

## Item description

### Male connector/plug WINSTA® MIDI 3-pole

The WINSTA® MIDI male connector/plug with protection type IP20 supports rapid, correct installation. WAGO pluggable installation connectors are useful when requirements repeat or are distributed on a defined pattern, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. 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!)). B coding enables the WINSTA® MIDI pluggable installation connectors to be used for application control in automation, robotics, and mechanical engineering. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is ideally suitable 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 costs.

**Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!**

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

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Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

The WINSTA® Pluggable Connection System is ideally 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 time spent on assembly and installation errors at the construction site. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with protection type IP20 from WAGO.

- 
- pluggable installation connectors with protection against mismatching
- pre-assembled versions
- for automation controllers
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

## Data Notes

### Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## 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) $\triangleq$ 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
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Subject to changes. Please also observe the further product documentation!

## Connection data

Connection points	6
Total number of potentials	3

## 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	3
Conductor entry direction to mating direction	0 °

## Physical data

Pin spacing	10 mm / 0.394 inches
Width	30 mm / 1.181 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

## Mechanical Data

Application	Control technology
Coding	B
Variable coding	Yes
Marking	5 2 1
Potential marking	5 2 1
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

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

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)	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	pink
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	0.212 MJ
Weight	10 g

## Environmental requirements

Processing temperature	-5 ... +40 °C
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Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Insulating parts for temperatures ≤ 105 °C

## Commercial data

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)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821553472
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172

## Counterpart

	Item no.770-283/081-000 Socket; 3-pole; Cod. B; 4,00 mm <sup>2</sup> ; pink	<a href="http://www.wago.com/770-283/081-000">www.wago.com/770-283/081-000</a>
	Item no.770-783/081-000 Snap-in socket; 3-pole; Cod. B; 4,00 mm <sup>2</sup> ; pink	<a href="http://www.wago.com/770-783/081-000">www.wago.com/770-783/081-000</a>

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



Item no.770-883/011-000/081-000

Socket for PCBs; angled; 3-pole; Cod. B; pink

[www.wago.com/770-883/011-000/081-000](http://www.wago.com/770-883/011-000/081-000)



Item no.770-883/081-000

Socket for PCBs; straight; 3-pole; Cod. B; pink

[www.wago.com/770-883/081-000](http://www.wago.com/770-883/081-000)

## Required accessories

### 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

### Coding

Coding



Item no.: 770-401

Coding pin; for plugs; Plastic; gray

[www.wago.com/770-401](http://www.wago.com/770-401)

### Marking accessories

Marker



Item no.: 770-450/000-002

Marker card; Plastic; yellow

[www.wago.com/770-450/000-002](http://www.wago.com/770-450/000-002)



Item no.: 770-450/000-001

Marker card; Plastic; green

[www.wago.com/770-450/000-001](http://www.wago.com/770-450/000-001)



Item no.: 770-450/000-005

Marker card; Plastic; red

[www.wago.com/770-450/000-005](http://www.wago.com/770-450/000-005)

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



Item no.: 770-450

Marker card; Plastic; white

[www.wago.com/770-450](http://www.wago.com/770-450)



Item no.: 770-450/000-006

Marker card; Plastic; blue

[www.wago.com/770-450/000-006](http://www.wago.com/770-450/000-006)



Item no.: 770-450/000-012

Marker card; Plastic; orange

[www.wago.com/770-450/000-012](http://www.wago.com/770-450/000-012)

## Mounting

### Mounting accessories



Item no.: 770-318

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black

[www.wago.com/770-318](http://www.wago.com/770-318)



Item no.: 770-338

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; white

[www.wago.com/770-338](http://www.wago.com/770-338)

## 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.: 770-383

Operating tool; 3-way; green

[www.wago.com/770-383](http://www.wago.com/770-383)

## Strain relief

### Strain relief housing



Item no.: 770-503

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

[www.wago.com/770-503](http://www.wago.com/770-503)



Item no.: 770-503/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black

[www.wago.com/770-503/023-000](http://www.wago.com/770-503/023-000)



Item no.: 770-503/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black

[www.wago.com/770-503/021-000](http://www.wago.com/770-503/021-000)



Item no.: 770-503/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black

[www.wago.com/770-503/035-000](http://www.wago.com/770-503/035-000)



Item no.: 770-503/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black

[www.wago.com/770-503/038-000](http://www.wago.com/770-503/038-000)

