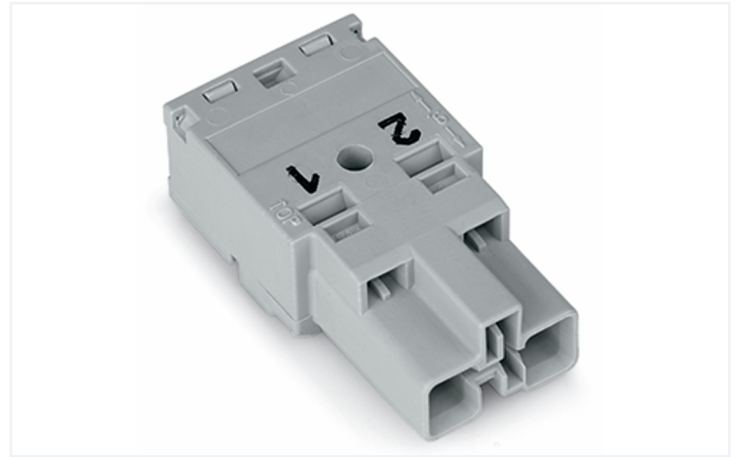
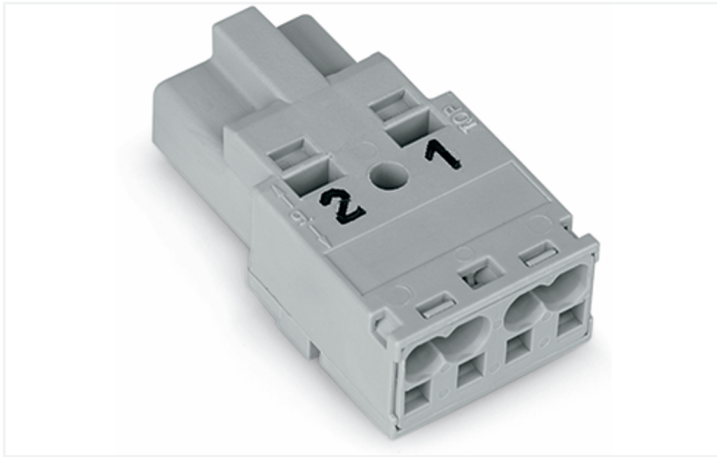


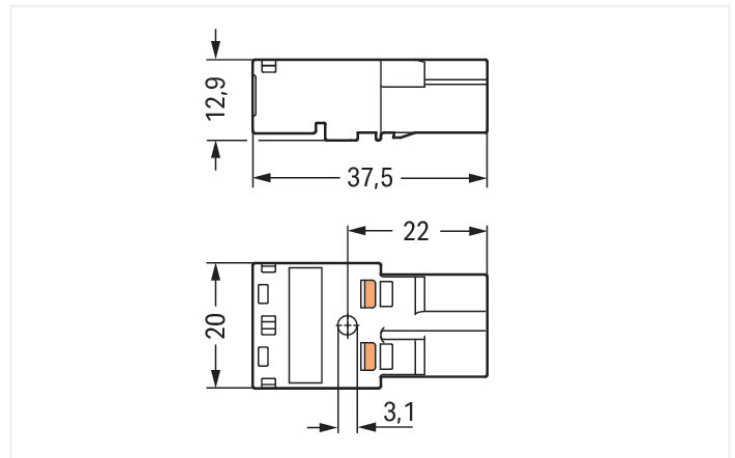
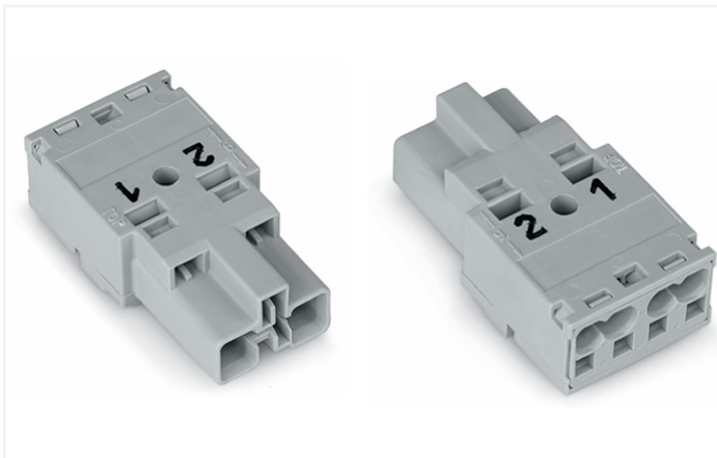
Data Sheet | Item Number: 770-252

