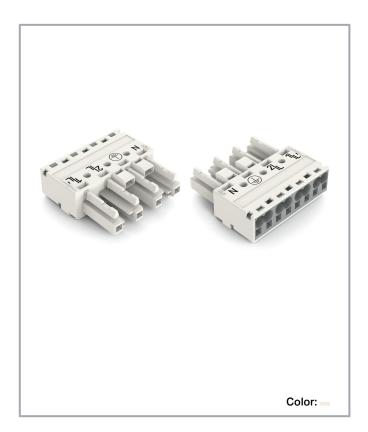
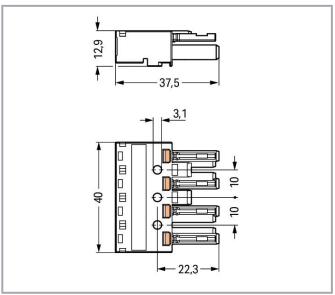
Socket; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; white

www.wago.com/770-224







## 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. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in seconds. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. The pluggable installation connector is protected against ingress by solid objects 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!)). Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They tell us about the product's domains of use. This product has a current rating of 25 A – as a result it is also suitable for powerful loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Due to the built-in test slot, connections can be checked even when they are plugged in. That saves time and reduces installation labor and expense.

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

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# 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, even more reliable, and error-free. Using this pre-assembled system decreases assembly times and installation errors at the construction site. Now you can also reduce installation costs without compromising safety and quality: The WINSTA® MIDI pluggable installation connector with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- protection against mismating eliminates errors
- for automation controllers
- with A coding for use in many general mains applications
- 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

## General

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

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## **Connection data**

Connection points	8
Total number of potentials	4

# Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
	Push-in
Nominal cross-section	4 mm² / 12 AWG
Solid conductor	0.5 4 mm² / 20 12 AWG
Solid conductor; push-in termination	1.5 4 mm² / 16 12 AWG
Stranded conductor	0.5 2.5 mm² / 20 14 AWG
Fine-stranded conductor	0.5 4 mm² / 20 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 1.5 mm² / 20 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 2.5 mm² / 20 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	4
Conductor entry direction to mating direction	0 °

# Physical data

Pin spacing	10 mm / 0.394 inches
Width	40 mm / 1.575 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

## **Mechanical Data**

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N
Potential marking	N
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

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

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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® 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).

#### **Material Data**

Note (material data)

Information on material specifications can be found here

Color	white
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	0.218 MJ
Weight	12.5 g

# **Environmental requirements**

Processing temperature -5 ... +40 °C

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

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Continuous	operating temperature	-35 +85 °C	
Note on continuous operating temperature		Insulating parts for temperatures ≤ 105 °C	
Commercia	al data		
		00 (M/, 1, 1)	
Product Gro	·	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 t		box	
Country of c	origin	DE	
GTIN		4044918252386	
Customs tar	riff number	85366990990	
Approvals /	/ Certificates		
General appro	ovals		
Logo	Approval	Additional Approval Text	Certificate name
	CCA	IEC 61535	NL -84761
	DEKRA Certification B.V.		
KEMA	CCA DEKRA Certification B.V.	EN 61535	71- 123228
c <b>911</b> °us	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171
VDE	VDE VDE Prüf- und Zertifizierungsinstitut	EN 61984	40002889
Declarations	of conformity and manufacturer's declarations		Certificate
Logo	Approval	Additional Approval Text	name
Subject to cha	anges. Please also observe the further product docum	entation!	
WAGO GmbH	& Co. KG	Do you have any questions about our products?	
Honocotr 27		We are always because take your call at 140 (E71) 0	

05.06.2023 Page 5/13





**EU-Declaration of Conformity** WAGO GmbH & Co. KG

Approvals for marine applications			0.115
Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	-	19- HG1868589- PDA
DNV DNVCOM/AF	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
O LR FTI AMADON. NOME	LR Lloyds Register	IEC 61984	LR22429487TA

# Counterpart

	Item no.770-134 Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; white	www.wago.com/770-134
	Item no.770-234 Plug; 4-pole; Cod. A; 4,00 mm²; white	www.wago.com/770-234
The Last	Item no.770-6224 Linect® T-connector; 4-pole; Cod. A; 1 input; 2 outputs; white	www.wago.com/770-6224
	Item no.770-676 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white	www.wago.com/770-676
	Item no.770-677 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white	www.wago.com/770-677

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www.wago.com/770-224





Item no.770-734

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

www.wago.com/770-734



Item no.770-734/007-000

Snap-in plug; with direct ground contact; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; white

www.wago.com/770-734/007-

000



Item no.770-994

h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white

www.wago.com/770-994



Item no.770-834

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

www.wago.com/770-834



Item no.770-834/011-000

Plug for PCBs; angled; 4-pole; Cod. A; white

www.wago.com/770-834/011-

000



Item no.770-995

h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for www.wago.com/770-995 flying leads; white

