

## Item description

### Female connector/socket WINSTA® MIDI B coding

The WINSTA® MIDI female connector/socket B coding is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. 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. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. 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!)). B coding enables the WINSTA® MIDI pluggable installation connectors to be used for control in applications in the domains of automation, mechanical engineering and robotics. This pluggable installation connector is designed for a voltage load of up to 25 A. Thus, it can also be used for high power loads. Our WINSTA® MIDI product line achieves flexibility for the installation of applications. Through its Push-in CAGE CLAMP® spring pressure connection technology, it achieves error-free, time-saving installation and offers customization for meeting various installation requirements.

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



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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Now you can also reduce installation costs without compromising quality and safety: The WINSTA® MIDI pluggable installation connector with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- simple circuits
- for automation controllers
- flexible installation to save space
- convenient installation and commissioning

### 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) ≙ 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

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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.



## General

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
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## Connection data

Connection points	4
Total number of potentials	2

## 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	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	Control technology
Coding	B
Variable coding	No
Marking	1 2
Potential marking	1 2

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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)	Female connector/socket
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	gray
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	0.127 MJ
Weight	6.6 g

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

## 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
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	4050821541912
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
	CCA DEKRA Certification B.V.	IEC 61984	NL-32104
	CCA DEKRA Certification B.V.	EN 61984	2173495.01
	cURus Underwriters Laboratories Inc.	UL 1977	E45171

## Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
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Subject to changes. Please also observe the further product documentation!



EU-Declaration of Conformity  
WAGO GmbH & Co. KG

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UK-Declaration of Conformity  
WAGO GmbH & Co. KG








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### Approvals for marine applications

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.770-1601</b> T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray	<a href="http://www.wago.com/770-1601">www.wago.com/770-1601</a>
	<b>Item no.770-1608</b> h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; gray	<a href="http://www.wago.com/770-1608">www.wago.com/770-1608</a>
	<b>Item no.770-1651</b> h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray	<a href="http://www.wago.com/770-1651">www.wago.com/770-1651</a>
	<b>Item no.770-1658</b> h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; gray	<a href="http://www.wago.com/770-1658">www.wago.com/770-1658</a>
	<b>Item no.770-1701</b> T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray	<a href="http://www.wago.com/770-1701">www.wago.com/770-1701</a>
	<b>Item no.770-1704</b> 3-way distribution connector; 2-pole; Cod. B; 1 input; 3 outputs; gray	<a href="http://www.wago.com/770-1704">www.wago.com/770-1704</a>
	<b>Item no.770-1751</b>	

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

h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray [www.wago.com/770-1751](http://www.wago.com/770-1751)



**Item no. 770-252**  
Plug; 2-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

[www.wago.com/770-252](http://www.wago.com/770-252)



**Item no. 771-8992/005-103**  
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; gray

[www.wago.com/771-8992/005-103](http://www.wago.com/771-8992/005-103)



**Item no. 771-8992/205-103**  
pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; gray

[www.wago.com/771-8992/205-103](http://www.wago.com/771-8992/205-103)

## 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)

### 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)

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



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)

## 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](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)

### Cover

Cover



Item no.: 770-201

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

[www.wago.com/770-201](http://www.wago.com/770-201)



Item no.: 770-221

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

[www.wago.com/770-221](http://www.wago.com/770-221)



Item no.: 897-2003

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

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

### Mounting

Snap-in frame



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)

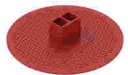


Item no.: 770-337

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

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

Mounting accessories



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)

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## Downloads

### Documentation

#### Bid Text

770-242 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
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770-242 doc - Datei	2015 Jun 8	doc 24.1 kB	Download
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### CAD/CAE-Data

#### CAD data

2D/3D Models 770-242		URL	Download
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#### CAE data

EPLAN Data Portal 770-242		URL	Download
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WSCAD Universe 770-242		URL	Download
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ZUKEN Portal 770-242		URL	Download
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### Environmental Product Compliance

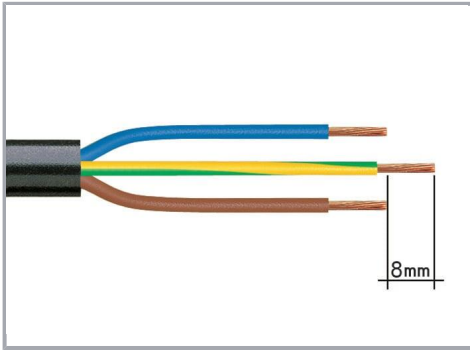
#### Compliance Search

Environmental Product Compliance 770-242 Socket; 2-pole; Cod. B; 4,00 mm <sup>2</sup> ; gray		URL	Download
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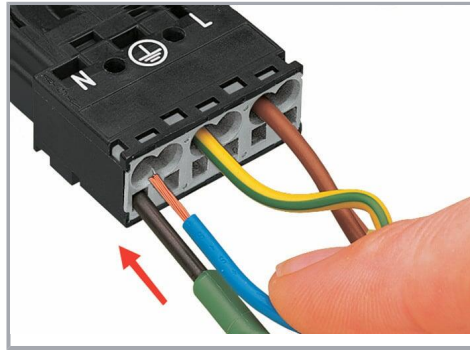
### Installation Notes

#### Conductor termination

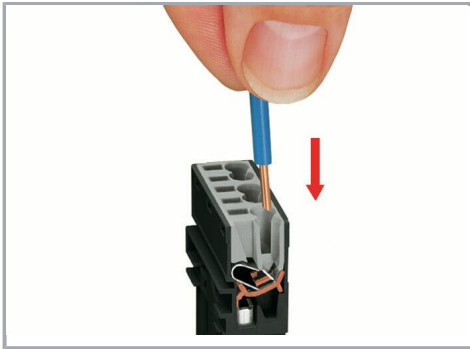
Subject to changes. Please also observe the further product documentation!



