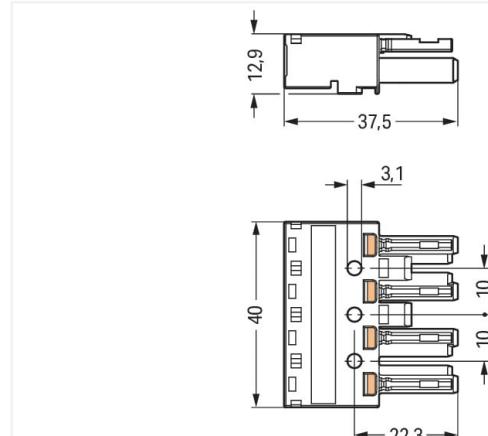


Color: ■ pink



Dimensions in mm

Female connector/socket WINSTA® MIDI with protection against mismatching

The WINSTA® MIDI female connector/socket 4-pole is the pluggable solution for your use in control cabinets, for lighting connections or on PCBs. The pluggable installation connectors with spring pressure connection technology function without screw connections. They allow resource-efficient, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, secure wiring of all components. 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 control in applications in automation, mechanical engineering and robotics. This pluggable installation connector is designed for a voltage load of up to 25 A. Thus, it can also be used 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, flexible, and secure installation.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MIDI pluggable installation connectors with protection type IP20 from WAGO.

- protection against mismatching eliminates errors
- pre-assembled versions
- with B coding for controllers such as lighting fixtures and sun blinds
- custom-engineered solutions
- rapid, structured electrical installation

### 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 60664-1	Approvals per	UL 1977
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	400 V	-	-		
Rated surge voltage	6 kV	-	-		
Rated current	25 A	-	-		

### General information

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

### Connection data

Connection points	8	Connection 1	
Total number of potentials	4	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	4
		Conductor entry direction to mating direction	0 °

### Physical data

Pin spacing	10 mm / 0.394 inches
Width	40 mm / 1.575 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 5 3
Potential marking	1 2 5 3
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 WINSTA® 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="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
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	0.221 MJ
Weight	12.6 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**

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	4050821555841
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

## 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

#### Compliance Search

Environmental Product  
Compliance  
770-284/081-000



## Documentation

#### Bid Text

770-284/081-000	19.02.2019	xml 2.96 KB	
770-284/081-000	08.06.2015	doc 24.50 KB	

## CAD/CAE-Data

#### CAD data

2D/3D Models 770-284/081-000	
---------------------------------	---

#### CAE data

WSCAD Universe 770-284/081-000	
ZUKEN Portal 770-284/081-000	

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Male connector/plug



##### [Item No.: 770-894/011-000/081-000](#)

Plug for PCBs; angled; 4-pole; Cod. B; pink

##### [Item No.: 770-894/081-000](#)

Plug for PCBs; straight; 4-pole; Cod. B; pink

##### [Item No.: 770-294/081-000](#)

Plug; 4-pole; Cod. B; 4,00 mm<sup>2</sup>; pink

##### [Item No.: 770-794/081-000](#)

Snap-in plug; 4-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



##### [Item No.: 770-101](#)

Locking lever; for flying leads; for manual operation; black

##### [Item No.: 770-121](#)

Locking lever; for flying leads; for manual operation; white

##### [Item No.: 770-111](#)

Locking lever; for flying leads; for tool operation; black

##### [Item No.: 770-131](#)

Locking lever; for flying leads; for tool operation; white

## 1.2.2 Strain relief

### 1.2.2.1 Strain relief housing



##### [Item No.: 770-504/023-000](#)

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

##### [Item No.: 770-514/023-000](#)

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

##### [Item No.: 770-504](#)

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

##### [Item No.: 770-514](#)

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

## 1.3 Optional Accessories

### 1.3.1 Cover

#### 1.3.1.1 Cover



##### [Item No.: 770-201](#)

Lockout cap; 12-pole, separable; for sockets; Plastic; black

##### [Item No.: 770-221](#)

Lockout cap; 12-pole, separable; for sockets; Plastic; white

##### [Item No.: 897-2005](#)

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

## 1.3.2 Installation

### 1.3.2.1 Mounting accessories



##### [Item No.: 770-319](#)

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black

##### [Item No.: 770-339](#)

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; white

### 1.3.3 Marking

#### 1.3.3.1 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

### 1.3.4 Tool

#### 1.3.4.1 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

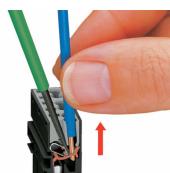


Insert the stripped solid conductor until it hits the backstop.



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

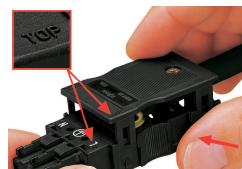


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

### 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.

## Mating 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