Item no.771-9994/006-102

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>; white

www.wago.com/771-9994

/006-102

# :—<del></del>

Item no.771-9994/206-102

pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm<sup>2</sup>; white

www.wago.com/771-9994

/206-102

# Required accessories

#### Strain relief

Strain relief housing



Item no.: 770-504/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

www.wago.com/770-504

/023-000



Item no.: 770-514

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

www.wago.com/770-514

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Item no.: 770-504

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

www.wago.com/770-504



Item no.: 770-514/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

www.wago.com/770-514

/023-000

Cover

Cover



Item no.: 770-201

Lockout cap; 12-pole, separable; for sockets; Plastic; black

www.wago.com/770-201



Item no.: 770-221

Lockout cap; 12-pole, separable; for sockets; Plastic; white

www.wago.com/770-221

Locking levers

Locking system



Item no.: 770-121

Locking lever; for flying leads; for manual operation; white

www.wago.com/770-121



Item no.: 770-131

Locking lever; for flying leads; for tool operation; white

www.wago.com/770-131



Item no.: 770-101

Locking lever; for flying leads; for manual operation; black

www.wago.com/770-101



Item no.: 770-111

Locking lever; for flying leads; for tool operation; black

www.wago.com/770-111

Optional accessories

Tool

Operating tool



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719

Mounting

Snap-in frame



Item no.: 770-319

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-319

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Item no.: 770-339

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-339

Marking acc	essories	
Marker		
	Item no.: 770-450/000-002 Marker card; Plastic; yellow	www.wago.com/770-450 /000-002
-		
	Item no.: 770-450/000-001	www.wago.com/770-450
Tip	Marker card; Plastic; green	/000-001
	Item no.: 770-450/000-005	www.wago.com/770-450
Tp	Marker card; Plastic; red	/000-005
	Item no.: 770-450	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1	Marker card; Plastic; white	www.wago.com/770-450
	Item no.: 770-450/000-006	www.wago.com/770-450
Trans	Marker card; Plastic; blue	/000-006
	Item no.: 770-450/000-012	www.wago.com/770-450
Tip	Marker card; Plastic; orange	/000-012
Cover		
Cover		
	U 007 0005	
	Item no.: 897-2005	www.wago.com/897-2005
	Protective cap; Type4; for sockets and plugs; PVC; red	

# Downloads Documentation

**Bid Text** 

770-224 2019 Feb 19 xml Download

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

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770-224	2018 Apr 10	docx	Download
docx - Datei		14.7 kB	
770-224	2018 Apr 10	doc	Download
doc - Datei		24.1 kB	

## CAD/CAE-Data

CAD data

2D/3D Models 770-224		Download
CAE data		
EPLAN Data Portal 770-224	URL	Download
WSCAD Universe 770-224	URL	Download
ZUKEN Portal 770-224	URL	Download

# **Environmental Product Compliance**

Compliance Search

Environmental Product Compliance 770-224

Socket; 4-pole; Cod. A; 4,00 mm²; white

## **Installation Notes**

Conductor termination

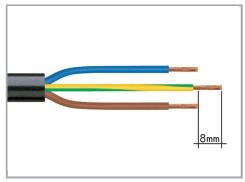
 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

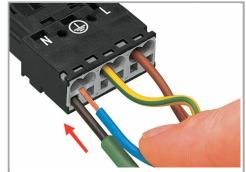
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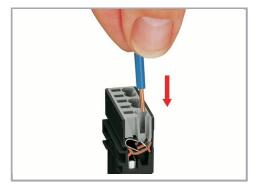


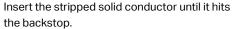


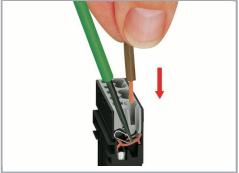


- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm

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.







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.

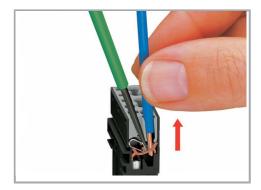
#### Conductor removal

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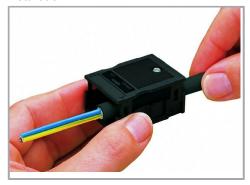
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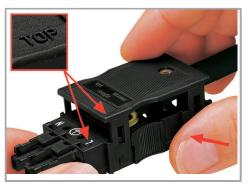


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### 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.

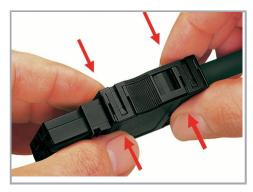


Latch the strain relief housing onto the plug /socket. Note the "TOP" inscription.

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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

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

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