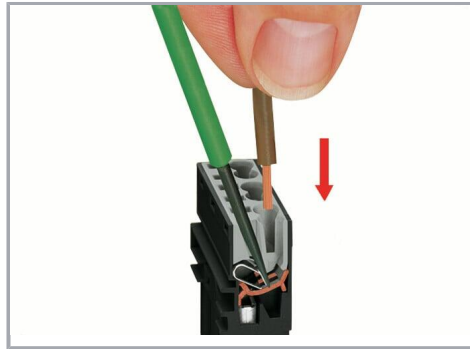
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



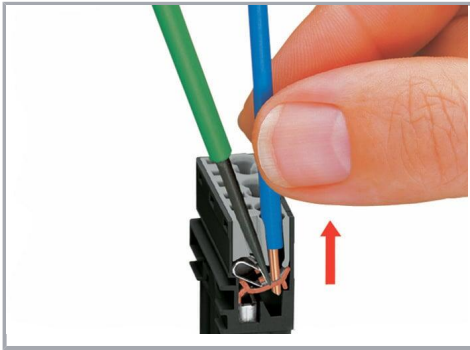
Insert the stripped solid conductor until it hits the backstop.



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.

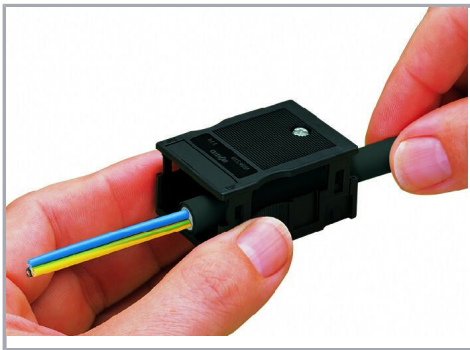
### Conductor removal

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

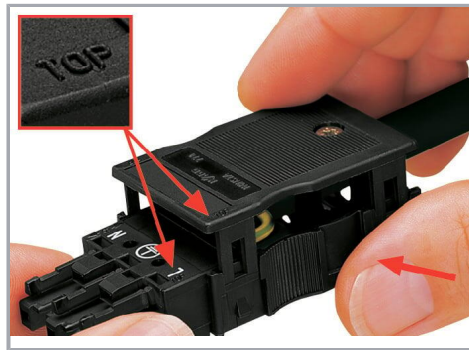


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

### Installation

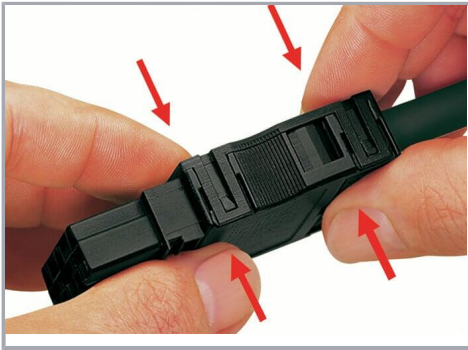


We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



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

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



Prepare strain relief housing by snapping together upper and bottom part.

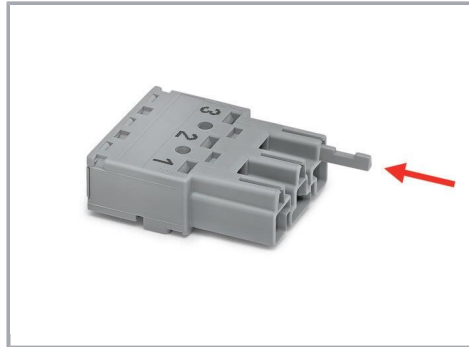


Tighten strain relief screw with screwdriver (2.5 mm blade width).

### Coding



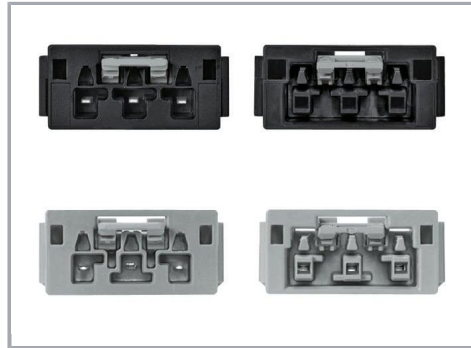
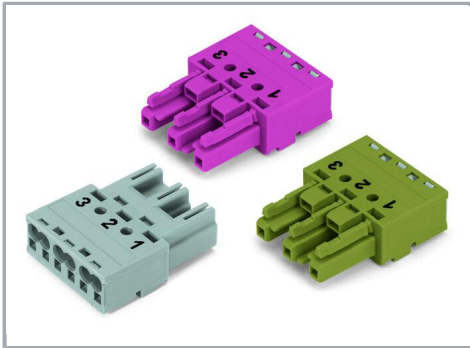
Simply cut off the coding pin from the socket.



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

### Mismatching 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!