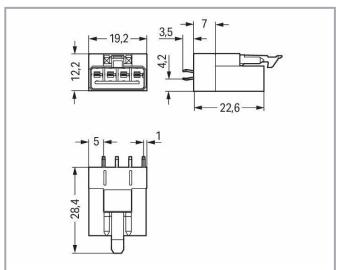
Plug for PCBs; straight; 4-pole; Cod. A; black

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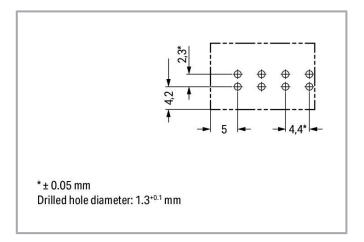




 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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## Item description

## Male connector/plug WINSTA® MINI A coding

The WINSTA® MINI male connector/plug 4-pole saves money and space thanks to its compact dimensions. Our enormous selection of pluggable PCB connectors with different insertion directions and operating variants offers you the perfect solution for your application at any time. For greater protection in electrical installations, the pcb connector is provided with mechanical protection against mismating. Thanks to the color coding and mechanical A coding of WINSTA® MINI pcb connectors, you can clearly distinguish different circuits. WINSTA® MINI satisfies the demand for 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 less and less space for the connection technology.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and therefore more efficient, more reliable, and error-free. Using this pre-assembled system reduces assembly times and errors during installation at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with *WINSTA®* MINI pcb connectors with marking from WAGO.

- \_
- effective protection against mismating
- compact design for conductors with a cross-section up to 1.5 mm²
- suitable for any application
- convenient installation and commissioning

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

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# 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	12 A

## General

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

## Connection data

Total number of potentials	4
Number of levels	1
PE function	Preceding PE contact

# Connection 1

# Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	19.2 mm / 0.756 inches
Height	31.9 mm / 1.256 inches
Height from the surface	28.4 mm / 1.118 inches

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Depth	12.2 mm / 0.48 inches
Solder pin length	3.5 mm
Solder pin dimensions	1 x 0.8 mm
Drilled hole diameter with tolerance	1.3 <sup>(+0.1)</sup> mm

#### **Mechanical Data**

Application	General mains applications
Coding	A
Variable coding	No
Marking	1/L' 2/L
Potential marking	1/L' 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
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 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
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

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Solder pin arrangement	2 in-line solder pins/pole
Number of solder pins per potential	2

#### **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	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.083 MJ
Weight	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
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4050821695516
Customs tariff number	85366990990

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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# Approvals / Certificates

## General approvals

Logo	Approval	Additional Approval Text	Certificate name
KEMA	CCA DEKRA Certification B.V.	EN 61535	71- 123231
	CCA DEKRA Certification B.V.	IEC 61535	NL-85020
c <b>AL</b> us	cURus Underwriters Laboratories Inc.	UL 1977	E45171

## Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
CE	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK	UK-Declaration of Conformity WAGO GmbH & Co. KG	<del>-</del>	-

## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	Steel Vessel Rules	19- HG1869855- PDA
DNV DNVCOMAF	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
OLONG THE PROPERTY OF THE PROP	LR Lloyds Register	EN 61535	08/20047 (E2)

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## Counterpart



Item no.890-104
Socket; with strain relief housing; 4-pole; Cod. A; 1,50 mm²; black

www.wago.com/890-104



Item no.890-204 Socket; 4-pole; Cod. A; 1,50 mm<sup>2</sup>; black

www.wago.com/890-204

Item no.891-8994/106-101

pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

www.wago.com/891-8994

/106-101

Item no.891-8994/006-101

pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black

www.wago.com/891-8994

/006-101

# Downloads CAD/CAE-Data

#### **CAD** data

2D/3D Models 890-814 URL Download

#### **PCB** Design

Symbol and Footprint 890-814

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
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- 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

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- 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

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

#### CAE data

ZUKEN Portal 890-814 URL Download

## **Environmental Product Compliance**

Compliance Search

Environmental Product Compliance 890-814 URL

Plug for PCBs; straight; 4-pole; Cod. A; black

RL Download

## **Installation Notes**

# **Product family**

WINSTA® MINI

Show all products from the family

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

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