

Item description

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

The *WINSTA®* MIDI male connector/plug B coding is the pluggable solution for your application in control cabinets, for lighting connections or on PCBs. WAGO pluggable installation connectors are useful when criteria repeat or are distributed on a defined pattern, 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 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 application control in automation, mechanical engineering and robotics. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They tell us about the product's domains of use. This product has a current rating of 25 A – therefore it is suitable for high power loads. *WINSTA®* MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy, secure, tailored installation.

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

The *WINSTA®* Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and therefore more efficient, more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and errors during installation at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection

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



technology too! Plan your installation with with marking from WAGO.

-
- pluggable installation connectors with protection against mismatching
- simple circuits
- with B coding for use in process automation, such as lighting technology
- ready to install and use immediately
- rapid, structured electrical installation

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	light green
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
Recupel Type	
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821451112
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
	cURus 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.770-1612**

T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; light green

www.wago.com/770-1612**Item no.770-1662**

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; light green

www.wago.com/770-1662**Item no.770-1712**

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

www.wago.com/770-1712

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**Item no.770-1715**

3-way distribution connector; 3-pole; Cod. B; 1 input; 3 outputs; light green

www.wago.com/770-1715**Item no.770-1762**

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

www.wago.com/770-1762**Item no.770-263**Socket; 3-pole; Cod. B; 4,00 mm²; light greenwww.wago.com/770-263**Item no.770-763**Snap-in socket; 3-pole; Cod. B; 4,00 mm²; light greenwww.wago.com/770-763**Item no.770-863**

Socket for PCBs; straight; 3-pole; Cod. B; light green

www.wago.com/770-863**Item no.770-863/011-000**

Socket for PCBs; angled; 3-pole; Cod. B; light green

www.wago.com/770-863/011-000**Item no.771-9993/005-105**pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; H05VV-F 3 x 1.0 mm²; 1 m; 1,00 mm²; light greenwww.wago.com/771-9993/005-105**Item no.771-9993/105-105**pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. B; H05VV-F 3 x 1.0 mm²; 1 m; 1,00 mm²; light greenwww.wago.com/771-9993/105-105**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

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**Item no.: 770-360**

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

www.wago.com/770-360**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**Strain relief**

Strain relief housing

**Item no.: 770-503**

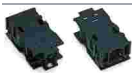
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

www.wago.com/770-503**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

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**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

Coding

Coding

**Item no.: 770-401**

Coding pin; for plugs; Plastic; gray

www.wago.com/770-401

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

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Downloads

Documentation

Bid Text

770-273 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
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770-273 doc - Datei	2015 Jun 8	doc 24.6 kB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 770-273	URL	Download
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CAE data

WSCAD Universe 770-273	URL	Download
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ZUKEN Portal 770-273	URL	Download
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Asset Administration Shell

Asset Administration Shell 770-273	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-273 Plug; 3-pole; Cod. B; 4,00 mm ² ; light green	URL	Download
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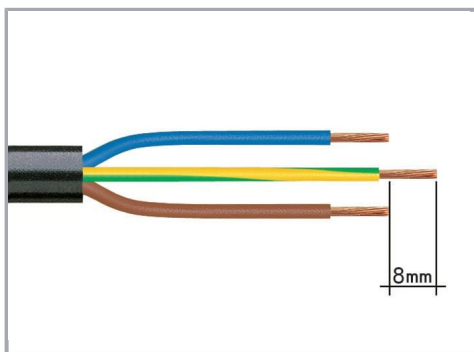
Installation Notes

Conductor termination

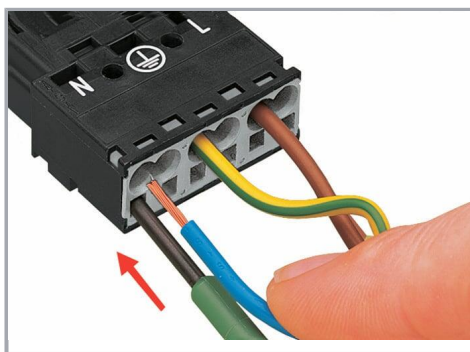
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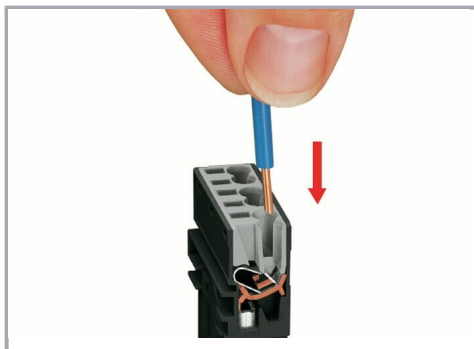
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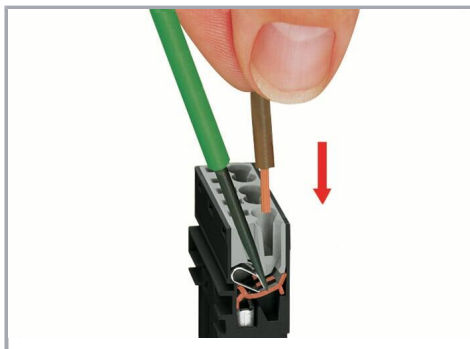
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

