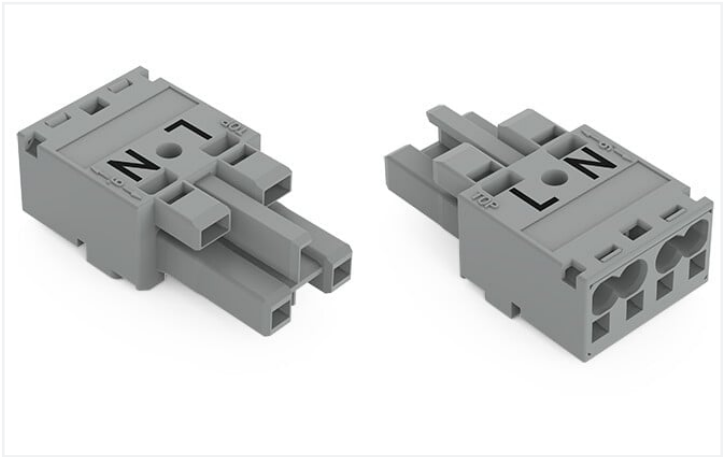
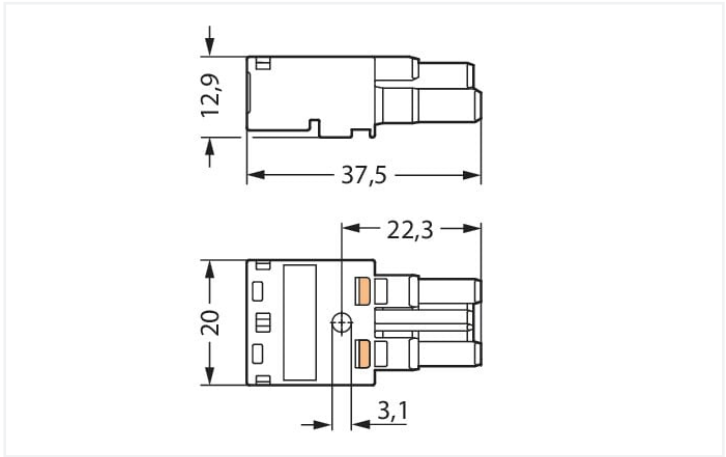




Color: ■ gray



Dimensions in mm

Female connector/socket WINSTA® MIDI 2-pole

For signal and power transmission: The WINSTA® MIDI female connector/socket 2-pole. WAGO pluggable installation connectors are used when criteria repeat or are planned on a defined grid, for example for installing grid lighting or flush-mount lighting. For greater security in electrical installations, the pluggable installation connector is equipped 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!)). B coding enables the WINSTA® MIDI pluggable installation connectors to be used for application control in automation, mechanical engineering and robotics. This pluggable installation connector is designed for a current load of up to 25 A. As a result, it can also be used for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the built-in test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and expense.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Now you can also cut installation expenses without compromising safety and quality: with marking reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- pre-assembled versions
- with B coding for use in process automation, such as lighting technology, among other examples
- 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      | 250 V | -              | -  |  |
| Rated surge voltage  | 4 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          | 4 |
| Total number of potentials | 2 |

## Connection 1

|                                                            |                                  |
|------------------------------------------------------------|----------------------------------|
| 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                                                | 2                                |
| Conductor entry direction to mating direction              | 0°                               |

## Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches   |
| Width       | 20 mm / 0.787 inches   |
| Height      | 12.9 mm / 0.508 inches |
| Depth       | 37.5 mm / 1.476 inches |

## Mechanical data

|                                         |                                                                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application                             | Control technology                                                                                                                                     |
| Coding                                  | B                                                                                                                                                      |
| Variable coding                         | No                                                                                                                                                     |
| 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) | Female connector/socket                                                                                                                                                                                                                                                                                          |
| 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                       | 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                   | 0.127 MJ                                                                                                               |
| Weight                      | 6.6 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

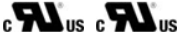
|                       |               |
|-----------------------|---------------|
| eCl@ss 10.0           | 27-44-06-05   |
| eCl@ss 9.0            | 27-44-06-05   |
| ETIM 8.0              | EC002560      |
| ETIM 7.0              | EC002560      |
| PU (SPU)              | 100 pcs       |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4050821553137 |
| 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>770-242/060-000 |  |

Documentation

| Bid Text        |            |                 |  |
|-----------------|------------|-----------------|--|
| 770-242/060-000 | 19.02.2019 | xml<br>2.96 KB  |  |
| 770-242/060-000 | 08.06.2015 | doc<br>23.50 KB |  |

CAD/CAE-Data

| CAD data                        |  |
|---------------------------------|--|
| 2D/3D Models<br>770-242/060-000 |  |

| CAE data                             |  |
|--------------------------------------|--|
| EPLAN Data Portal<br>770-242/060-000 |  |
| WSCAD Universe<br>770-242/060-000    |  |
| ZUKEN Portal<br>770-242/060-000      |  |



1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 770-252/060-000  
Plug; 2-pole; Cod. B; 4,00 mm²; gray

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.: 770-502/042-000  
Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; black



Item No.: 770-512/042-000  
Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; white



Item No.: 770-502/041-000  
Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; black



Item No.: 770-512/041-000  
Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 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.: 897-2003  
Protective cap; Type2; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 897-2100  
Mounting plate; for Snap-in; Plastic; for detectors and sensors ; Ø 200 mm; red



Item No.: 770-317  
Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black



Item No.: 770-337  
Snap-in frame; 2-pole; 1.0 ... 3.0 mm; white

1.3.3 Tool

1.3.3.1 Operating tool



Item No.: 770-382  
Operating tool; 2-way; green



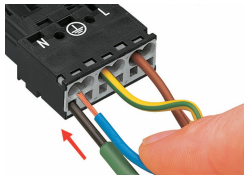
Item No.: 210-719  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

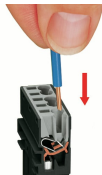
Conductor termination



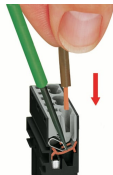
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

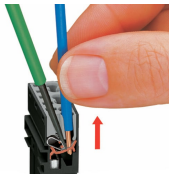


Insert the stripped solid conductor until it hits the backstop.



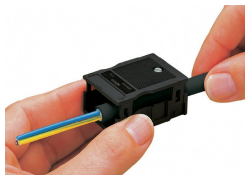
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

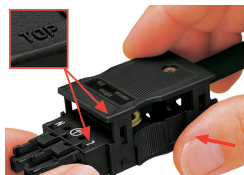


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

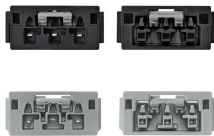
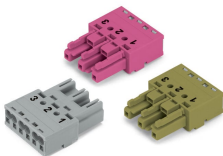


Simply cut off the coding pin from the socket.



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