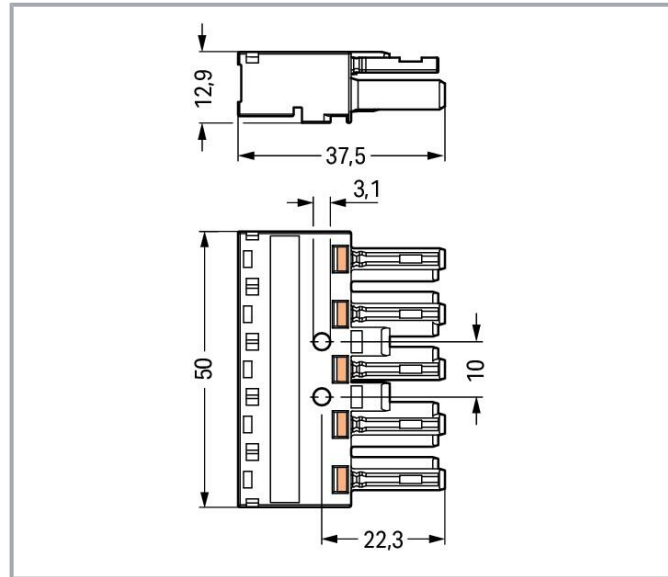
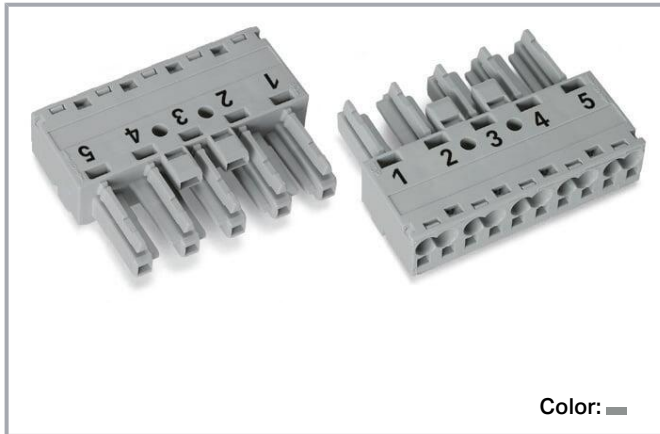


Data sheet | Item number: 770-245

Socket; 5-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

[www.wago.com/770-245](http://www.wago.com/770-245)



## Item description

### Female connector/socket WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI female connector/socket rated current 25 A. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow fast, efficient, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. 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!)). That results in the fact that users' fingers will never come into contact with live elements. Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are suitable for process control, such as for lighting or within data networks. 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 – as a result it is also suitable for high power loads. The WINSTA® MIDI product line achieves total flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees time-saving, error-free installation and offers customization for meeting various installation requirements.

### Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers

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

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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.



costs. Now you can also lower installation costs without compromising quality and safety: with protection against mismatching eliminates the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- simple circuits
- with B coding for use in process automation, such as lighting technology, for instance
- custom-engineered solutions
- convenient installation and commissioning

## Data

### Notes

Variants:	Other pole markings Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .
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## 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
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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.
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Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

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



## 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 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	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	1 2 3 4 5

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

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Potential marking	1 2 3 4 5
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	0.407 MJ

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

Weight	16.1 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
ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918252454
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	UL 1059	E 45172

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




Underwriters Laboratories Inc.



## 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](http://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](http://www.wago.com/770-1741)

## Item no.770-255

Plug; 5-pole; Cod. B; 4,00 mm<sup>2</sup>; gray[www.wago.com/770-255](http://www.wago.com/770-255)

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

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

[www.wago.com/770-1744](http://www.wago.com/770-1744)



**Item no. 770-755**  
Snap-in plug; 5-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

[www.wago.com/770-755](http://www.wago.com/770-755)



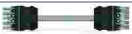
**Item no. 770-855**  
Plug for PCBs; straight; 5-pole; Cod. B; gray

[www.wago.com/770-855](http://www.wago.com/770-855)



**Item no. 770-855/011-000**  
Plug for PCBs; angled; 5-pole; Cod. B; gray

[www.wago.com/770-855/011-000](http://www.wago.com/770-855/011-000)



**Item no. 771-9995/005-103**  
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; (H)05VV-F 5x1,0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; gray

[www.wago.com/771-9995/005-103](http://www.wago.com/771-9995/005-103)



**Item no. 771-9995/205-103**  
pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. B; (H)05VV-F 5x1,0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; gray

[www.wago.com/771-9995/205-103](http://www.wago.com/771-9995/205-103)

## 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.: 770-505/021-000**  
Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black

