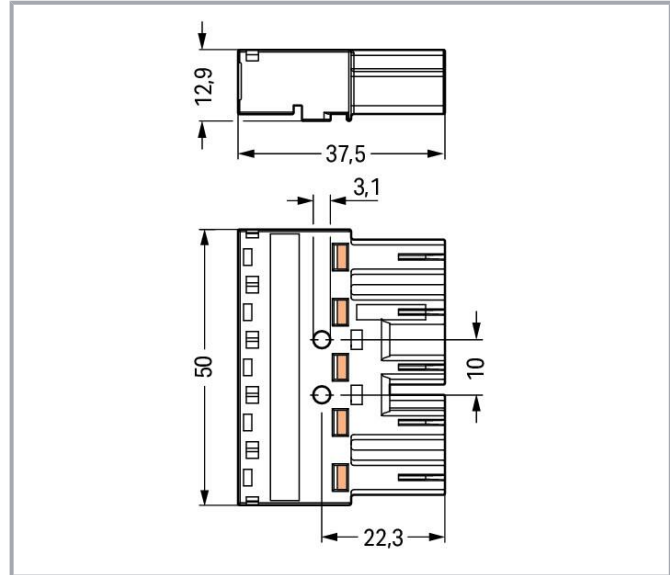
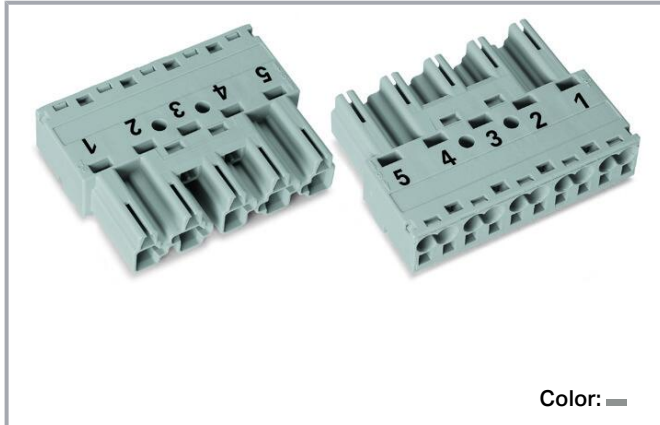




Item description

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

For signal and power transmission: The *WINSTA*® MIDI male connector/plug B coding. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of requirements in no time flat. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. 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!)). Solutions like the *WINSTA*® MIDI pluggable installation connectors with B coding are suitable for applications related to process control, such as for lighting or in data networks. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Thanks to the included test slot, connections can be checked even when they are plugged in. This saves time, labor, and money.

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

The *WINSTA*® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus faster, even more reliable, and error-free. Use of this pre-assembled system decreases assembly times and errors during

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



installation at the construction site. Now you can also lower installation expenses without compromising safety and quality: with marking eliminates the need for servicing and prevents unnecessary downtime.

-
- protection against mismating eliminates errors
- simple circuits
- for automation controllers
- ready for immediate use
- 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)	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- and 5-pole load

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

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

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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	10
Total number of potentials	5

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	5
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	50 mm / 1.969 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 4 3 2 1

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Potential marking	5 4 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)
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	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	0.419 MJ

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

Weight	15.9 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	4044918253987
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

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.770-1641
T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

www.wago.com/770-1641



Item no.770-1741
T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

www.wago.com/770-1741



Item no.770-1744
3-way distribution connector; 5-pole; Cod. B; 1 input; 3 outputs; gray

www.wago.com/770-1744

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

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**Item no.770-245**

Socket; 5-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-245**Item no.770-745**

Snap-in socket; 5-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-745**Item no.770-845**