Plug; 2-pole; Cod. B; 4,00 mm²; gray

<https://www.wago.com/770-252>



Color: ■ gray



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI male connector/plug 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. 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 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!)). Pluggable installation connectors with B coding from the WINSTA® MIDI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for light, pumps or sun blinds. Your own pole marking is possible as well. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is especially suitable 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 integrated test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and costs.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Now you can also reduce installation costs without compromising safety and quality: with marking eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- pre-assembled versions
- for automation controllers
- custom-engineered solutions
- convenient installation and commissioning



| 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 | |
| Overvoltage category | | III | II |
| Pollution degree | | 3 | 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 approx. 0.25 mΩ contact transition plug/ socket |

| Connection data | |
|----------------------------|---|
| Clamping units | 4 |
| Total number of potentials | 2 |

| Connection 1 | |
|--|----------------------------------|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Operating tool 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

| | |
|---|--|
| Use | Control technology |
| Coding | B |
| Variable coding | No |
| Marking | 2 1 |
| Potential marking | 2 1 |
| 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: 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) | Information on material specifications can be found here |
| Color | gray |
| 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 | 0.123 MJ |
| Weight | 6.4 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) | |
| PU (SPU) | 100 pcs | |
| Packaging type | Box | |
| Country of origin | PL | |
| GTIN | 4050821541875 | |
| 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 8.0 | EC002560 | |
| ECCN | NO US CLASSIFICATION | |

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

Approvals / Certificates

| General approvals | | | Declarations of conformity and manufacturer's declarations | | |
|--|-----------|------------------|--|----------|------------------|
|    | | | | | |
| Approval | Standard | Certificate Name | Approval | Standard | Certificate Name |
| CCA DEKRA Certification B.V. | IEC 61984 | NL-32104 | EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
| CCA DEKRA Certification B.V. | EN 61984 | 2173495.01 | UK-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
| cURus Underwriters Laboratories Inc. | UL 1977 | E45171 | | | |
| cURus Underwriters Laboratories Inc. | UL 1059 | E 45172 | | | |

Approvals for marine applications

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



Downloads

Environmental Product Compliance

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1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly




Item No.: 771-8992/105-103
pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; 1 m; 1,00 mm²; gray




Item No.: 771-8992/005-103
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; 1 m; 1,00 mm²; gray


1.1.2 Distribution connector




Item No.: 770-1704
3-way distribution connector; 2-pole; Cod. B; 1 input; 3 outputs; gray




Item No.: 770-1608
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; gray




Item No.: 770-1658
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; gray




Item No.: 770-1651
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray




Item No.: 770-1751
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray



Item No.: 770-1601
T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray



Item No.: 770-2601/082-000
T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; light turquoise



Item No.: 770-1701
T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray



1.1.3 Female connector/socket



Item No.: 770-242
Socket; 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.: 770-360
Lockout cap; for plugs; 5-pole; separable; yellow



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



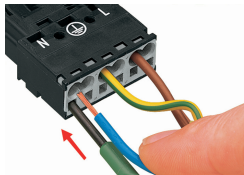
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

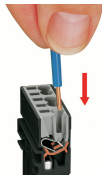
Conductor termination



- 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.

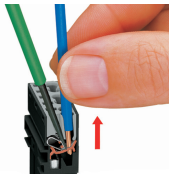


Insert the stripped solid conductor until it hits the backstop.



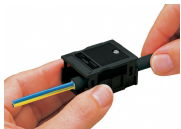
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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.

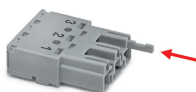


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding

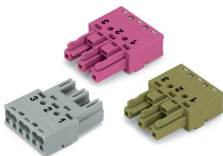


Simply cut off the coding pin from the socket.



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