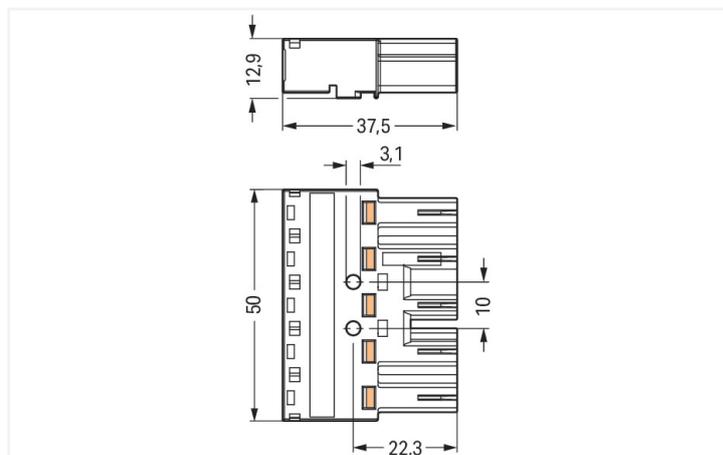
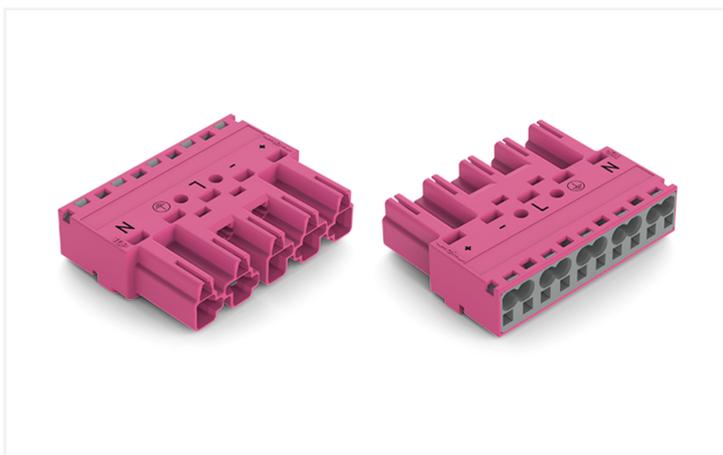


Color: ■ pink



Dimensions in mm

### Male connector/plug WINSTA® MIDI 5-pole

The WINSTA® MIDI male connector/plug B coding is the pluggable solution for your application in control cabinets, for lighting connections or on PCBs. Our pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in a large number of 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 energised contact elements. Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are appropriate for applications involving process control, for example, for lighting or within data networks. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They provide information about possible domains of use and applications. This product has a current rating of 25 A – therefore it is suitable for high power loads. The WINSTA® MIDI product line achieves maximum flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it achieves error-free, time-saving installation and offers customization for meeting various installation requirements.

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

The WINSTA® Pluggable Connection System is ideally tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and thus faster, more reliable, and error-free. Using this pre-assembled system decreases assembly times and errors during installation at the construction site. Now you can also lower installation costs without compromising quality and safety: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching

- for automation controllers
- for automation controllers
- flexible installation to save space
- quick replacement of defective units during ongoing operation

## Notes

General safety information

**NOTICE: Observe installation and safety instructions!**

- Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden!
- Nicht unter Spannung/Last installieren!
- Nur für bestimmungsgemäßen Gebrauch einsetzen!
- Nationale Vorschriften/Normen/Richtlinien beachten!
- Technische Daten der Produkte beachten!
- Auf die richtige Polbelegung achten!
- Keine beschädigten/verschmutzten Komponenten verwenden!
- Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten!
- Leiter bis zum Anschlag einführen!
- Nur mit Verriegelungsklinke und Zugentlastung verwenden!
- Originalzubehör verwenden!