[www.wago.com/770-505/021-000](http://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](http://www.wago.com/770-505/023-000)

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



**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](http://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](http://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](http://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](http://www.wago.com/770-515/021-000)

## Optional accessories

### 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.: 897-2005**  
Protective cap; Type4; for sockets and plugs; PVC; red

[www.wago.com/897-2005](http://www.wago.com/897-2005)

### Mounting

#### Mounting accessories



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

[www.wago.com/770-320](http://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](http://www.wago.com/770-321)



**Item no.: 770-340**  
Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

[www.wago.com/770-340](http://www.wago.com/770-340)



**Item no.: 770-341**  
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white

[www.wago.com/770-341](http://www.wago.com/770-341)

### Tool

#### Operating tool

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





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)

### Marking accessories

#### Marker



Item no.: 770-450/000-002  
Marker card; Plastic; yellow

[www.wago.com/770-450/000-002](http://www.wago.com/770-450/000-002)



Item no.: 770-450/000-001  
Marker card; Plastic; green

[www.wago.com/770-450/000-001](http://www.wago.com/770-450/000-001)



Item no.: 770-450/000-005  
Marker card; Plastic; red

[www.wago.com/770-450/000-005](http://www.wago.com/770-450/000-005)



Item no.: 770-450  
Marker card; Plastic; white

[www.wago.com/770-450](http://www.wago.com/770-450)



Item no.: 770-450/000-006  
Marker card; Plastic; blue

[www.wago.com/770-450/000-006](http://www.wago.com/770-450/000-006)



Item no.: 770-450/000-012  
Marker card; Plastic; orange

[www.wago.com/770-450/000-012](http://www.wago.com/770-450/000-012)

### Downloads

#### Documentation

##### Bid Text

770-245 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-245 doc - Datei	2015 Jun 8	doc 24.6 kB	Download

#### CAD/CAE-Data

##### CAD data

2D/3D Models 770-245	URL	Download
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Subject to changes. Please also observe the further product documentation!

## CAE data

EPLAN Data Portal 770-245	<a href="#">URL</a>	<a href="#">Download</a>
WSCAD Universe 770-245	<a href="#">URL</a>	<a href="#">Download</a>
ZUKEN Portal 770-245	<a href="#">URL</a>	<a href="#">Download</a>

## Asset Administration Shell

Asset Administration Shell 770-245	<a href="#">URL</a>	<a href="#">Download</a>
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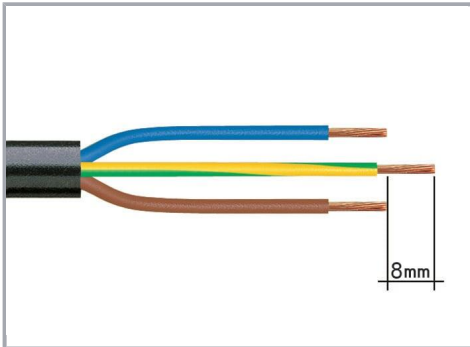
## Environmental Product Compliance

### Compliance Search

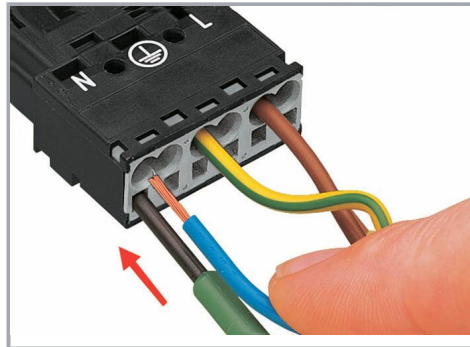
Environmental Product Compliance 770-245	<a href="#">URL</a>	<a href="#">Download</a>
Socket; 5-pole; Cod. B; 4,00 mm <sup>2</sup> ; gray		

## Installation Notes

### Conductor termination

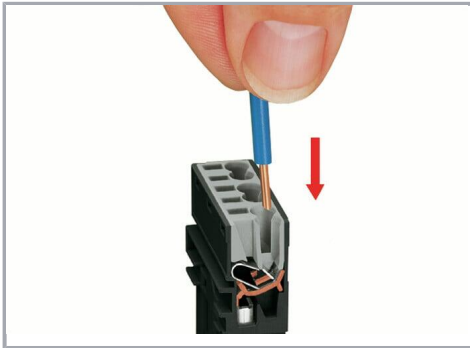


1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

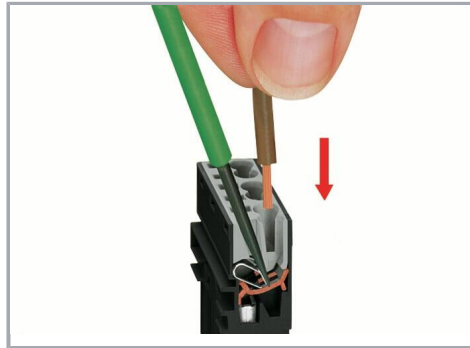


To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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