Socket for PCBs; straight; 5-pole; Cod. B; gray

www.wago.com/770-845**Item no.770-845/011-000**

Socket for PCBs; angled; 5-pole; Cod. B; gray

www.wago.com/770-845/011-000**Item no.771-9995/005-103**

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; (H)05VV-F 5x1,0 mm²; 1 m; 1,00 mm²; gray

www.wago.com/771-9995/005-103**Item no.771-9995/105-103**

pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. B; (H)05VV-F 5x1,0 mm²; 1 m; 1,00 mm²; gray

www.wago.com/771-9995/105-103

Required accessories

Strain relief

Strain relief housing

**Item no.: 770-505/021-000**

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black

www.wago.com/770-505/021-000**Item no.: 770-505/023-000**

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

www.wago.com/770-505/023-000**Item no.: 770-505**

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

www.wago.com/770-505**Item no.: 770-515**

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

www.wago.com/770-515**Item no.: 770-515/023-000**

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

www.wago.com/770-515/023-000**Item no.: 770-515/021-000**

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white

www.wago.com/770-515/021-000

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

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

Mounting

Mounting accessories



Item no.: 770-320
Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-320



Item no.: 770-321
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black

www.wago.com/770-321

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



	Item no.: 770-340 Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white	www.wago.com/770-340
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	Item no.: 770-341 Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white	www.wago.com/770-341
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Coding		
Coding		

	Item no.: 770-401 Coding pin; for plugs; Plastic; gray	www.wago.com/770-401
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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
---	---	--

Downloads
Documentation

Bid Text			
770-255	2019 Feb 19	xml	Download
X81 - Datei		3.0 kB	
770-255	2015 Jun 8	doc	Download
doc - Datei		24.6 kB	

CAD/CAE-Data

CAD data			
2D/3D Models 770-255		URL	Download

CAE data

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EPLAN Data Portal 770-255	URL	Download
WSCAD Universe 770-255	URL	Download
ZUKEN Portal 770-255	URL	Download
Asset Administration Shell		
Asset Administration Shell 770-255	URL	Download

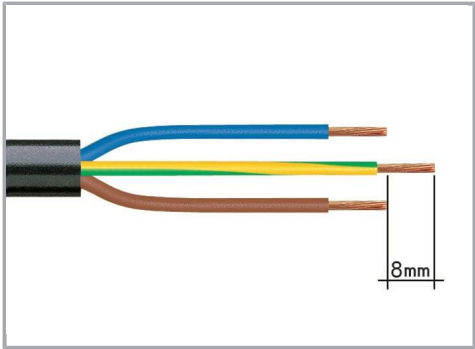
Environmental Product Compliance

Compliance Search

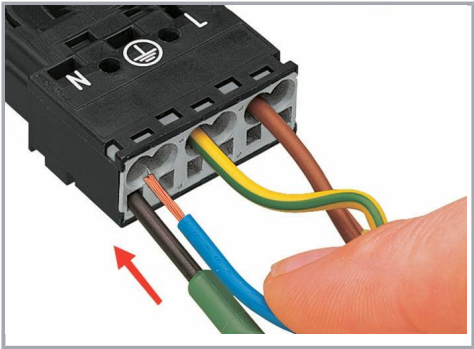
Environmental Product Compliance 770-255	URL	Download
Plug; 5-pole; Cod. B; 4,00 mm²; gray		

Installation Notes

Conductor termination

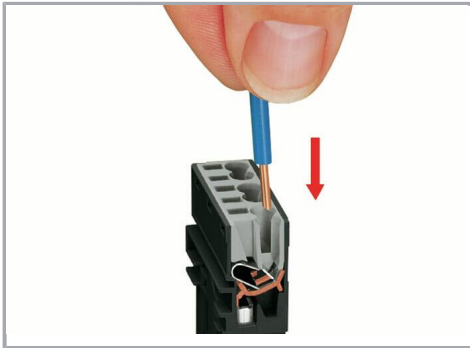


- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm

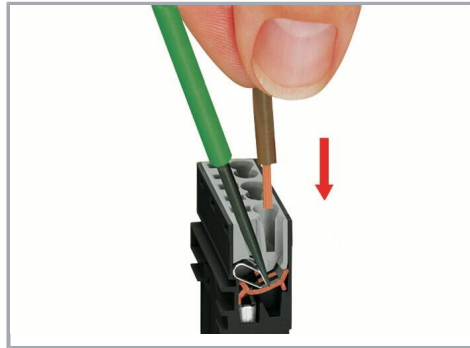


To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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

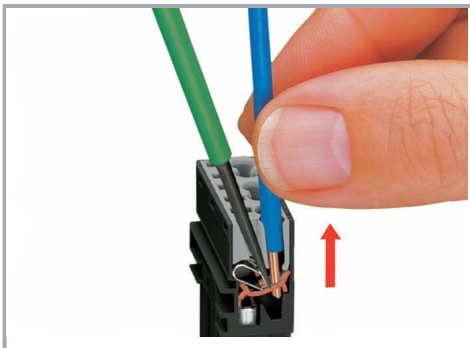


Insert the stripped solid conductor until it hits the backstop.



