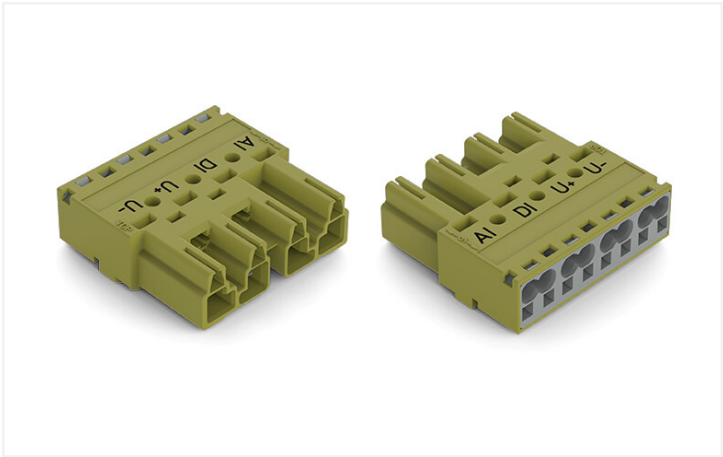
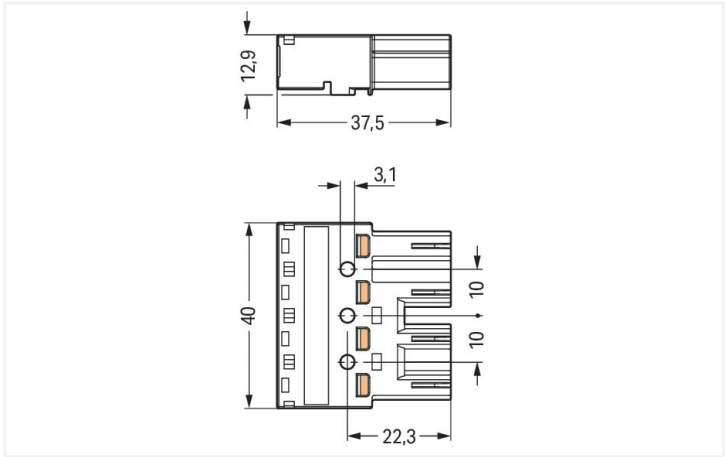




Color: ■ light green



Dimensions in mm

Male connector/plug WINSTA® MIDI 4-pole

For power and signal transmission: The WINSTA® MIDI male connector/plug 4-pole. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make 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 mismating. 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 elements. B coding enables the WINSTA® MIDI pluggable installation connectors to be used for application control in automation, robotics, and mechanical engineering. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. Our WINSTA® MIDI product line guarantees total flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers customization for meeting an enormous variety of installation requirements.

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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It allows 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 tool! Plan your installation with WINSTA® MIDI pluggable installation connectors with marking from WAGO.

- pluggable installation connectors with protection against mismating
- for automation controllers
- with B coding for controllers, for example sun blinds and lighting fixtures
- flexible installation to save space
- quick replacement of defective units during ongoing operation

| Notes     |                                                                                                                                                                                     |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Variants: | Other pole markings<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> . |

| Electrical data      |       |                |     |    |
|----------------------|-------|----------------|-----|----|
| Ratings per          |       | IEC/EN 60664-1 |     |    |
| Overvoltage category |       | III            | III | II |
| Pollution degree     |       | 3              | 2   | 2  |
| Nominal voltage      | 400 V | -              | -   | -  |
| Rated surge voltage  | 6 kV  | -              | -   | -  |
| Rated current        | 25 A  | -              | -   | -  |
| Approvals per        |       | UL 1977        |     |    |
| Rated voltage        |       | 600 V          |     |    |
| Rated current        |       | 23 A           |     |    |



| General information        |                                                                                          |
|----------------------------|------------------------------------------------------------------------------------------|
| Note on contact resistance | approx. 1 mΩ of contact resistance<br>approx. 0.25 mΩ contact transition plug/<br>socket |

| Connection data            |   |                                                            |                                  |
|----------------------------|---|------------------------------------------------------------|----------------------------------|
| Connection points          | 8 | <b>Connection 1</b>                                        |                                  |
| Total number of potentials | 4 | Connection technology                                      | Push-in CAGE CLAMP®              |
|                            |   | Actuation type                                             | Operating tool<br>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                                                | 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                                 | AI DI U+ U-                                                                                                                                            |
| Potential marking                       | AI DI U+ U-                                                                                                                                            |
| 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 WINSTA® components are 100% protected against mismating when:<br>a.) plugging different numbers of poles<br>b.) plugging while rotated 180<br>c.) plugging while laterally staggered<br>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                       | 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                   | 0.261 MJ                                                                                                               |
| Weight                      | 13.1 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                  | 4050821555698 |
| Customs tariff number | 85366990990   |



| Environmental Product Compliance |                        |
|----------------------------------|------------------------|
| RoHS Compliance Status           | Compliant,No Exemption |

Approvals / Certificates

General approvals



| Approval                                | Standard | Certificate Name |
|-----------------------------------------|----------|------------------|
| cURus<br>Underwriters Laboratories Inc. | UL 1977  | E45171           |
| cURus<br>Underwriters Laboratories Inc. | UL 1059  | E 45172          |

