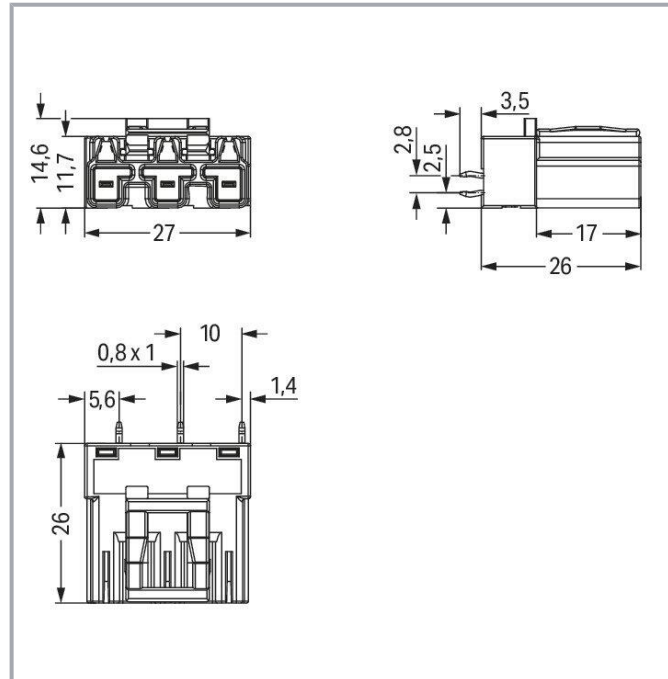


**Data sheet | Item number: 770-813**

Plug for PCBs; straight; 3-pole; Cod. A; black

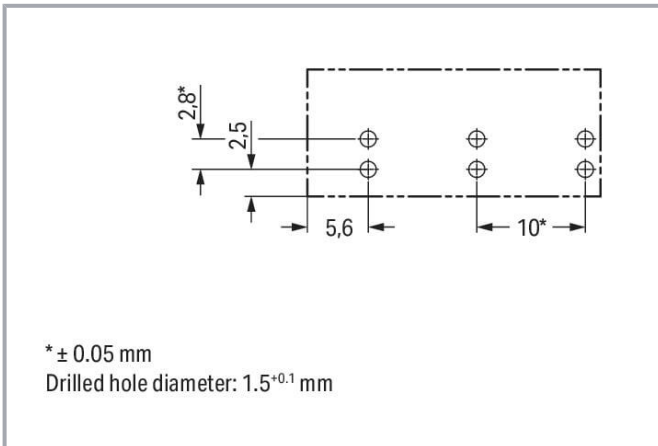
[www.wago.com/770-813](http://www.wago.com/770-813)



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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## Item description

### Male connector/plug *WINSTA*® MIDI A coding

The *WINSTA*® MIDI male connector/plug with protection against mismatching offers easy, secure handling to support drive and control technology tasks. The pluggable PCB connectors with spring pressure connection technology and Push-in CAGE CLAMP® technology from WAGO permit maintenance free terminal connections. The coding options reduce installation errors, allowing fast, secure wiring of all components. Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pcb connectors, you can clearly distinguish different circuits. Important parameters in the selection of a pcb connectors are the rated current and voltage: They provide information about possible domains of use and applications. This product has a current rating of 25 A – so it is suitable for high power loads. Our *WINSTA*® MIDI product line offers maximum flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers customization and flexibility for meeting various installation requirements.

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

The *WINSTA*® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Now you can also lower installation expenses without compromising quality and safety: with marking reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- for automation controllers
- with A coding for a large number of uses
- convenient installation and commissioning

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	25 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 16 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	23 A

**General information**

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	3
Number of levels	1
PE function	Preceding PE contact

**Connection 1**

Pole number	3
-------------	---

**Physical data**

Pin spacing	10 mm / 0.394 inches
Width	27 mm / 1.063 inches
Height	29.5 mm / 1.161 inches
Height from the surface	26 mm / 1.024 inches
Depth	14.6 mm / 0.575 inches

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Solder pin length	3.5 mm
Solder pin dimensions	1 x 0.8 mm
Drilled hole diameter with tolerance	1.5 <sup>(-0.1 ... +0.1)</sup> mm

## Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N $\nabla$ L
Potential marking	N $\nabla$ 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> <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
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

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Number of solder pins per potential	2
-------------------------------------	---

## Material data

Note (material data)

Information on material specifications can be found here

Color	black
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	0.18 MJ
Weight	6.7 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

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	4044918511445
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------




## Approvals / Certificates

### General approvals


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Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61535	71- 123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172

## Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1868589- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

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## Counterpart



Item no. 770-103

Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm<sup>2</sup>; black[www.wago.com/770-103](http://www.wago.com/770-103)

Item no. 770-203

Socket; 3-pole; Cod. A; 4,00 mm<sup>2</sup>; black[www.wago.com/770-203](http://www.wago.com/770-203)

Item no. 770-203/035-000

Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm<sup>2</sup>; black[www.wago.com/770-203/035-000](http://www.wago.com/770-203/035-000)

Item no. 771-9993/006-101

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black[www.wago.com/771-9993/006-101](http://www.wago.com/771-9993/006-101)

Item no. 771-9993/106-101

pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black[www.wago.com/771-9993/106-101](http://www.wago.com/771-9993/106-101)

## Required accessories

### Cover

Cover



Item no.: 770-360

Lockout cap; for plugs; 5-pole; separable; yellow

[www.wago.com/770-360](http://www.wago.com/770-360)

## Optional accessories

### Coding

Coding



Item no.: 770-401

Coding pin; for plugs; Plastic; gray

[www.wago.com/770-401](http://www.wago.com/770-401)

## Downloads

### CAD/CAE-Data

#### CAD data

2D/3D Models 770-813

URL

Download

#### CAE data

EPLAN Data Portal 770-813

URL

Download

ZUKEN Portal 770-813

URL

Download

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PCB Design

Symbol and Footprint 770-813	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
- 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

Asset Administration Shell

Asset Administration Shell 770-813	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-813  
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Hansastr. 27  
32423 Minden  
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Plug for PCBs; straight; 3-pole; Cod. A; black

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## Installation Notes

## Product family

**WINSTA® MIDI**

[Show all products from the family](#)

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32423 Minden

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