**To be sold only with installation instructions!**

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 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	400 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	25 A	-	-

Ratings per IEC/EN – Notes	
Rated current (note)	25 A for 3-pole load 20 A for 4- and 5-pole load

Approvals per	UL 1977
Rated voltage	600 V
Rated current	23 A

General information	
Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket

## Connection Data

Clamping units	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

Use	Control technology
Coding	B
Variable coding	Yes
Marking	+ - L ⊕ N
Potential marking	+ - L ⊕ N
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)	<a href="#">Information on material specifications can be found here</a>
Color	pink
Cover color	gray
Material group	I
Insulation material (main housing)	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	0.328 MJ
Weight	16.7 g

**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**

PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821553953
Customs tariff number	85366990990

**Product Classification**

UNSPSC	39121402
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 10.0	EC002560
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>	
Environmental Product Compliance 770-295/082-000	<a href="#">↓</a>

Documentation

Bid Text			
770-295/082-000	19.02.2019	xml 2.97 KB	
770-295/082-000	08.06.2015	doc 24.50 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 770-295/082-000	

CAE data	
WSCAD Universe 770-295/082-000	
ZUKEN Portal 770-295/082-000	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

<a href="#">Item No.: 770-785/082-000</a> Snap-in socket; 5-pole; Cod. B; 4,00 mm <sup>2</sup> ; pink	<a href="#">Item No.: 770-885/011-000/082-000</a> Socket for PCBs; angled; 5-pole; Cod. B; pink	<a href="#">Item No.: 770-885/082-000</a> Socket for PCBs; straight; 5-pole; Cod. B; pink	<a href="#">Item No.: 770-285/082-000</a> Socket; 5-pole; Cod. B; 4,00 mm <sup>2</sup> ; pink

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system

<a href="#">Item No.: 770-101</a> Locking lever; for flying leads; for manual operation; black	<a href="#">Item No.: 770-121</a> Locking lever; for flying leads; for manual operation; white	<a href="#">Item No.: 770-111</a> Locking lever; for flying leads; for tool operation; black	<a href="#">Item No.: 770-131</a> Locking lever; for flying leads; for tool operation; white

1.2.2 Strain relief

1.2.2.1 Strain relief housing

<a href="#">Item No.: 770-505/021-000</a> Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black	<a href="#">Item No.: 770-515/021-000</a> Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white	<a href="#">Item No.: 770-505/023-000</a> Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black	<a href="#">Item No.: 770-515/023-000</a> Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white
<a href="#">Item No.: 770-505</a> Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black	<a href="#">Item No.: 770-515</a> Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white		

### 1.3 Optional Accessories

#### 1.3.1 Coding

##### 1.3.1.1 Coding



**Item No.: 770-401**

Coding pin; for plugs; Plastic; gray

#### 1.3.2 Cover

##### 1.3.2.1 Cover



**Item No.: 770-360**

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



**Item No.: 897-2005**

Protective cap; Type4; for sockets and plugs; PVC; red

#### 1.3.3 Installation

##### 1.3.3.1 Mounting accessories



**Item No.: 770-321**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black



**Item No.: 770-341**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white



**Item No.: 770-320**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black



**Item No.: 770-340**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

#### 1.3.4 Marking

##### 1.3.4.1 Marker



**Item No.: 770-450/000-006**

Marker card; Plastic; blue



**Item No.: 770-450/000-001**

Marker card; Plastic; green



**Item No.: 770-450/000-012**

Marker card; Plastic; orange



**Item No.: 770-450/000-005**

Marker card; Plastic; red



**Item No.: 770-450**

Marker card; Plastic; white



**Item No.: 770-450/000-002**

Marker card; Plastic; yellow

#### 1.3.5 Tool

##### 1.3.5.1 Operating tool

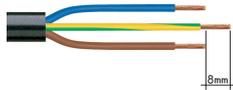


**Item No.: 210-719**

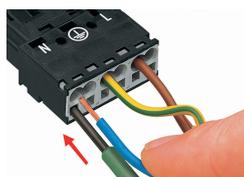
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

## 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.

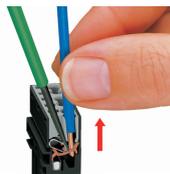


Insert the stripped solid conductor until it hits the backstop.



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



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



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.

Easy circuit identification via different marking and colors