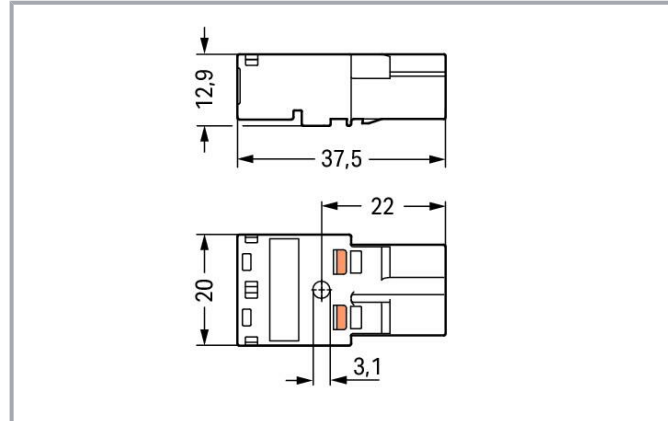


Data sheet | Item number: 770-232
Plug; 2-pole; Cod. A; 4,00 mm²; white

www.wago.com/770-232



Item description

Male connector/plug *WINSTA*® MIDI A coding

The *WINSTA*® MIDI male connector/plug 2-pole supports rapid, correct installation. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in a large number of applications. The coding options reduce installation errors, allowing fast, maintenance-free 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!)). The *WINSTA*® MIDI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – as a result it is also suitable for robust 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, connections can be checked 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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Now you can also cut installation costs without compromising quality and safety: The *WINSTA*® MIDI pluggable installation connector with protection against mismatching eliminates the need for servicing and prevents unnecessary

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

downtime.

-
- protection against mismatching eliminates errors
- for automation controllers
- with A coding for use in many general mains applications
- custom-engineered solutions
- convenient installation and commissioning

Data

Electrical data

Ratings per IEC/EN

| | |
|-------------------------------|---|
| Ratings per | IEC/EN 60664-1 |
| Nominal voltage (III/3) | 250 V |
| Rated impulse voltage (III/3) | 4 kV |
| Rated current | 25 A |
| Legend (ratings) | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

Ratings per UL 1977

| | |
|-------------------------|--|
| Note for the US market | Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office. |
| Rated voltage (UL 1977) | 600 V |
| Rated current UL 1977 | 23 A |

General

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

Connection data

| | |
|----------------------------|---|
| Connection points | 4 |
| Total number of potentials | 2 |

Connection 1

Connection technology

Subject to changes. Please also observe the further product documentation!



| | Push-in CAGE CLAMP® |
|--|--|
| Actuation type | Operating tool Push-in |
| Nominal cross-section | 4 mm ² / 12 AWG |
| Solid conductor | 0.5 ... 4 mm ² / 20 ... 12 AWG |
| Solid conductor; push-in termination | 1.5 ... 4 mm ² / 16 ... 12 AWG |
| Stranded conductor | 0.5 ... 2.5 mm ² / 20 ... 14 AWG |
| Fine-stranded conductor | 0.5 ... 4 mm ² / 20 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² / 20 ... 16 AWG |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² / 20 ... 14 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1.5 mm ² / 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 | Yes |
| Marking | N L |
| Potential marking | N L |
| 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 |
|------------------------------------|---------------------|

Subject to changes. Please also observe the further product documentation!



| | |
|-------------------------------|--|
| Connector (connection type) | for conductor |
| Mismating protection | Yes |
| Note on mismating protection | All <i>WINSTA</i> [®] 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 | white |
| 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 | 0.139 MJ |
| Weight | 6.5 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 |

Subject to changes. Please also observe the further product documentation!



| | |
|-----------------------|---------------|
| 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 | 4050821028314 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance


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

Approvals / Certificates


General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|------------------|
| | CCA DEKRA Certification B.V. | IEC 61535 | NL -84761 |
|  | CCA DEKRA Certification B.V. | EN 61535 | 71- 123228 |
|  | cURus Underwriters Laboratories Inc. | UL 1977 | E45171 |

Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
|  | EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|--|------------------------------------|--------------------------|--------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG1868589- PDA |

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



DNV GL
Det Norske Veritas, Germanischer Lloyd

-

TAE00001Z6



LR
Lloyds Register

IEC 61984

LR22429487TA

Counterpart



Item no.770-122/041-000
Socket; with strain relief housing; 2-pole; Cod. A; 4,00 mm²; white

www.wago.com/770-122/041-000



Item no.770-1656
T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white

www.wago.com/770-1656



Item no.770-1665
T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; white

www.wago.com/770-1665



Item no.770-1684
h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white

www.wago.com/770-1684



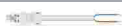
Item no.770-1686
h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white

www.wago.com/770-1686



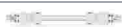
Item no.770-222
Socket; 2-pole; Cod. A; 4,00 mm²; white

www.wago.com/770-222



Item no.771-8992/106-102
pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; white

www.wago.com/771-8992/106-102



Item no.771-8992/006-102
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; white

www.wago.com/771-8992/006-102

Required accessories

Strain relief

Strain relief housing



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

www.wago.com/770-502/041-000

Subject to changes. Please also observe the further product documentation!



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

www.wago.com/770-502/042-000



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

www.wago.com/770-512/041-000



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

www.wago.com/770-512/042-000

Locking levers

Locking system



Item no.: 770-121

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

www.wago.com/770-121



Item no.: 770-131

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

www.wago.com/770-131



Item no.: 770-101

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

www.wago.com/770-101



Item no.: 770-111

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

www.wago.com/770-111

Optional accessories

Tool

Operating tool



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719



Item no.: 770-382

Operating tool; 2-way; green

www.wago.com/770-382

Cover

Cover



Item no.: 770-360

Lockout cap; for plugs; 5-pole; separable; yellow

www.wago.com/770-360

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



Item no.: 897-2003

Protective cap; Type2; for sockets and plugs; PVC; red

www.wago.com/897-2003

Mounting

Snap-in frame



Item no.: 770-317

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-317



Item no.: 770-337

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-337

Mounting accessories



Item no.: 897-2100

Mounting plate; for Snap-in; Plastic; for detectors and sensors ; Ø 200 mm; red

www.wago.com/897-2100

Downloads

Documentation

Bid Text

| | | | |
|------------------------|-------------|----------------|----------|
| 770-232 X81 - Datei | 2019 Feb 19 | xml 3.0 kB | Download |
| 770-232 doc - Datei | 2015 Jun 8 | doc 24.1 kB | Download |

CAD/CAE-Data

CAD data

2D/3D Models 770-232 [URL](#) [Download](#)

CAE data

WSCAD Universe 770-232 [URL](#) [Download](#)

ZUKEN Portal 770-232 [URL](#) [Download](#)

EPLAN Data Portal 770-232 [URL](#) [Download](#)

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-232

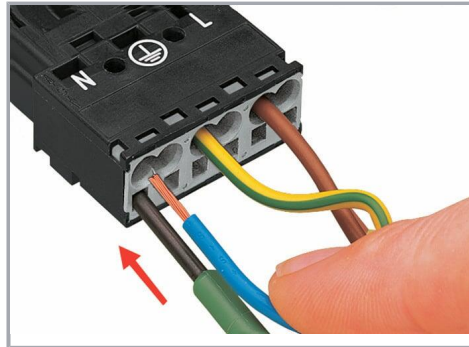
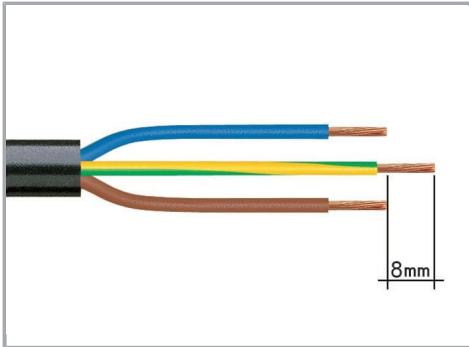
URL