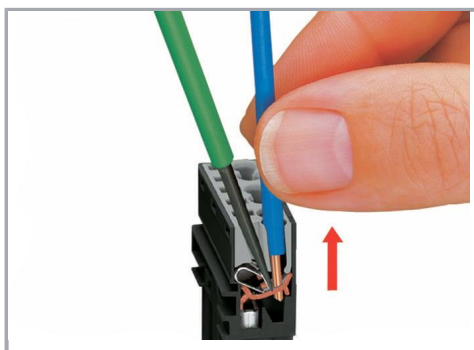


Insert the stripped solid conductor until it hits the backstop.



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.

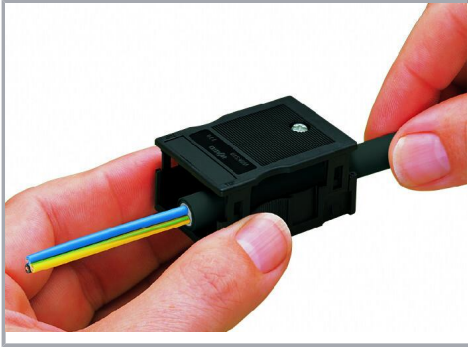
Conductor removal



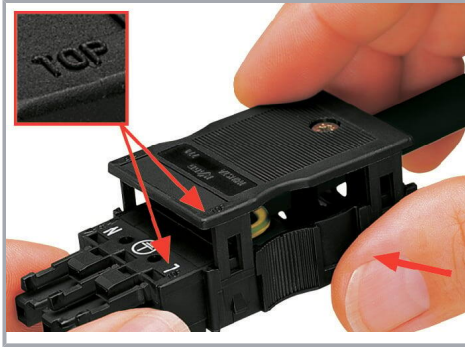
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

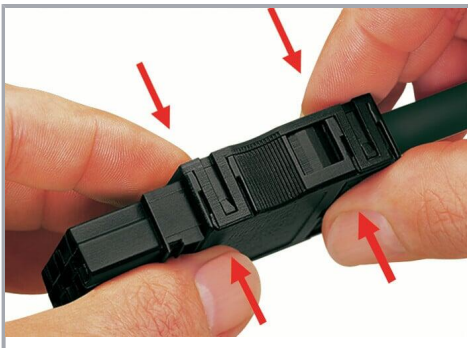
Installation



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.

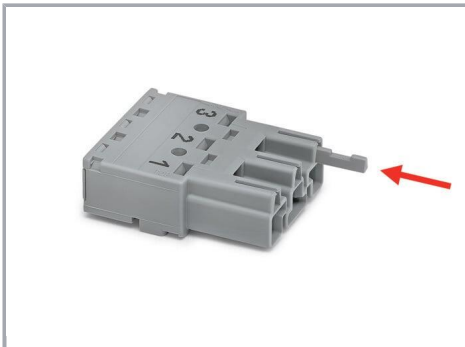


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding



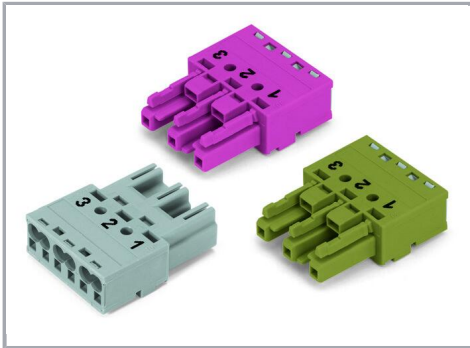
Simply cut off the coding pin from the socket.



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

Mismatching protection

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

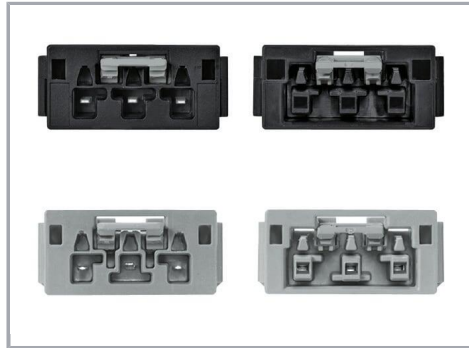


B-coded connectors with different colors can be plugged together.

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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