

Item description

Male connector/plug *WINSTA*® MIDI B coding

The *WINSTA*® MIDI male connector/plug with protection type IP20 provides the foundation for installation of solid and fine-stranded conductors. WAGO pluggable installation connectors can be used when specifications repeat or are planned on a defined grid, for example for installing grid lighting or flush-mount lighting. 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 offers protection against contact 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!)). Pluggable installation connectors with B coding from the *WINSTA*® MIDI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Your own pole marking is possible, too. This pluggable installation connector is designed for a current load of up to 25 A. Therefore, it can also be used for high power loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in a broad range of individual products you can use for quick, easy, flexible, and secure electrical installation.

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!



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. Use of this pre-assembled system decreases assembly times and errors during installation at the construction site. Now you can also cut installation costs without compromising quality and safety: with marking reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- simple circuits
- with B coding for use in process automation, such as lighting technology
- ready to install and use immediately
- 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)	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 IEC/EN – Notes

Note (rated current)	25 A for 3-pole load 20 A for 4-pole load
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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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General information

Note on contact resistance

approx. 1 mΩ of contact resistance
approx. 0.25 mΩ contact transition plug/socket

Connection data

Connection points	8
Total number of potentials	4

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 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	Control technology
Coding	B
Variable coding	Yes
Marking	4 3 2 1
Potential marking	4 3 2 1

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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)	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	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	0.357 MJ
Weight	13 g

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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)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918253970
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.	EN 61984	2173495.01
	CCA DEKRA Certification B.V.	IEC 61984	NL-32104
	cULus Underwriters Laboratories Inc.	UL 1977	E45171
	cULus Underwriters Laboratories Inc.	UL 1059	E 45172

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

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19-HG1868589-PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

Counterpart

**Item no. 770-1631**

T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

www.wago.com/770-1631**Item no. 770-1731**

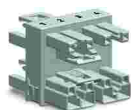
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

www.wago.com/770-1731**Item no. 770-1681**

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

www.wago.com/770-1681

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

**Item no. 770-1734**

3-way distribution connector; 4-pole; Cod. B; 1 input; 3 outputs; gray

www.wago.com/770-1734**Item no. 770-1781**

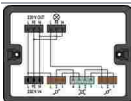
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray

www.wago.com/770-1781**Item no. 770-244**Socket; 4-pole; Cod. B; 4,00 mm²; graywww.wago.com/770-244**Item no. 770-744**Snap-in socket; 4-pole; Cod. B; 4,00 mm²; graywww.wago.com/770-744**Item no. 770-844**

Socket for PCBs; straight; 4-pole; Cod. B; gray

www.wago.com/770-844**Item no. 770-844/011-000**

Socket for PCBs; angled; 4-pole; Cod. B; gray

www.wago.com/770-844/011-000**Item no. 771-9994/005-103**pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; graywww.wago.com/771-9994/005-103**Item no. 771-9994/105-103**pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; graywww.wago.com/771-9994/105-103**Item no. 899-631/305-000**

Distribution box; Crossover switching; 1 input; 5 outputs; Cod. A, B, S; MIDI; black

www.wago.com/899-631/305-000

Required accessories

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

Locking levers

Locking system

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

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**Item no.: 770-121**

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

www.wago.com/770-121**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

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

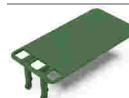
www.wago.com/210-719

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**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

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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

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

Downloads
Documentation

Bid Text

770-254 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-254 doc - Datei	2015 Jun 8	doc 24.6 kB	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 770-254	URL	Download
WSCAD Universe 770-254	URL	Download
ZUKEN Portal 770-254	URL	Download

CAD data

2D/3D Models 770-254	URL	Download
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Asset Administration Shell

Asset Administration Shell 770-254	URL	Download
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Subject to changes. Please also observe the further product documentation!

