

**Data sheet | Item number: 770-704**

Snap-in socket; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black

[www.wago.com/770-704](http://www.wago.com/770-704)



**Color:**

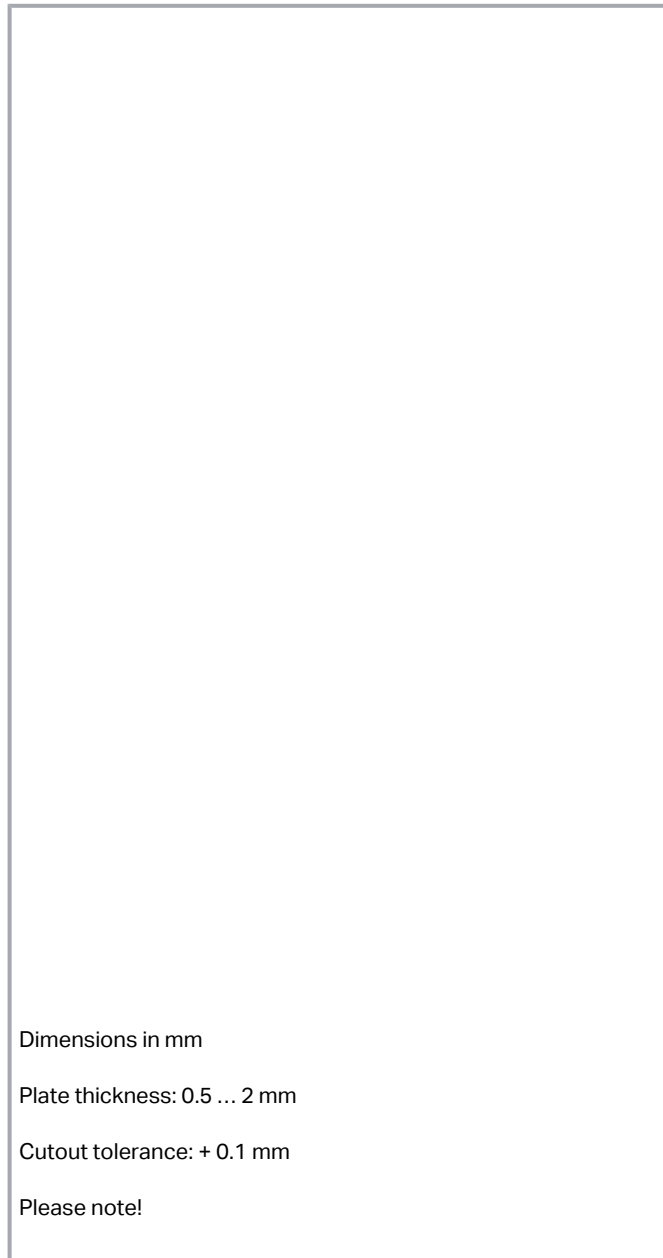


Subject to changes. Please also observe the further product documentation!

---

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)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



Dimensions in mm

Plate thickness: 0.5 ... 2 mm

Cutout tolerance: + 0.1 mm

Please note!

## Item description

### Female connector/socket *WINSTA*® MIDI with protection type IP20

The *WINSTA*® MIDI female connector/socket with protection against mismatching supports rapid, correct installation. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of

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



requirements in no time flat. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. The pluggable installation connector is protected in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). That results in the fact that users' fingers will never come into contact with live elements. Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. This pluggable installation connector can be used for a current load of up to 25 A. Therefore, it can also be used for high power loads. The *WINSTA*® MIDI product line allows total flexibility for the installation of applications. Through its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers customization and flexibility for meeting all installation requirements.

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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It offers error-free installation of cables and components, quickly and reliably. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with *WINSTA*® MIDI pluggable installation connectors with locking lever from WAGO.

- pluggable installation connectors with protection against mismating
- simple circuits
- with A coding for use in many general mains applications
- flexible installation to save space
- convenient installation and commissioning

### **Data**

#### **Notes**

Note	The snap-in connectors must be relieved of tensile and transverse forces. A surface finish can influence the edge radius of the cutouts. This may affect the snap-in socket fit, so ensure an adequate fit before use. In addition, the punched edge should be on the inside for punched cutouts. The wings of the snap-in connectors must not be mechanically stressed for a long period before use (e.g., due to a pre-locking position).
------	--

### **Electrical data**

#### **Ratings per IEC/EN**

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V

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)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



Rated impulse voltage (III/3)	6 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

