

**Data sheet | Item number: 770-305**

Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black

[www.wago.com/770-305](http://www.wago.com/770-305)



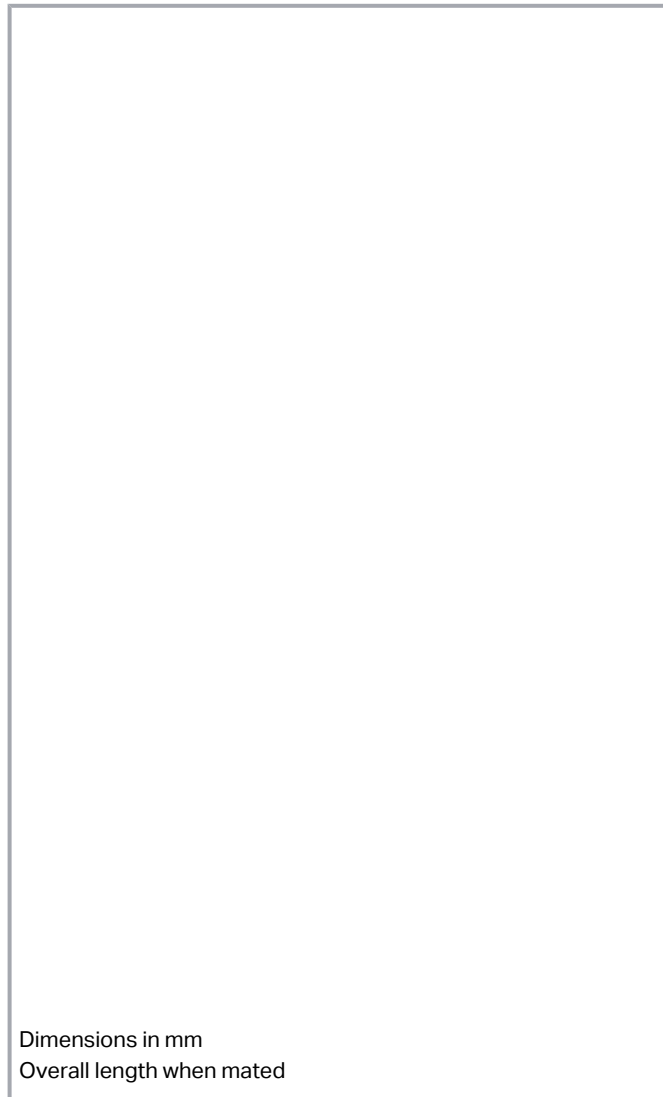
**Color:**

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.



## Item description

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

Use effective pluggable connections instead of laborious screw connections: With the *WINSTA*® MIDI female connector/socket rated current 25 A. Our pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in a large number of applications. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. The pluggable installation connector is protected in accordance with protection type IP20 (When mated and secured with a strain relief housing: 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 electrified elements. General mains applications for almost any domain of use can be implemented with *WINSTA*® MIDI pluggable installation connectors with A coding.

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



The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – therefore it is also suitable for powerful loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Thanks to the included test slot, connections can be checked even when they are plugged in. This saves time, labor, and money. The strip length is 55 mm.

### Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, more reliable, and error-free. Using this pre-assembled system reduces assembly times and installation errors at the construction site. Now you can also reduce installation expenses without compromising safety and quality: The WINSTA® MIDI pluggable installation connector with protection against mismatching reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- for automation controllers
- suitable for any application
- custom-engineered solutions
- fast, secure installation

## Data

### Electrical data

#### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	25 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 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

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



## General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
----------------------------	--

## Connection data

Connection points	5
Total number of potentials	5

## Connection 1

Connection technology	Push-in CAGE CLAMP®
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	5
Conductor entry direction to mating direction	0°
Strip length (outer insulation)	55 mm

## Physical data

Pin spacing	10 mm / 0.394 inches
Width	54.6 mm / 2.15 inches
Height	17 mm / 0.669 inches
Depth	76 mm / 2.992 inches

## Mechanical Data

Application	General mains applications
Coding	A
Variable coding	Yes

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.



