pin arrangement	2 in-line solder pins/pole

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



Number of solder pins per potential	2
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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	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.057 MJ
Weight	2.4 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
ECCN	NO DATA
PU (SPU)	100 pcs
Packaging type	box
Country of origin	PL
GTIN	4050821695493
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.	EN 61535	71-123231
	CCA DEKRA Certification B.V.	IEC 61535	NL-85020
	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)

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Counterpart


Item no.890-102

 Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black

www.wago.com/890-102

Item no.890-202

 Socket; 2-pole; Cod. A; 1,50 mm²; black

www.wago.com/890-202

Item no.890-202/342-000

 Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black

www.wago.com/890-202/342-000

Item no.891-8992/005-101

 pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; black

www.wago.com/891-8992/005-101

Item no.891-8992/105-101

 pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; black

www.wago.com/891-8992/105-101

Downloads

CAD/CAE-Data

CAD data

2D/3D Models 890-812

URL

Download

PCB Design

Symbol and Footprint via Ultra Librarian 890-812

URL

Download

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics
- BoardStation

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- Mentor Graphics Design Architect
- Mentor Graphics Design
- Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Symbol and Footprint via SamacSys 890-812

URL

Download

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA

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- eCADSTAR
- KiCad
- OrCAD_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

CAE data

ZUKEN Portal 890-812	URL	Download
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Asset Administration Shell

Asset Administration Shell 890-812	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-812	URL	Download
Plug for PCBs; straight; 2-pole; Cod. A; black		

Installation Notes

Product family

WINSTA® MINI
[Show all products from the family](#)

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