

Item description

Male connector/plug *WINSTA*® MIDI with protection against mismatching

The *WINSTA*® MIDI male connector/plug with protection against mismatching supports fast, reliable installation. WAGO pluggable installation connectors are used when requirements repeat or are planned on a specified grid, for example for installing grid lighting or flush-mount lighting. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. The pluggable installation connector is protected 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!)). This means that users' fingers will never come into contact with live contact elements. Pluggable installation connectors with B coding from the *WINSTA*® MIDI line are available in pink, light green, or gray, allowing you to distinguish different circuits, for example for light, pumps or, sun blinds. Usage-specific pole marking is possible in addition. 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 product line guarantees maximum flexibility for the electrical installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers customization and flexibility for meeting all installation requirements.

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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Now you can also reduce installation costs without compromising quality and safety:

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



with protection type IP20 reduces the need for servicing and prevents unnecessary downtime.

-
- pluggable installation connectors with protection against mismatching
- for automation controllers
- with B coding for use in automation of processes, such as lighting technology, for example
- ready to install and use immediately
- 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

General information

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	6
Total number of potentials	3

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	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	3 2 1
Potential marking	3 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)

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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 <i>WINSTA</i> ® 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

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	4050821446729
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
	cULus Underwriters Laboratories Inc.	UL 1977	E45171
	cULus Underwriters Laboratories Inc.	UL 1059	E 45172

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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.770-1613 T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; pink	www.wago.com/770-1613
	Item no.770-1663 h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; pink	www.wago.com/770-1663
	Item no.770-1713 T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; pink	www.wago.com/770-1713
	Item no.770-1716 3-way distribution connector; 3-pole; Cod. B; 1 input; 3 outputs; pink	www.wago.com/770-1716

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**Item no.770-1763**

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; pink www.wago.com/770-1763

**Item no.770-283**

Socket; 3-pole; Cod. B; 4,00 mm²; pink

www.wago.com/770-283

**Item no.770-783**

Snap-in socket; 3-pole; Cod. B; 4,00 mm²; pink

www.wago.com/770-783

**Item no.770-883**

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

www.wago.com/770-883

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

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

www.wago.com/770-883/011-000

**Item no.771-9993/005-107**

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; 1 m; 1,00 mm²; pink

www.wago.com/771-9993/005-107

**Item no.771-9993/105-107**

pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. B; 1 m; 1,00 mm²; pink

www.wago.com/771-9993/105-107

Required accessories

Locking levers

Locking system

**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

Coding

Coding

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

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**Item no.: 770-401**

Coding pin; for plugs; Plastic; gray

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**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**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**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**Item no.: 770-383**

Operating tool; 3-way; green

www.wago.com/770-383**Mounting**

Mounting accessories

**Item no.: 770-318**

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

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**Strain relief**

Strain relief housing

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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



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



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



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



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



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



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



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



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



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



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



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

Downloads

Documentation

Bid Text

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770-293 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-293 doc - Datei	2015 Jun 8	doc 24.6 kB	Download

CAD/CAE-Data

CAE data

WSCAD Universe 770-293	URL	Download
ZUKEN Portal 770-293	URL	Download

CAD data

2D/3D Models 770-293	URL	Download
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Asset Administration Shell

Asset Administration Shell 770-293	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-293 Plug; 3-pole; Cod. B; 4,00 mm ² ; pink	URL	Download
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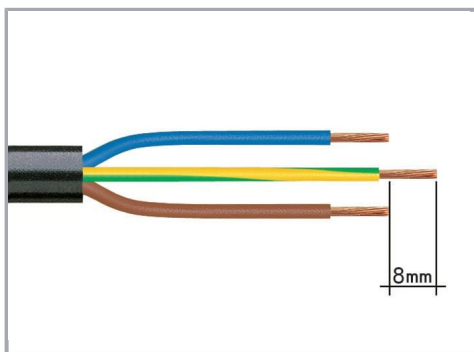
Installation Notes

Conductor termination

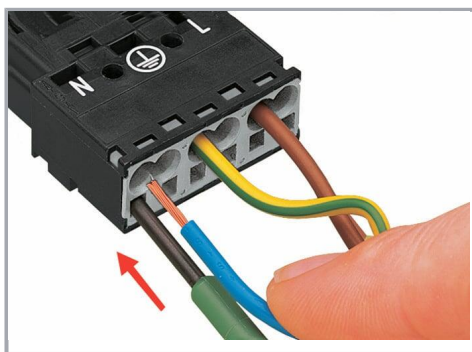
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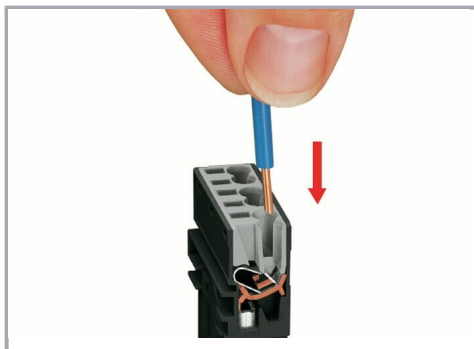
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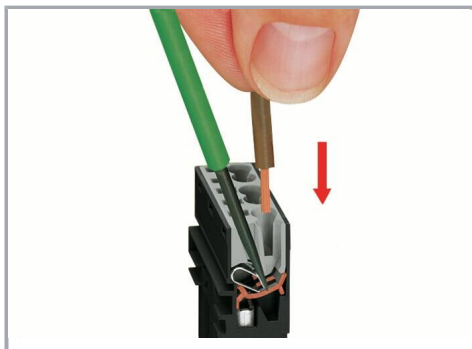
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

