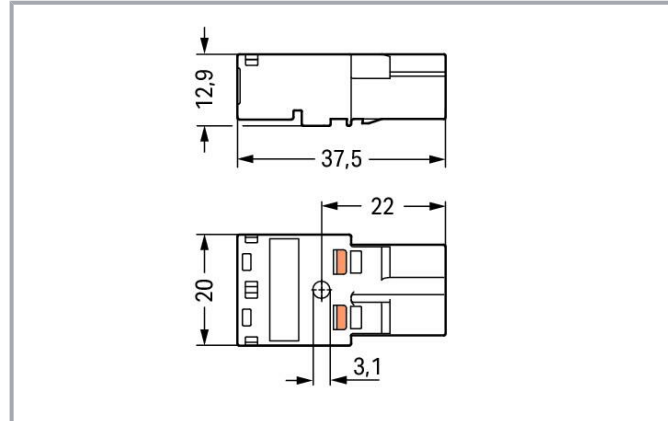


Data sheet | Item number: 770-212  
Plug; 2-pole; Cod. A; 4,00 mm<sup>2</sup>; black

[www.wago.com/770-212](http://www.wago.com/770-212)



## Item description

### Male connector/plug *WINSTA*® MIDI with protection type IP20

For power and signal transmission: The *WINSTA*® MIDI male connector/plug rated current 25 A. The pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow flexible, error-free installation in numerous possible uses. The coding options reduce installation errors, allowing fast, secure wiring of all components. 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!)). The *WINSTA*® MIDI pluggable installation connector with A coding in black or white is usually used for general mains applications in power distribution. This pluggable installation connector can be used for a voltage load of up to 25 A. As a result, it can also be used for high power loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the built-in test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and expense.

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

The *WINSTA*® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and consequently faster, even more reliable, and error-free. Using this pre-assembled system decreases assembly times and errors during installation at the construction site. Choose durability and quality – with protection against mismatching from WAGO makes the installation of

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

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electrical components noticeably easier.

- 
- protection against mismatching eliminates errors
- pre-assembled versions
- suitable for any application
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

## Data

### Electrical data

#### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 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 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
----------------------------	--

### Connection data

Connection points	4
Total number of potentials	2

### Connection 1

Connection technology

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



	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	2
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	10 mm / 0.394 inches
Width	20 mm / 0.787 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 L
Potential marking	N 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
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
------------------------------------	---------------------

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Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All <i>WINSTA</i> <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).

## 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
Contact plating	Tin
Fire load	0.139 MJ
Weight	6.5 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

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eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
ECCN	NO DATA
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821028291
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
	CCA DEKRA Certification B.V.	EN 61535	71- 123228
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172

#### Declarations of conformity and manufacturer's declarations




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

#### Approvals for marine applications

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

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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.770-1606</b> T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	<a href="http://www.wago.com/770-1606">www.wago.com/770-1606</a>
	<b>Item no.770-102/041-000</b> Socket; with strain relief housing; 2-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-102/041-000">www.wago.com/770-102/041-000</a>
	<b>Item no.770-1615</b> T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/770-1615">www.wago.com/770-1615</a>
	<b>Item no.770-1634</b> h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black	<a href="http://www.wago.com/770-1634">www.wago.com/770-1634</a>
	<b>Item no.770-1636</b> h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black	<a href="http://www.wago.com/770-1636">www.wago.com/770-1636</a>
	<b>Item no.770-202</b> Socket; 2-pole; Cod. A; 4,00 mm <sup>2</sup> ; black	<a href="http://www.wago.com/770-202">www.wago.com/770-202</a>
	<b>Item no.771-8992/006-101</b> pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-8992/006-101">www.wago.com/771-8992/006-101</a>
	<b>Item no.771-8992/106-101</b> pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm <sup>2</sup> ; 1 m; 1,50 mm <sup>2</sup> ; black	<a href="http://www.wago.com/771-8992/106-101">www.wago.com/771-8992/106-101</a>
	<b>Item no.899-631/477-000</b> Distribution box; Single-phase current (230 V); 1 input; 11 outputs; Cod. A; MIDI; black	<a href="http://www.wago.com/899-631/477-000">www.wago.com/899-631/477-000</a>

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

## Required accessories

### Strain relief

#### Strain relief housing



**Item no.: 770-502/041-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; black

[www.wago.com/770-502/041-000](http://www.wago.com/770-502/041-000)



**Item no.: 770-502/042-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; black

[www.wago.com/770-502/042-000](http://www.wago.com/770-502/042-000)



**Item no.: 770-512/041-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; white

[www.wago.com/770-512/041-000](http://www.wago.com/770-512/041-000)



**Item no.: 770-512/042-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; white

[www.wago.com/770-512/042-000](http://www.wago.com/770-512/042-000)

### Locking levers

#### Locking system



**Item no.: 770-121**

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

[www.wago.com/770-121](http://www.wago.com/770-121)



**Item no.: 770-131**

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

[www.wago.com/770-131](http://www.wago.com/770-131)



**Item no.: 770-101**

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

[www.wago.com/770-101](http://www.wago.com/770-101)



**Item no.: 770-111**

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

[www.wago.com/770-111](http://www.wago.com/770-111)

## Optional accessories

### Cover

#### Cover



**Item no.: 770-360**

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

[www.wago.com/770-360](http://www.wago.com/770-360)



