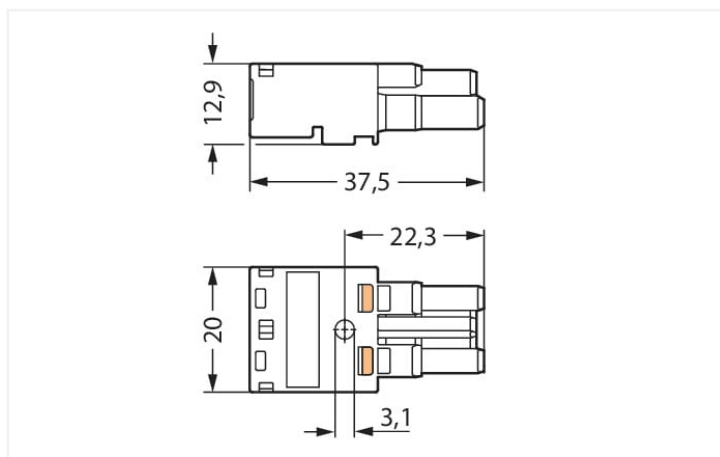




Color: ■ black



Dimensions in mm

#### Female connector/socket WINSTA® MIDI 2-pole

The WINSTA® MIDI female connector/socket A coding supports rapid, correct installation. WAGO pluggable installation connectors can be used when criteria repeat or are distributed on a defined pattern, for example for installing grid lighting or flush-mount lighting. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. 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 electrified elements. The WINSTA® MIDI pluggable installation connector with A coding in white or black is usually used for general mains applications in power distribution. 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 also suitable for high power loads. Our WINSTA® MIDI product line allows maximum flexibility for the installation. 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 perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and therefore faster, even more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and errors during installation at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with marking from WAGO.

- pluggable installation connectors with protection against mismatching
- simple circuits
- with A coding for a great number of uses
- exact dimensions
- quick replacement of defective units during ongoing operation



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            | 250 V | -   | -  |                       |       |
| Rated surge voltage        | 4 kV  | -   | -  |                       |       |
| Rated current              | 25 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 | Connection 1   |                                  |
| Total number of potentials | 2 | 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                             | General mains applications   |
| Coding                                  | A  |
| 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="#">Information on material specifications can be found here</a> |
| Color                       | black  |
| 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                   | 0.113 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       |               |
|-----------------------|---------------|
| 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      |
| PU (SPU)              | 100 pcs       |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4050821028109 |
| Customs tariff number | 85366990990   |






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

Approvals / Certificates


| General approvals   |           |                  |
|---|-----------|------------------|
| <div>  </div> |           |                  |
| Approval  | Standard  | Certificate Name |
| CCA<br>DEKRA Certification B.V.   | EN 61535  | 71-123228        |
| CCA<br>DEKRA Certification B.V.   | IEC 61535 | NL -84761        |
| cURus<br>Underwriters Laboratories Inc.   | UL 1977   | E45171           |
| cURus<br>Underwriters Laboratories Inc.   | UL 1059   | E 45172          |

| Declarations of conformity and manufacturer's declarations |          |                  |
|--|----------|------------------|
| Approval   | Standard | Certificate Name |
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |



Approvals for marine applications

|   |           |                  |
|---|-----------|------------------|
|    |           |                  |
| Approval  | Standard  | Certificate Name |
| ABS<br>American Bureau of Ship-<br>ping   | -         | 19-HG1868589-PDA |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd   | -         | TAE00001Z6       |
| LR<br>Lloyds Register   | IEC 61984 | LR22429487TA     |

Downloads

| Environmental Product Compliance            |   |
|---|---|
| Compliance Search                           |   |
| Environmental Product<br>Compliance 770-202 |  |

Documentation

|          |            |                 |   |
|----------|------------|-----------------|---|
| Bid Text |            |                 |   |
| 770-202  | 19.02.2019 | xml<br>2.93 KB  |  |
| 770-202  | 08.06.2015 | doc<br>23.50 KB |  |



| CAD/CAE-Data   |   |
|--|---|
| <div>CAD data</div> <div>2D/3D Models 770-202</div> <div>↓</div> | <div>CAE data</div> <div>EPLAN Data Portal 770-202</div> <div>↓</div> |
|  | <div>WSCAD Universe 770-202</div> <div>↓</div>                        |
|  | <div>ZUKEN Portal 770-202</div> <div>↓</div>                          |





1 Compatible Products

1.1 System counterpart



1.1.1 Cable assembly

|   |  |
|---|--|
|   |   |
| <div>Item No.: <a href="#">771-8992/206-101</a><br/>pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; black</div> | <div>Item No.: <a href="#">771-8992/006-101</a><br/>pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; black</div> |

1.1.2 Distribution connector

|  |  |   |   |
|--|--|---|---|
|   |   |   |    |
| <div>Item No.: <a href="#">770-1634</a><br/>h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black</div> | <div>Item No.: <a href="#">770-1636</a><br/>h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black</div> | <div>Item No.: <a href="#">770-1606</a><br/>T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black</div> | <div>Item No.: <a href="#">770-1615</a><br/>T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black</div> |





1.1.3 Male connector/plug

|  |  |
|--|--|
|     |   |
| <div>Item No.: <a href="#">770-212</a><br/>Plug; 2-pole; Cod. A; 4,00 mm²; black</div> | <div>Item No.: <a href="#">770-112/041-000</a><br/>Plug; with strain relief housing; 2-pole; Cod. A; 4,00 mm²; black</div> |

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system

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

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



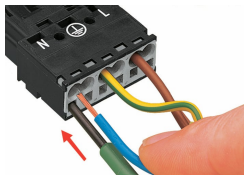
**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

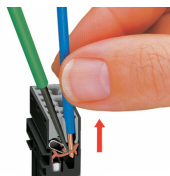


Insert the stripped solid conductor until it hits the backstop.



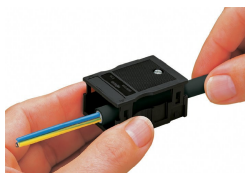
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

### Conductor removal

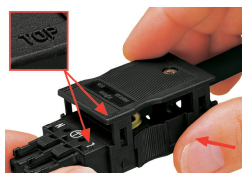


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

### 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).