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-254

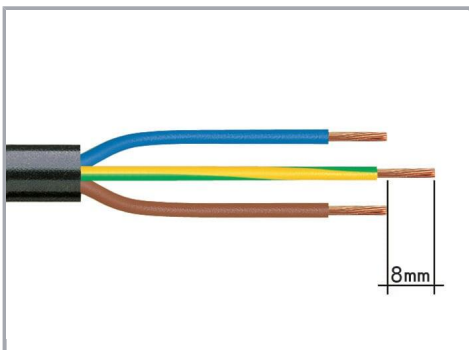
URL

Download

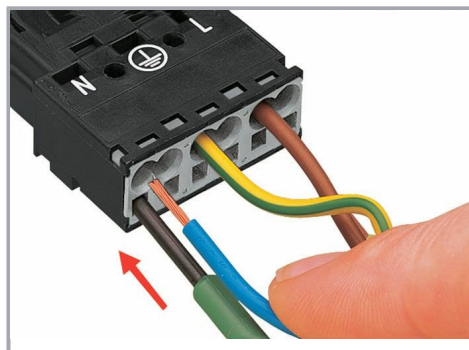
Plug; 4-pole; Cod. B; 4,00 mm²; gray

Installation Notes

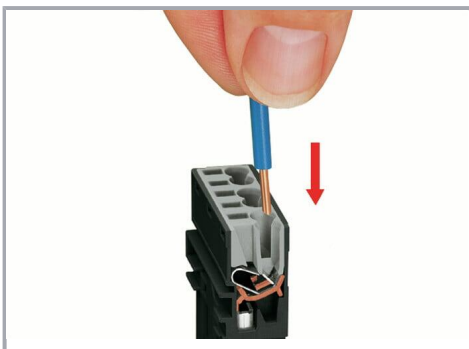
Conductor termination



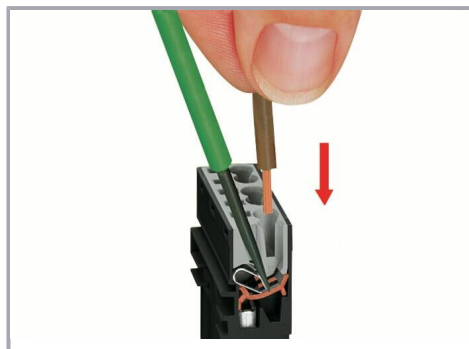
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



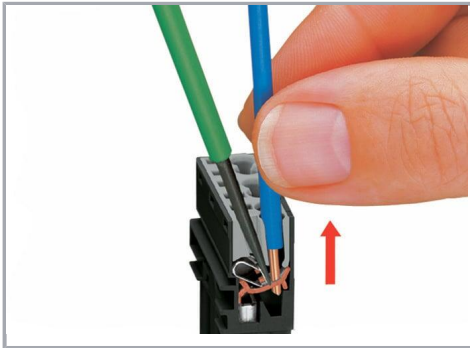
Insert the stripped solid conductor until it hits the backstop.



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.

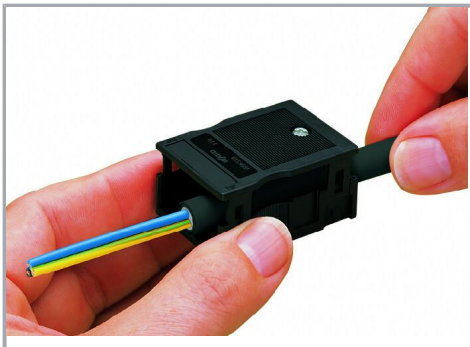
Conductor removal

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

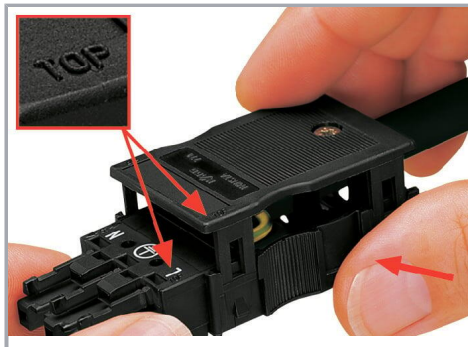


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

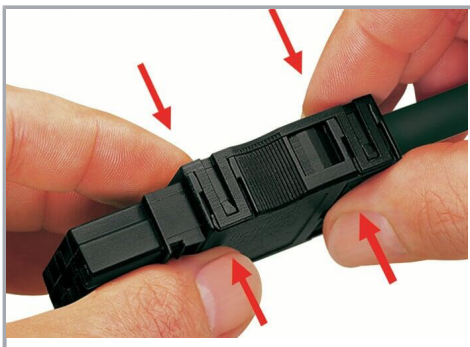
Installation



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.



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



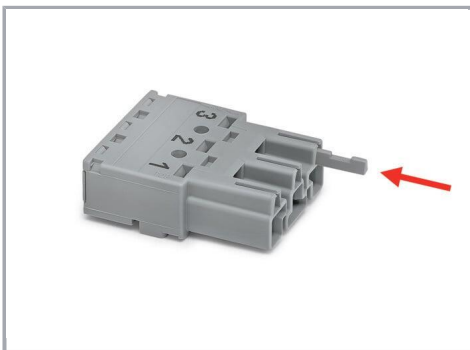
Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding

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

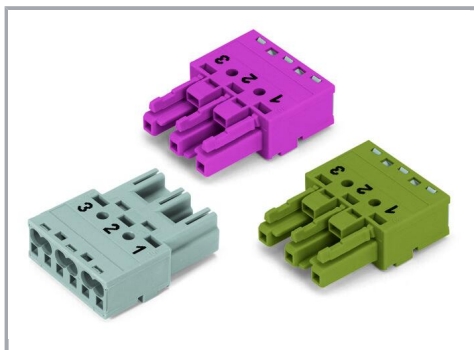


Simply cut off the coding pin from the socket.



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

Mismatching protection

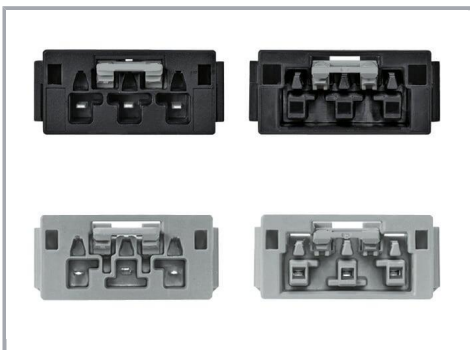


B-coded connectors with different colors can be plugged together.

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.

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



Easy circuit identification via different marking and colors

Product family

WINSTA® MIDI

[Show all products from the family](#)

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