**Item no.: 897-2003**

Protective cap; Type2; for sockets and plugs; PVC; red

[www.wago.com/897-2003](http://www.wago.com/897-2003)

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## Mounting

### Mounting accessories



Item no.: 770-317

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

[www.wago.com/770-317](http://www.wago.com/770-317)



Item no.: 770-337

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; white

[www.wago.com/770-337](http://www.wago.com/770-337)



Item no.: 897-2100

Mounting plate; for Snap-in; Plastic; for detectors and sensors ; Ø 200 mm; red

[www.wago.com/897-2100](http://www.wago.com/897-2100)

## 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](http://www.wago.com/210-719)



Item no.: 770-382

Operating tool; 2-way; green

[www.wago.com/770-382](http://www.wago.com/770-382)

## Downloads

### Documentation

#### Bid Text

770-212 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-212 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

### CAD/CAE-Data

#### CAE data

EPLAN Data Portal 770-212	URL	Download
WSCAD Universe 770-212	URL	Download
ZUKEN Portal 770-212	URL	Download

#### CAD data

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2D/3D Models 770-212

[URL](#)

[Download](#)

### Asset Administration Shell

Asset Administration Shell 770-212

[URL](#)

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 770-212

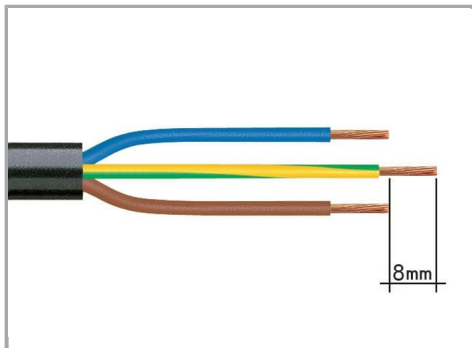
[URL](#)

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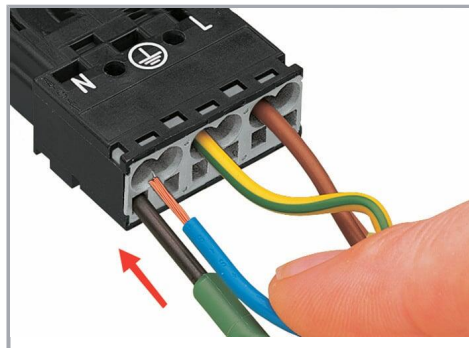
Plug; 2-pole; Cod. A; 4,00 mm<sup>2</sup>; black

## 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.

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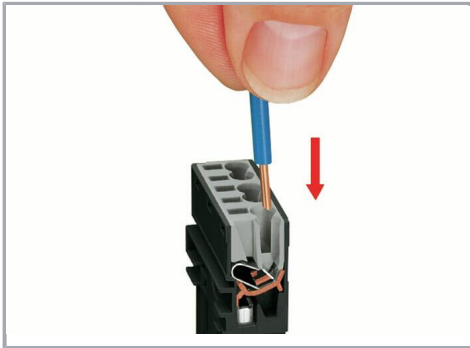
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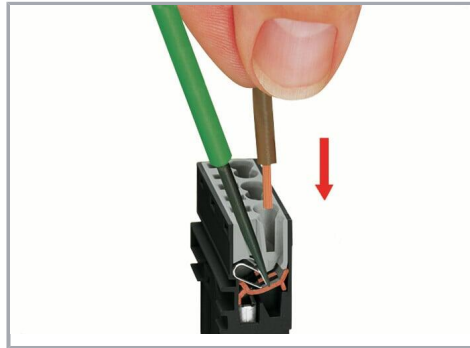
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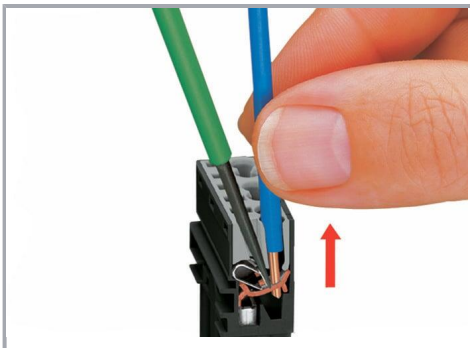


Insert the stripped solid conductor until it hits the backstop.



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.

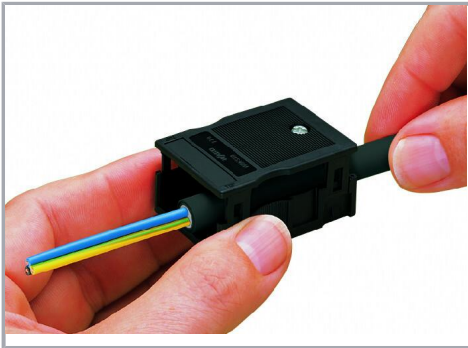
#### Conductor removal



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

#### Installation

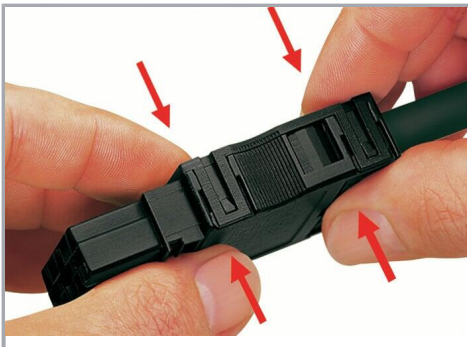
Subject to changes. Please also observe the further product documentation!



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](#)

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