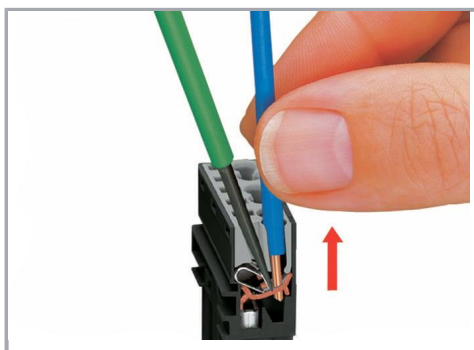


Insert the stripped solid conductor until it hits the backstop.



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.

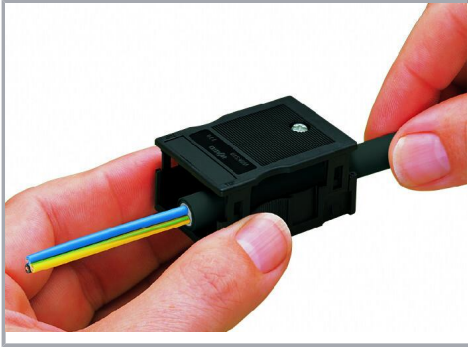
Conductor removal



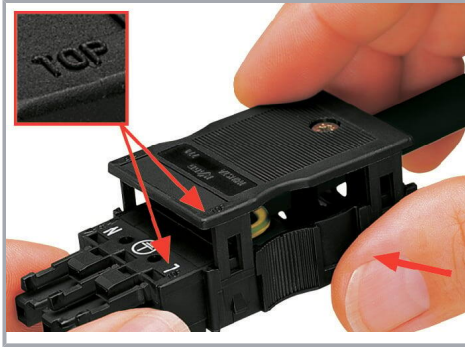
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

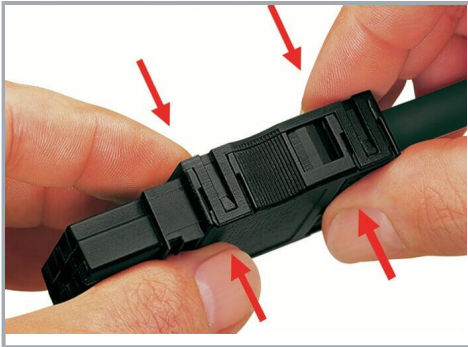
Installation



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.

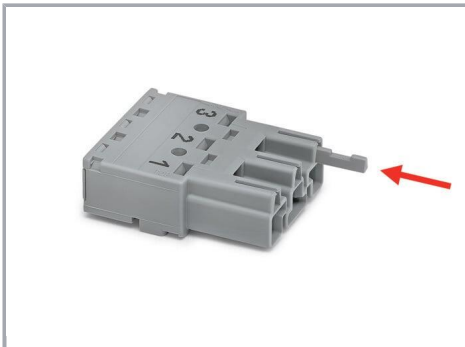


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding



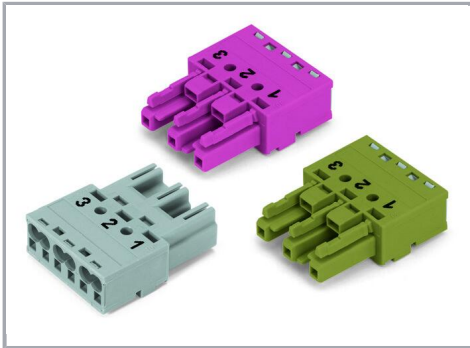
Simply cut off the coding pin from the socket.



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

Mismatching protection

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

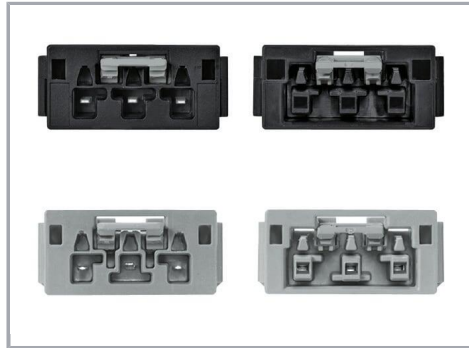


B-coded connectors with different colors can be plugged together.

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](#)

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