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



**Item no.: 770-503/032-000**

Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

[www.wago.com/770-503/032-000](http://www.wago.com/770-503/032-000)



**Item no.: 770-513/038-000**

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white

[www.wago.com/770-513/038-000](http://www.wago.com/770-513/038-000)



**Item no.: 770-513**

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

[www.wago.com/770-513](http://www.wago.com/770-513)



**Item no.: 770-513/021-000**

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white

[www.wago.com/770-513/021-000](http://www.wago.com/770-513/021-000)



**Item no.: 770-513/032-000**

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

[www.wago.com/770-513/032-000](http://www.wago.com/770-513/032-000)



**Item no.: 770-513/035-000**

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white

[www.wago.com/770-513/035-000](http://www.wago.com/770-513/035-000)



**Item no.: 770-513/023-000**

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white

[www.wago.com/770-513/023-000](http://www.wago.com/770-513/023-000)

## 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)

## Downloads

### Documentation

### Bid Text

770-293/081-000	2019 Feb 19	xml	<a href="#">Download</a>
X81 - Datei		3.0 kB	
770-293/081-000	2015 Jun 8	doc	<a href="#">Download</a>
doc - Datei		24.6 kB	

## CAD/CAE-Data

### CAE data

WSCAD Universe 770-293/081-000

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	<a href="#">URL</a>	<a href="#">Download</a>
ZUKEN Portal 770-293/081-000	<a href="#">URL</a>	<a href="#">Download</a>
WSCAD Universe 770-293/081-000	<a href="#">URL</a>	<a href="#">Download</a>
<b>CAD data</b>		
2D/3D Models 770-293/081-000	<a href="#">URL</a>	<a href="#">Download</a>
<b>Asset Administration Shell</b>		
Asset Administration Shell 770-293/081-000	<a href="#">URL</a>	<a href="#">Download</a>

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## Environmental Product Compliance

### Compliance Search

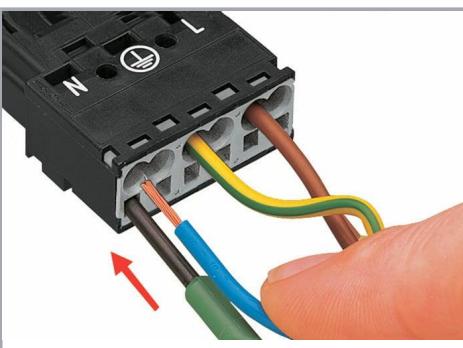
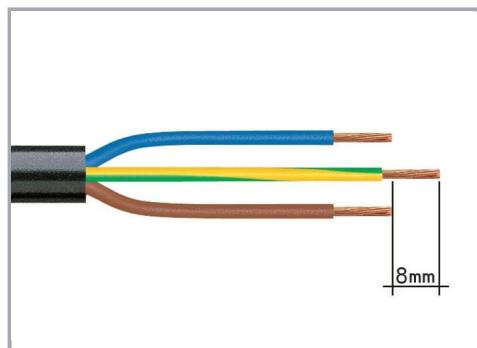
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Environmental Product Compliance 770-293/081-000	<a href="#">URL</a>	<a href="#">Download</a>
Plug; 3-pole; Cod. B; 4,00 mm <sup>2</sup> ; pink		

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## Installation Notes

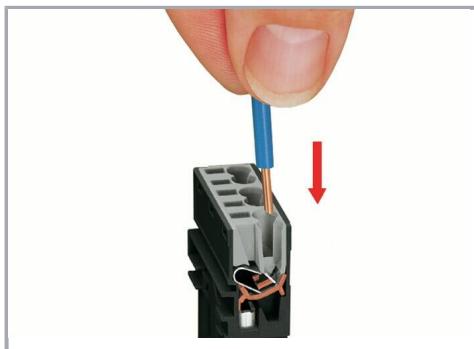
### Conductor termination



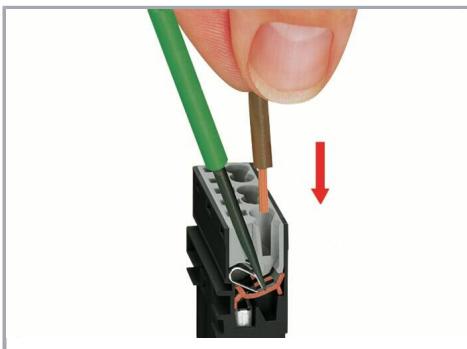
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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!