Marking	N $\downarrow$ L1 L2 L3
Potential marking	N $\downarrow$ L1 L2 L3
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
Protection type	IP20; When mated and secured with a strain relief housing: 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	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).
Strain relief	strain relief housing

### 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

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



Contact plating	Tin
Fire load	0.64 MJ
Weight	29.2 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)	25 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918252478
Customs tariff number	85366990990

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CCA</b> DEKRA Certification B.V.	IEC 61535	NL -84761
	<b>CCA</b> DEKRA Certification B.V.	EN 61535	71- 123228
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1059	E 45172
	<b>VDE</b> VDE Prüf- und Zertifizierungsinstitut	EN 61984	40002889

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.



## 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.770-115</b> Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-115">www.wago.com/770-115</a>
<b>Item no.770-315</b> Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-315">www.wago.com/770-315</a>
<b>Item no.770-415</b> Plug; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-415">www.wago.com/770-415</a>
<b>Item no.770-215</b> Plug; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-215">www.wago.com/770-215</a>
<b>Item no.770-622</b> T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/770-622">www.wago.com/770-622</a>
<b>Item no.770-609</b> 3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; black	<a href="http://www.wago.com/770-609">www.wago.com/770-609</a>
<b>Item no.770-621</b> T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	<a href="http://www.wago.com/770-621">www.wago.com/770-621</a>
<b>Item no.770-640</b> Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; black	<a href="http://www.wago.com/770-640">www.wago.com/770-640</a>
<b>Item no.770-659</b> 3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; white	<a href="http://www.wago.com/770-659">www.wago.com/770-659</a>
<b>Item no.770-715</b> Snap-in plug; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-715">www.wago.com/770-715</a>
<b>Item no.770-715/007-000</b> Snap-in plug; with direct ground contact; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-715/007-000">www.wago.com/770-715/007-000</a>
<b>Item no.770-815</b> Plug for PCBs; straight; 5-pole; Cod. A; black	<a href="http://www.wago.com/770-815">www.wago.com/770-815</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.



<b>Item no.771-9995/006-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-9995/006-101">www.wago.com/771-9995/006-101</a>
<b>Item no.770-815/011-000</b> Plug for PCBs; angled; 5-pole; Cod. A; black	<a href="http://www.wago.com/770-815/011-000">www.wago.com/770-815/011-000</a>
<b>Item no.899-631/100-000</b> Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black	<a href="http://www.wago.com/899-631/100-000">www.wago.com/899-631/100-000</a>
<b>Item no.899-631/105-000</b> Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black	<a href="http://www.wago.com/899-631/105-000">www.wago.com/899-631/105-000</a>
<b>Item no.771-9995/206-101</b> pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-9995/206-101">www.wago.com/771-9995/206-101</a>
<b>Item no.899-631/187-000</b> Distribution box; Three-phase current (400 V); 1 input; 5 outputs; Cod. A; MIDI; black	<a href="http://www.wago.com/899-631/187-000">www.wago.com/899-631/187-000</a>
<b>Item no.899-631/302-000</b> Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black	<a href="http://www.wago.com/899-631/302-000">www.wago.com/899-631/302-000</a>
<b>Item no.899-631/346-000</b> Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black	<a href="http://www.wago.com/899-631/346-000">www.wago.com/899-631/346-000</a>

## Required accessories

### Locking levers

#### Locking system

<b>Item no.: 770-121</b> Locking lever; for flying leads; for manual operation; white	<a href="http://www.wago.com/770-121">www.wago.com/770-121</a>
<b>Item no.: 770-131</b> Locking lever; for flying leads; for tool operation; white	<a href="http://www.wago.com/770-131">www.wago.com/770-131</a>
<b>Item no.: 770-101</b> Locking lever; for flying leads; for manual operation; black	<a href="http://www.wago.com/770-101">www.wago.com/770-101</a>
<b>Item no.: 770-111</b> Locking lever; for flying leads; for tool operation; black	<a href="http://www.wago.com/770-111">www.wago.com/770-111</a>

### Cover

#### Cover

<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>

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





## Optional accessories

### Tool

Wiring aid		
<b>Item no.: 770-100</b>		<a href="http://www.wago.com/770-100">www.wago.com/770-100</a>
Wiring aid; 2- to 5-pole; Plastic; orange		
Operating tool		
<b>Item no.: 210-719</b>		<a href="http://www.wago.com/210-719">www.wago.com/210-719</a>
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft		

### Cover

Cover		
<b>Item no.: 897-2005</b>		<a href="http://www.wago.com/897-2005">www.wago.com/897-2005</a>
Protective cap; Type4; for sockets and plugs; PVC; red		