Downloads

Environmental Product Compliance

| Compliance Search                                   |  |
|-----------------------------------------------------|--|
| Environmental Product Compliance<br>770-274/072-000 |  |

Documentation

| Bid Text        |            |                 |  |
|-----------------|------------|-----------------|--|
| 770-274/072-000 | 19.02.2019 | xml<br>2.97 KB  |  |
| 770-274/072-000 | 08.06.2015 | doc<br>24.00 KB |  |

CAD/CAE-Data

| CAD data                        |  |
|---------------------------------|--|
| 2D/3D Models<br>770-274/072-000 |  |

| CAE data                          |  |
|-----------------------------------|--|
| WSCAD Universe<br>770-274/072-000 |  |
| ZUKEN Portal<br>770-274/072-000   |  |



| 1 Compatible Products                                                                                                  |                                                                                                                        |                                                                                                                 |                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1.1 Required Accessories                                                                                               |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.1.1 Locking system                                                                                                   |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.1.1.1 Locking system                                                                                                 |                                                                                                                        |                                                                                                                 |                                                                                                                 |
|                                       |                                       |                               |                              |
| <a href="#">Item No.: 770-101</a><br>Locking lever; for flying leads; for manual operation; black                      | <a href="#">Item No.: 770-121</a><br>Locking lever; for flying leads; for manual operation; white                      | <a href="#">Item No.: 770-111</a><br>Locking lever; for flying leads; for tool operation; black                 | <a href="#">Item No.: 770-131</a><br>Locking lever; for flying leads; for tool operation; white                 |
| 1.1.2 Strain relief                                                                                                    |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.1.2.1 Strain relief housing                                                                                          |                                                                                                                        |                                                                                                                 |                                                                                                                 |
|                                       |                                       |                               |                              |
| <a href="#">Item No.: 770-504/023-000</a><br>Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black | <a href="#">Item No.: 770-514/023-000</a><br>Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white | <a href="#">Item No.: 770-504</a><br>Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black | <a href="#">Item No.: 770-514</a><br>Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white |
| 1.2 Optional Accessories                                                                                               |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.2.1 Cover                                                                                                            |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.2.1.1 Cover                                                                                                          |                                                                                                                        |                                                                                                                 |                                                                                                                 |
|                                     |                                     |                                                                                                                 |                                                                                                                 |
| <a href="#">Item No.: 770-360</a><br>Lockout cap; for plugs; 5-pole; separable; yellow                                 | <a href="#">Item No.: 897-2005</a><br>Protective cap; Type4; for sockets and plugs; PVC; red                           |                                                                                                                 |                                                                                                                 |
| 1.2.2 Installation                                                                                                     |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.2.2.1 Mounting accessories                                                                                           |                                                                                                                        |                                                                                                                 |                                                                                                                 |
|                                     |                                     |                                                                                                                 |                                                                                                                 |
| <a href="#">Item No.: 770-319</a><br>Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black                                      | <a href="#">Item No.: 770-339</a><br>Snap-in frame; 4-pole; 1.0 ... 3.0 mm; white                                      |                                                                                                                 |                                                                                                                 |
| 1.2.3 Marking                                                                                                          |                                                                                                                        |                                                                                                                 |                                                                                                                 |
| 1.2.3.1 Marker                                                                                                         |                                                                                                                        |                                                                                                                 |                                                                                                                 |
|                                     |                                     |                             |                            |
| <a href="#">Item No.: 770-450/000-006</a><br>Marker card; Plastic; blue                                                | <a href="#">Item No.: 770-450/000-001</a><br>Marker card; Plastic; green                                               | <a href="#">Item No.: 770-450/000-012</a><br>Marker card; Plastic; orange                                       | <a href="#">Item No.: 770-450/000-005</a><br>Marker card; Plastic; red                                          |
|                                     |                                     |                                                                                                                 |                                                                                                                 |
| <a href="#">Item No.: 770-450</a><br>Marker card; Plastic; white                                                       | <a href="#">Item No.: 770-450/000-002</a><br>Marker card; Plastic; yellow                                              |                                                                                                                 |                                                                                                                 |

1.2.4 Tool

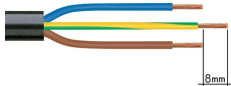
1.2.4.1 Operating tool



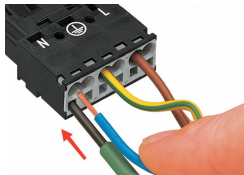
Item No.: 210-719  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

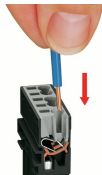
Conductor termination



- 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



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.

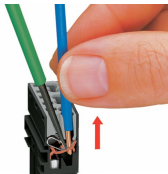


Insert the stripped solid conductor until it hits the backstop.



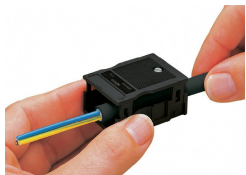
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

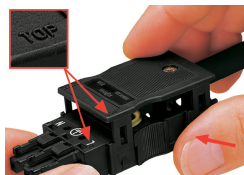


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

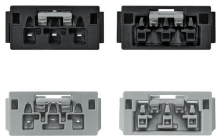
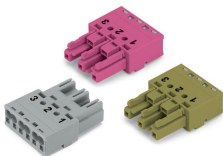


Simply cut off the coding pin from the socket.



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

Mismating 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