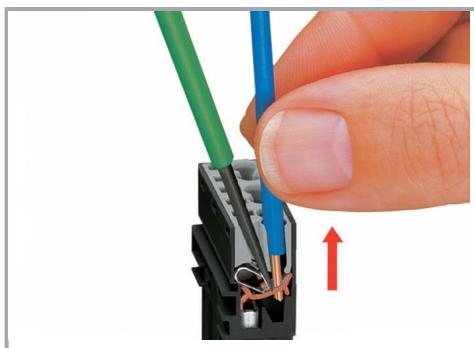


Insert the stripped solid conductor until it hits the backstop.



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.

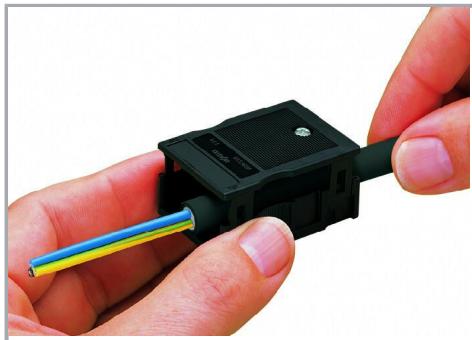
#### Conductor removal



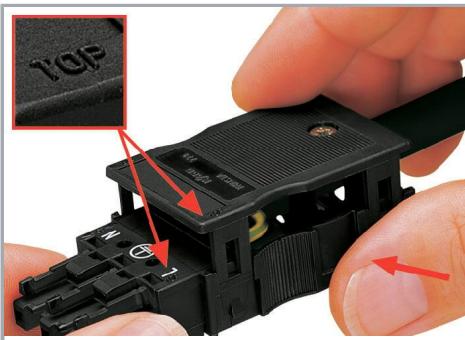
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### Installation

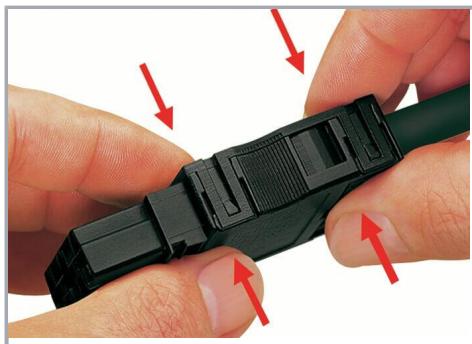
Subject to changes. Please also observe the further product documentation!



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.

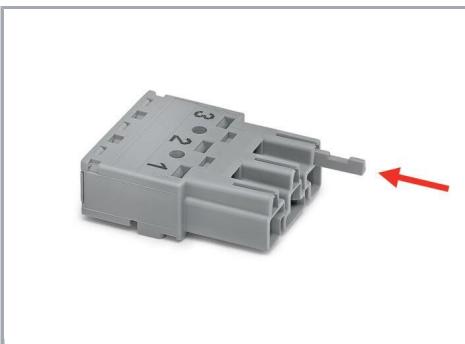


Tighten strain relief screw with screwdriver (2.5 mm blade width).

#### Coding



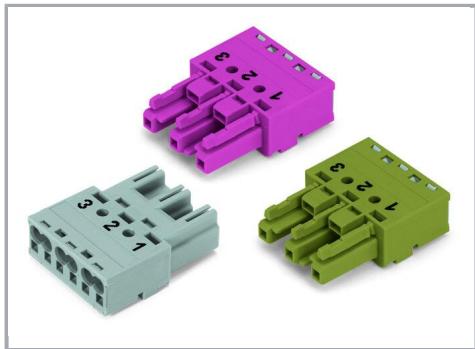
Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

#### Mismating protection

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

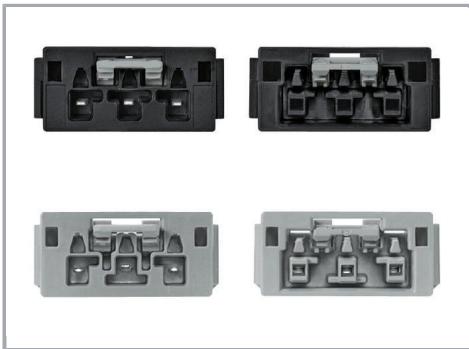


B-coded connectors with different colors can be plugged together.

Important note:

Different colors and/or pole markings are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.



Easy circuit identification via different marking and colors

## Product family

### WINSTA® MIDI

[Show all products from the family](#)

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

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