Connection points	8
Total number of potentials	4

### Connection 1

Connection technology	Push-in CAGE CLAMP <sup>®</sup>
Actuation type	Operating tool Push-in
Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
Solid conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
Solid conductor; push-in termination	1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG
Stranded conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm <sup>2</sup> / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	4
Conductor entry direction to mating direction	0°

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



## Physical data

Pin spacing	10 mm / 0.394 inches
Width	45.5 mm / 1.791 inches
Height	18.5 mm / 0.728 inches
Depth	37.5 mm / 1.476 inches

## Mechanical Data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N $\perp$ 2/L 1/L'
Potential marking	N $\perp$ 2/L 1/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
Housing sheet thickness	0.5 ... 2 mm / 0.02 ... 0.079 inches
Mounting type	Snap-in flange
Protection type	IP20; When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

## Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All WINSTA <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	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

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



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	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	0.211 MJ
Weight	15.7 g

## Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Insulating parts for temperatures $\leq 105$ °C

## Commercial data

Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-02
eCl@ss 9.0	27-44-06-02
ETIM 8.0	EC002566
ETIM 7.0	EC002566
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918252584
Customs tariff number	85366990990

## Environmental Product Compliance

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

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



## Approvals / Certificates

### General approvals

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

### Declarations of conformity and manufacturer's declarations

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

### Approvals for marine applications

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

## Counterpart

<b>Item no.770-114</b> Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-114">www.wago.com/770-114</a>
<b>Item no.771-9994/006-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-9994/006-101">www.wago.com/771-9994/006-101</a>
<b>Item no.770-214</b> Plug; 4-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-214">www.wago.com/770-214</a>
<b>Item no.771-9994/206-101</b> pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-9994/206-101">www.wago.com/771-9994/206-101</a>

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)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Optional accessories

### Cover

Cover		
<b>Item no.: 770-694</b>	Lockout cap; 4-pole; for cutouts; Plastic; white	<a href="http://www.wago.com/770-694">www.wago.com/770-694</a>
<b>Item no.: 770-644</b>	Lockout cap; 4-pole; for cutouts; Plastic; black	<a href="http://www.wago.com/770-644">www.wago.com/770-644</a>
<b>Item no.: 770-201</b>	Lockout cap; 12-pole, separable; for sockets; Plastic; black	<a href="http://www.wago.com/770-201">www.wago.com/770-201</a>
<b>Item no.: 770-221</b>	Lockout cap; 12-pole, separable; for sockets; Plastic; white	<a href="http://www.wago.com/770-221">www.wago.com/770-221</a>

### Tool

Operating tool		
<b>Item no.: 210-719</b>	Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-719">www.wago.com/210-719</a>

## Downloads

### Documentation

#### Bid Text

770-704 X81 - Datei	2019 年2月19日	xml 3.0 kB	Download
770-704 doc - Datei	2015 年6月8日	doc 23.6 kB	Download

### CAD/CAE-Data

#### CAD data

2D/3D Models 770-704	URL	Download
----------------------	-----	----------

#### CAE data

EPLAN Data Portal 770-704	URL	Download
WSCAD Universe 770-704	URL	Download
ZUKEN Portal 770-704	URL	Download

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)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 770-704  
Snap-in socket; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black

URL

Download

## Installation Notes

### Conductor termination



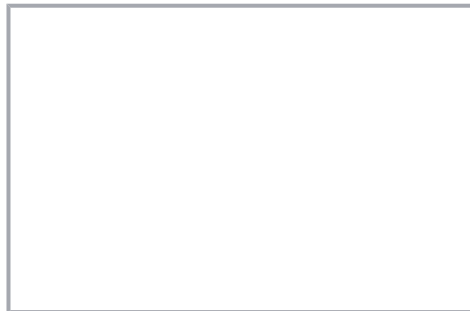
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



Insert the stripped solid conductor until it hits the backstop.



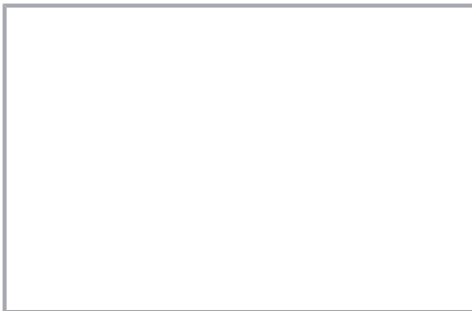
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

### Conductor removal

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



To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.



Seal unused cutout with lockout cap.

## Product family

**WINSTA® MIDI**

[Show all products from the family](#)

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