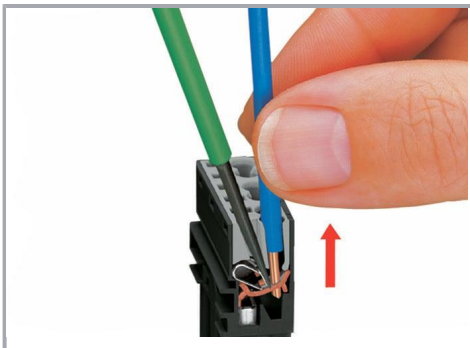


Insert the stripped solid conductor until it hits the backstop.



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.

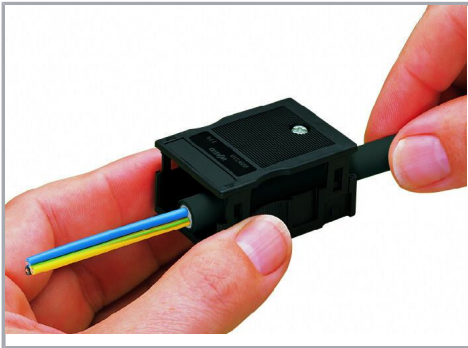
#### Conductor removal



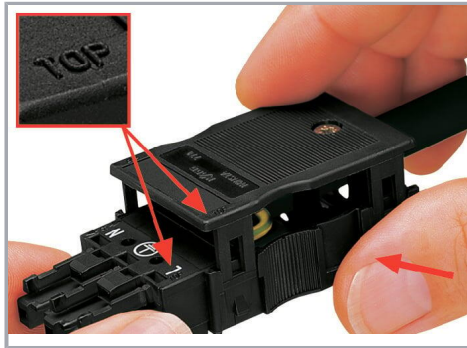
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### Installation

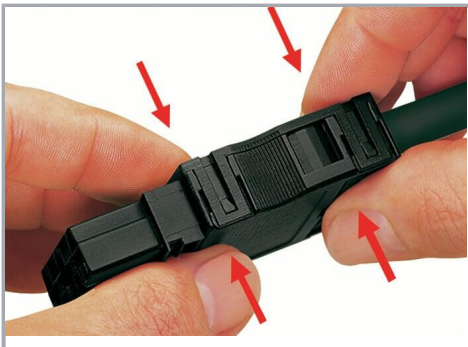
Subject to changes. Please also observe the further product documentation!



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.

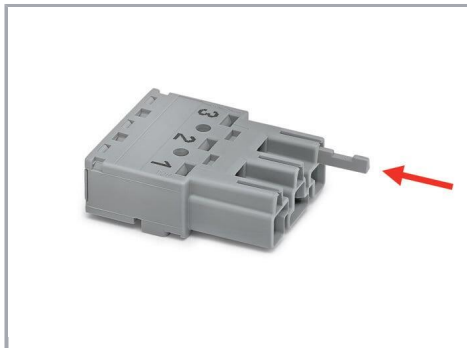


Tighten strain relief screw with screwdriver (2.5 mm blade width).

### Coding



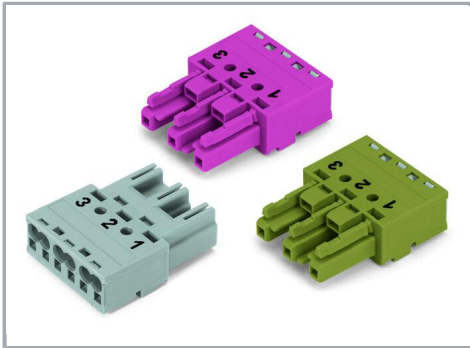
Simply cut off the coding pin from the socket.



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

### Mismatching protection

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

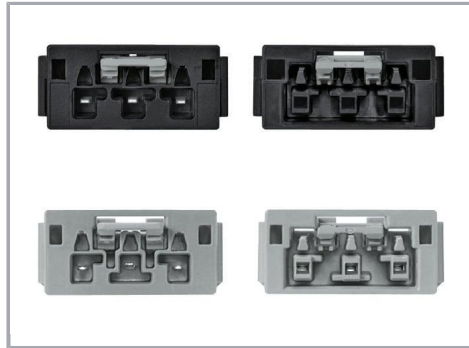


B-coded connectors with different colors can be plugged together.

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!