Download

Plug; 2-pole; Cod. A; 4,00 mm²; white

Installation Notes

Conductor termination

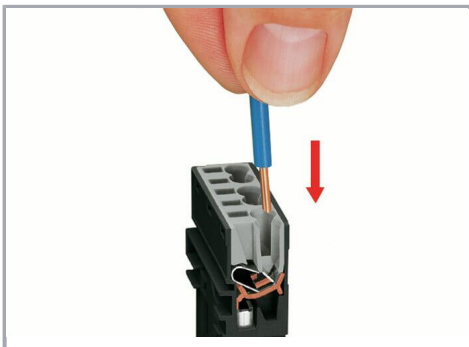


1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)

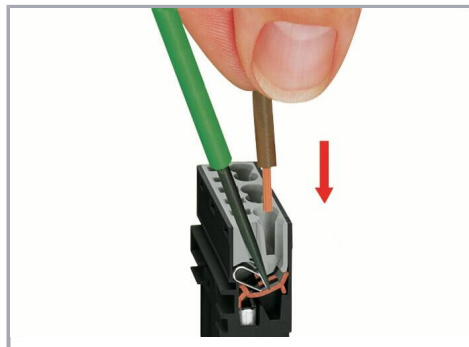
2. Strip length = 9 mm

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.



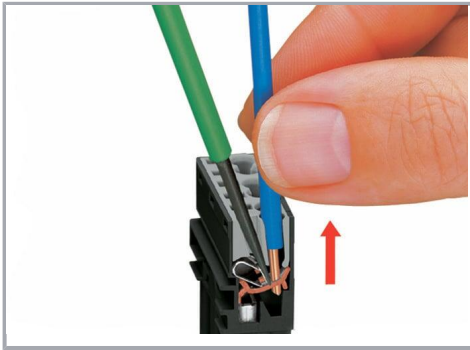
Insert the stripped solid conductor until it hits the backstop.



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.

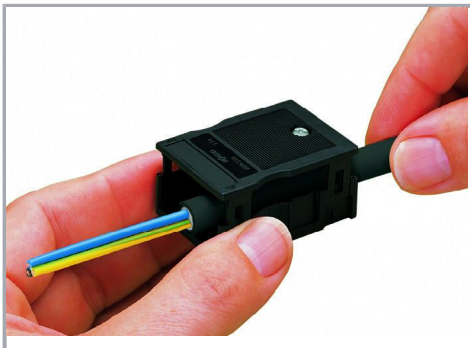
Conductor removal

Subject to changes. Please also observe the further product documentation!

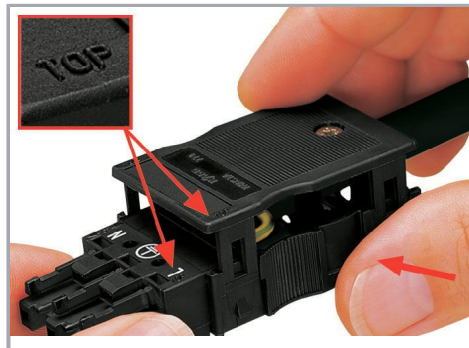


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Installation

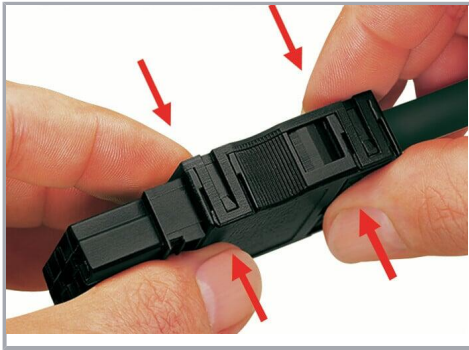


We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug /socket. Note the "TOP" inscription.

Subject to changes. Please also observe the further product documentation!



Prepare strain relief housing by snapping together upper and bottom part.



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

Product family

WINSTA® MIDI

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!