### Marking accessories

Marker		
<b>Item no.: 770-450/000-002</b>		<a href="http://www.wago.com/770-450/000-002">www.wago.com/770-450/000-002</a>
Marker card; Plastic; yellow		
<b>Item no.: 770-450/000-001</b>		<a href="http://www.wago.com/770-450/000-001">www.wago.com/770-450/000-001</a>
Marker card; Plastic; green		
<b>Item no.: 770-450/000-005</b>		<a href="http://www.wago.com/770-450/000-005">www.wago.com/770-450/000-005</a>
Marker card; Plastic; red		
<b>Item no.: 770-450</b>		<a href="http://www.wago.com/770-450">www.wago.com/770-450</a>
Marker card; Plastic; white		
<b>Item no.: 770-450/000-006</b>		<a href="http://www.wago.com/770-450/000-006">www.wago.com/770-450/000-006</a>
Marker card; Plastic; blue		
<b>Item no.: 770-450/000-012</b>		<a href="http://www.wago.com/770-450/000-012">www.wago.com/770-450/000-012</a>
Marker card; Plastic; orange		

## Downloads

### Documentation

#### Bid Text

770-305	2019 年2月19日	xml	Download
X81 - Datei		3.1 kB	
770-305	2015 年6月8日	doc	Download

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

doc - Datei

24.6 kB

## CAD/CAE-Data

### CAD data

2D/3D Models 770-305	<a href="#">URL</a>	<a href="#">Download</a>
----------------------	---------------------	--------------------------

### CAE data

EPLAN Data Portal 770-305	<a href="#">URL</a>	<a href="#">Download</a>
---------------------------	---------------------	--------------------------

WSCAD Universe 770-305	<a href="#">URL</a>	<a href="#">Download</a>
------------------------	---------------------	--------------------------

ZUKEN Portal 770-305	<a href="#">URL</a>	<a href="#">Download</a>
----------------------	---------------------	--------------------------

## Environmental Product Compliance

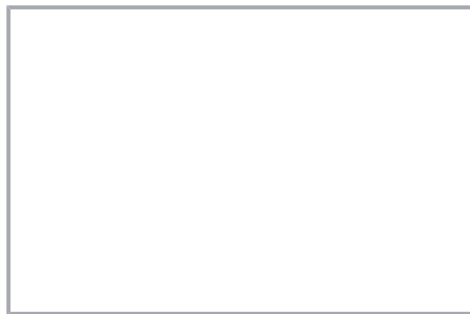
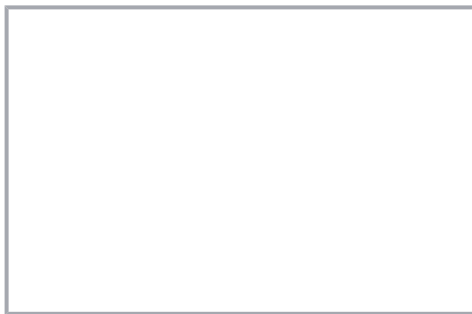
### Compliance Search

Environmental Product Compliance 770-305	<a href="#">URL</a>	<a href="#">Download</a>
--	---------------------	--------------------------

Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black

## 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.

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.

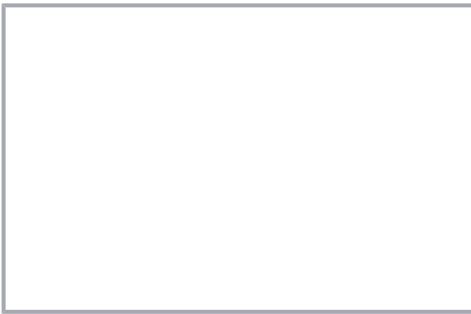


Insert the stripped solid conductor until it hits the backstop.



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

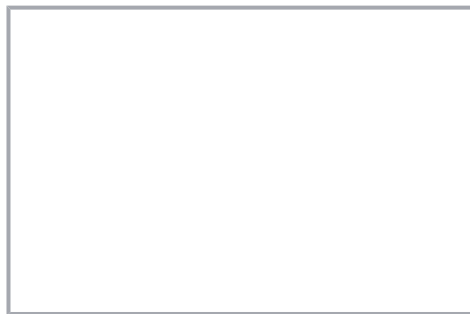


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

### Installation



We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug /socket. Note the "TOP" inscription.

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



Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw with screwdriver (2.5 mm blade width).

## Product family

**WINSTA® MIDI**

[Show all products from the family](#)

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.