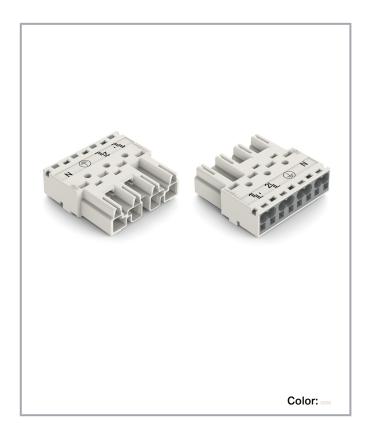
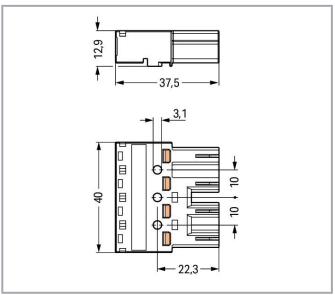
Plug; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; white

www.wago.com/770-234







# Item description

# Male connector/plug WINSTA® MIDI rated current 25 A

For power and signal transmission: The *WINSTA*® MIDI male connector/plug A coding. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in next to no time. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including 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!)). Standard mains applications for almost any domain of use can be realised with *WINSTA*® MIDI pluggable installation connectors with A coding. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. Our *WINSTA*® MIDI product line guarantees total flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers customization and flexibility for meeting all installation requirements.

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 | Web: www.wago.com

www.wago.com/770-234



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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Choose quality and durability – the WINSTA® MIDI pluggable installation connector with protection type IP20 from WAGO makes the electrical installation of electrical components noticeably easier.

- protection against mismating eliminates errors
- pre-assembled versions
- with A coding for a great number of applications
- exact dimensions
- convenient installation and commissioning

#### 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

	of contact resistance
approx. 0.25 m	nΩ contact transition plug/socket

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 | Web: www.wago.com Do you have any questions about our products?

www.wago.com/770-234



# Connection data

Connection points	8
Total number of potentials	4
PE function	Preceding PE contact

#### 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 mm <sup>2</sup> / 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	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

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

WAGO GmbH & Co. KG

Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com Do you have any questions about our products?

www.wago.com/770-234



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)	Male connector/plug
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	0.258 MJ
Weight	12.9 g

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

WAGO GmbH & Co. KG

Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com Do you have any questions about our products?



# **Environmental requirements**

Processing temperature	-5 +40 °C
Continuous operating temperature	-35 +85 ℃
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	DE
GTIN	4044918254595
Customs tariff number	85366990990

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

# General approvals

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



/DE EN 61984 40002889

VDE Prüf- und Zertifizierungsinstitut



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 | Web: www.wago.com Do you have any questions about our products?



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



# Approvals for marine applications

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



D. 1	Harr	in.
33	(Br	271
	20	66

Item no.770-124

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

www.wago.com/770-124



Item no.770-224

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

www.wago.com/770-224



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

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

WAGO GmbH & Co. KG Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com Do you have any questions about our products?

www.wago.com/770-234





#### 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



#### Item no.770-724

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

www.wago.com/770-724



#### Item no.770-724/009-000

Snap-in socket; with protruding mating face; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; white

www.wago.com/770-724/009-

000



#### Item no.770-824

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

www.wago.com/770-824



#### Item no.770-824/011-000

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

www.wago.com/770-824/011-

000



#### Item no.770-994

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

www.wago.com/770-994



## 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



## Item no.771-9994/106-102

pre-assembled connecting cable; Eca; Socket/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

/106-102

# Required accessories

# Locking levers

Locking system



#### Item no.: 770-121

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

www.wago.com/770-121

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 | Web: www.wago.com

www.wago.com/770-234





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

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



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

#### Optional accessories

Cover

Cover



Item no.: 770-360

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

www.wago.com/770-360



Item no.: 897-2005

Protective cap; Type4; for sockets and plugs; PVC; red

www.wago.com/897-2005

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

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 | Web: www.wago.com

www.wago.com/770-234



#### Mounting

Snap-in frame Item no.: 770-319 www.wago.com/770-319 Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black Item no.: 770-339 www.wago.com/770-339 Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black Marking accessories Marker Item no.: 770-450/000-002 www.wago.com/770-450 Marker card; Plastic; yellow /000-002 Item no.: 770-450/000-001 www.wago.com/770-450 Marker card; Plastic; green /000-001 Item no.: 770-450/000-005 www.wago.com/770-450 Marker card; Plastic; red /000-005 Item no.: 770-450 www.wago.com/770-450 Marker card; Plastic; white Item no.: 770-450/000-006 www.wago.com/770-450 Marker card; Plastic; blue /000-006 Item no.: 770-450/000-012 www.wago.com/770-450 Marker card; Plastic; orange /000-012

# Downloads Documentation

**Bid Text** 

770-234 2019 Feb 19 xml Download X81 - Datei 3.0 kB

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 | Web: www.wago.com

www.wago.com/770-234



770-234 2015 Jun 8 doc Download doc - Datei 24.1 kB

CAD/CAE-Data

**CAD** data

2D/3D Models 770-234 URL Download

**CAE** data

EPLAN Data Portal 770-234 URL Download

WSCAD Universe 770-234 URL Download

ZUKEN Portal 770-234 URL Download

**Environmental Product Compliance** 

Compliance Search

Environmental Product Compliance 770-234 URL Download Plug; 4-pole; Cod. A; 4,00 mm²; white

**Installation Notes** 

Conductor termination

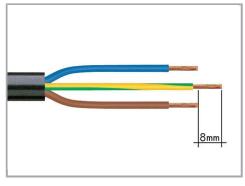
Subject to changes. Please also observe the further product documentation!

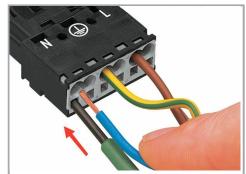
WAGO GmbH & Co. KG Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com

www.wago.com/770-234

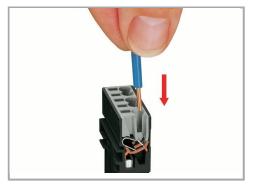


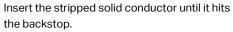


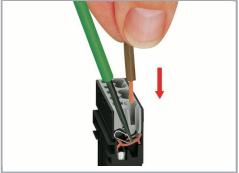


- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm

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

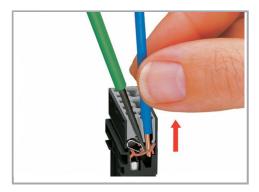
 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

WAGO GmbH & Co. KG Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com

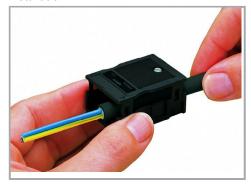
www.wago.com/770-234



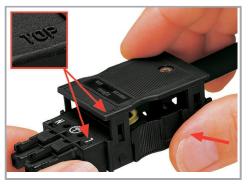


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### 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.

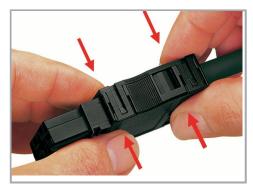


Latch the strain relief housing onto the plug /socket. Note the "TOP" inscription.

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

www.wago.com/770-234







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 | Web: www.wago.com