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.

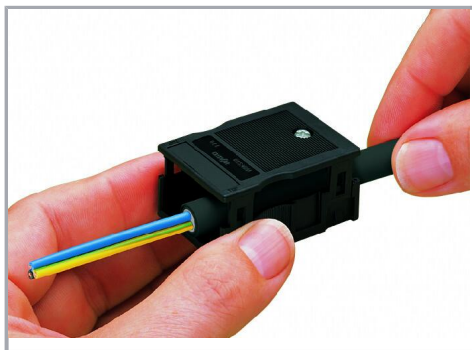
Conductor removal



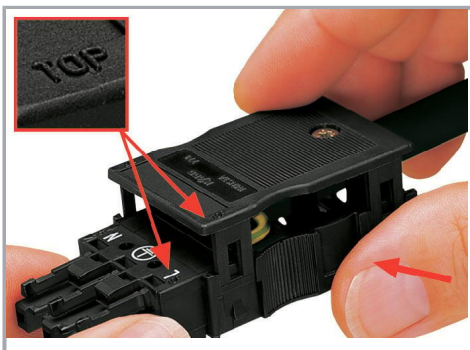
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Installation

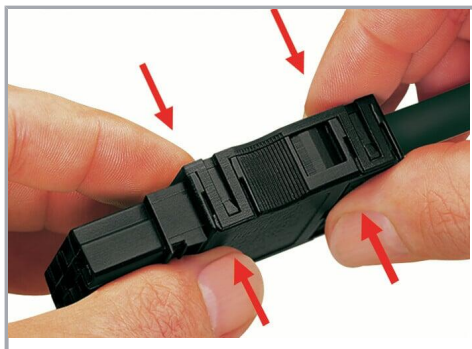
Subject to changes. Please also observe the further product documentation!



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.

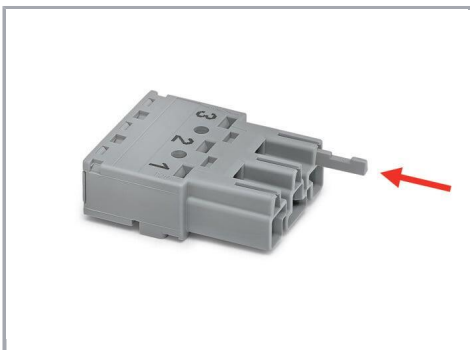


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding



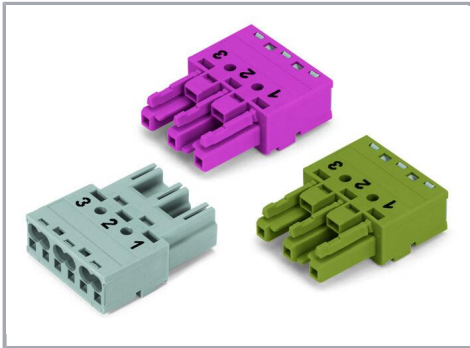
Simply cut off the coding pin from the socket.



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

Mismatching protection

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

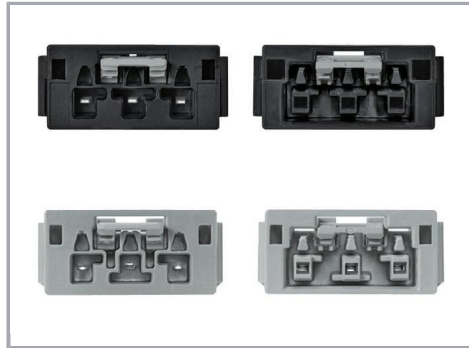


B-coded connectors with different colors can be plugged together.

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!

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