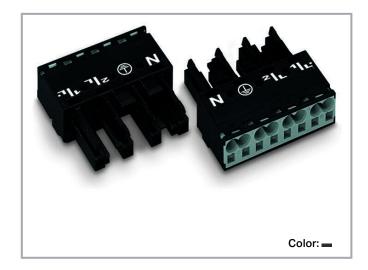
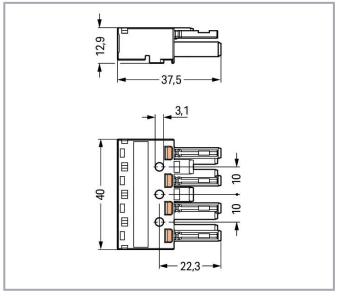
Socket; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black

www.wago.com/770-204







## Item description

# Female connector/socket WINSTA® MIDI with protection against mismating

For signal and power transmission: The *WINSTA*® MIDI female connector/socket with protection against mismating. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow flexible, error-free installation in a large number of applications. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. The pluggable installation connector offers touch-proof protection with live components 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!)). General 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 employed for a current load of up to 25 A. Thus, it can also be used for high power loads. The *WINSTA*® MIDI product line offers total 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 for meeting all installation requirements.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and

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installation errors at the construction site. Choose durability and quality – with marking from WAGO makes the electrical installation of electrical components significantly easier.

- pluggable installation connectors with protection against mismating
- simple circuits
- for any mains application
- ready to install and use immediately
- 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 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

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# 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 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
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!)

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# 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	black
Cover color	gray
Material group	
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.215 MJ
Weight	12.4 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

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# 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
ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918252270
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	EN 61535	71-
KEMA	DEKRA Certification B.V.		123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761
	cURus	UL 1977	E45171
c <b>FL</b> us	Underwriters Laboratories Inc.		
	cURus	UL 1059	E 45172
c <b>FW</b> us	Underwriters Laboratories Inc.		
	VDE	EN 61984	40002889
VDE	VDE Prüf- und Zertifizierungsinstitut		

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# Declarations of conformity and manufacturer's declarations

			Certificate
Logo	Approval	Additional Approval Text	name
CE	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Approvals fo	or marine applications		
			Certificate
Logo	Approval	Additional Approval Text	name
ABS.	ABS American Bureau of Shipping	-	19- HG1868589- PDA
DNV DNV.COM/AF	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
ON LE STATE	<b>LR</b> Lloyds Register	IEC 61984	LR22429487TA

## Counterpart

94	Item no.770-114 Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-114
	Item no.770-214 Plug; 4-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-214
	Item no.770-626 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	www.wago.com/770-626
	Item no.770-627 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	www.wago.com/770-627
T O	Item no.770-714 Snap-in plug; 4-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-714
THE REAL PROPERTY.	Item no.770-714/007-000 Snap-in plug; with direct ground contact; 4-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-714/007
•	Item no.770-814	

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Plug for PCBs; straight; 4-pole; Cod. A; black www.wago.com/770-814 Item no.770-814/011-000 www.wago.com/770-814/011-Plug for PCBs; angled; 4-pole; Cod. A; black 000 Item no.770-944 h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; www.wago.com/770-944 black Item no.770-945 h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for www.wago.com/770-945 flying leads; black Item no.771-9994/006-101 www.wago.com/771-9994 pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm<sup>2</sup>; 1 m; /006-101 1,50 mm2; black

#### Required accessories

Item no.771-9994/206-101

1,50 mm<sup>2</sup>; black

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



Item no.: 770-121 Locking lever; for flying leads; for manual operation; white

www.wago.com/770-121

www.wago.com/771-9994

/206-101



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

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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**

## Mounting

Mounting accessories



Item no.: 770-319

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

www.wago.com/770-319



Item no.: 770-339

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

www.wago.com/770-339

## 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

# Cover

Cover

ltem no.: 897-2005

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

www.wago.com/897-2005

## Marking accessories

Marker



Item no.: 770-450/000-002

Marker card; Plastic; yellow

www.wago.com/770-450 /000-002



Item no.: 770-450/000-001

Marker card; Plastic; green

www.wago.com/770-450

/000-001

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Item no.: 770-450/000-005 Marker card; Plastic; red

www.wago.com/770-450 /000-005



Item no.: 770-450 Marker card; Plastic; white

www.wago.com/770-450



Item no.: 770-450/000-006 Marker card; Plastic; blue www.wago.com/770-450 /000-006



Item no.: 770-450/000-012 Marker card; Plastic; orange

www.wago.com/770-450 /000-012

## Strain relief

Strain relief housing



Item no.: 770-504/020-000 Strain relief housing; 4-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black www.wago.com/770-504

/020-000

# Downloads Documentation

#### **Bid Text**

770-204 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-204 docx - Datei	2018 Apr 10	docx 14.7 kB	Download

# CAD/CAE-Data

#### **CAE** data

EPLAN Data Portal 770-204		Download
WSCAD Universe 770-204	URL	Download
ZUKEN Portal 770-204	URL	Download
CAD data		

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2D/3D Models 770-204

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**URL** 

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#### **Asset Administration Shell**

Asset Administration Shell 770-204 URL Download

# **Environmental Product Compliance**

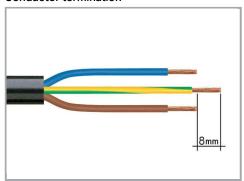
## Compliance Search

Environmental Product Compliance 770-204 Socket; 4-pole; Cod. A; 4,00 mm²; black URL

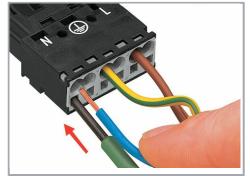
Download

## **Installation Notes**

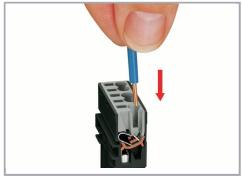
#### Conductor termination



- 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.

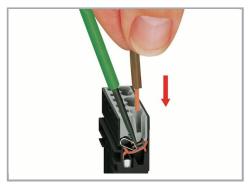
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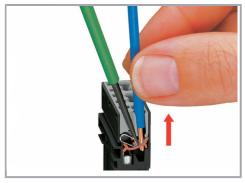
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To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

## Conductor removal



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

## Installation

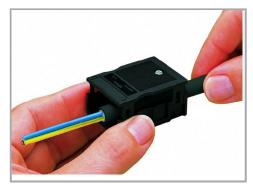
 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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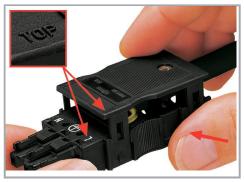
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We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



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



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

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