

Item description

Female connector/socket W/INSTA® MIDI with protection type IP20

The W/INSTA® MIDI female connector/socket A coding allows installation of solid and fine-stranded conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of requirements in no time flat. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector offers protection against contact 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!)). Thanks to the color coding and mechanical A coding of W/INSTA® MIDI pluggable installation connectors, you can clearly distinguish different circuits. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. Our W/INSTA® MIDI product line offers total flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers flexibility for meeting an enormous variety of installation requirements. The strip length is 35 mm.

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

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Do you have any questions about our products?

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

WINSTA® MIDI solutions for your electrical installation – protected against mismating and maintenance-free

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Choose quality and durability – with protection type IP20 from WAGO makes the installation of electrical components visibly easier.

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- protection against mismating eliminates errors
- pre-assembled versions
- suitable for any application
- 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) \triangleq 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 information

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

Connection data

| | |
|-------------------|---|
| Connection points | 4 |
|-------------------|---|

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

Total number of potentials

2

Connection 1

| | |
|--|--|
| Connection technology | 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 ° |
| Strip length (outer insulation) | 35 mm |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches |
| Width | 24.6 mm / 0.969 inches |
| Height | 15.9 mm / 0.626 inches |
| Depth | 71 mm / 2.795 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) |

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

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: 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). |
| Strain relief | strain relief housing |

Material data

Note (material data)

Information on material specifications can be found here

| | |
|-----------------------------|---|
| 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 | 0.393 MJ |
| Weight | 13 g |

Environmental requirements

| | |
|----------------------------------|----------------|
| Processing temperature | -5 ... +40 °C |
| Continuous operating temperature | -35 ... +85 °C |

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

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 |
| ECCN | NO DATA |
| PU (SPU) | 25 pcs |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4050821117919 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

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

Approvals / Certificates

General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|------------------|
|  | CCA DEKRA Certification B.V. | EN 61535 | 71- 123228 |
| | CCA DEKRA Certification B.V. | IEC 61535 | NL -84761 |
|  | cURus Underwriters Laboratories Inc. | UL 1977 | E45171 |
|  | cURus Underwriters Laboratories Inc. | UL 1059 | E 45172 |

Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|------|------------------------------|--------------------------|------------------|
| | EU-Declaration of Conformity | - | - |

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



WAGO GmbH & Co. KG

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|---|--|--------------------------|--------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG1868589- PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001Z6 |
|  | LR Lloyds Register | IEC 61984 | LR22429487TA |

Counterpart

| | | |
|--|--|--|
|  | Item no.770-112/041-000 Plug; with strain relief housing; 2-pole; Cod. A; 4,00 mm ² ; black | www.wago.com/770-112/041-000 |
|  | Item no.770-1606 T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black | www.wago.com/770-1606 |
|  | Item no.770-1615 T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black | www.wago.com/770-1615 |
|  | Item no.770-1634 h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black | www.wago.com/770-1634 |
|  | Item no.770-1636 h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black | www.wago.com/770-1636 |
|  | Item no.770-212 Plug; 2-pole; Cod. A; 4,00 mm ² ; black | www.wago.com/770-212 |
|  | Item no.771-8992/206-101 pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm ² ; 1 m; 1,50 mm ² ; black | www.wago.com/771-8992/206-101 |

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



Item no. 771-8992/006-101

pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; black

www.wago.com/771-8992

/006-101

Required accessories

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.: 770-201

Lockout cap; 12-pole, separable; for sockets; Plastic; black

www.wago.com/770-201



Item no.: 770-221

Lockout cap; 12-pole, separable; for sockets; Plastic; white

www.wago.com/770-221



Item no.: 897-2003

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

www.wago.com/897-2003

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

Downloads

Documentation

Bid Text

| | | | |
|--------------------------------|-------------|----------------|--------------------------|
| 770-102/041-000 X81 - Datei | 2019 Feb 19 | xml 3.1 kB | Download |
| 770-102/041-000 doc - Datei | 2015 Jun 8 | doc 24.1 kB | Download |

CAD/CAE-Data

CAD data

| | | |
|------------------------------|---------------------|--------------------------|
| 2D/3D Models 770-102/041-000 | URL | Download |
|------------------------------|---------------------|--------------------------|

CAE data

| | | |
|--------------------------------|---------------------|--------------------------|
| WSCAD Universe 770-102/041-000 | URL | Download |
| ZUKEN Portal 770-102/041-000 | URL | Download |
| WSCAD Universe 770-102/041-000 | URL | Download |

Asset Administration Shell

| | | |
|--|---------------------|--------------------------|
| Asset Administration Shell 770-102/041-000 | URL | Download |
|--|---------------------|--------------------------|

Environmental Product Compliance

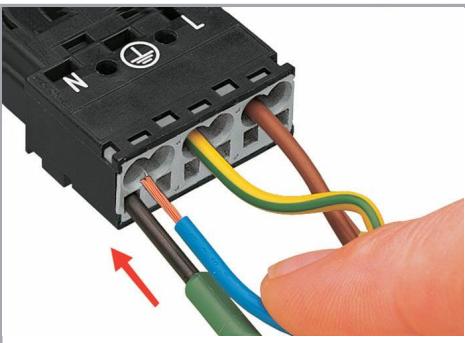
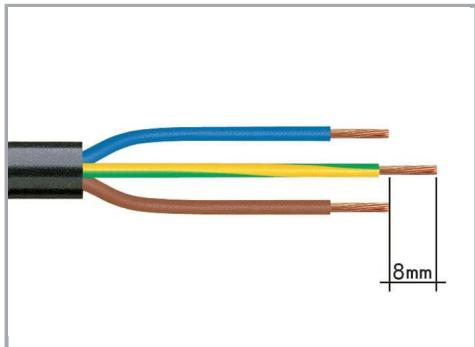
Compliance Search

| | | |
|--|---------------------|--------------------------|
| Environmental Product Compliance 770-102/041-000 Socket; with strain relief housing; 2-pole; Cod. A; 4,00 mm ² ; black | URL | Download |
|--|---------------------|--------------------------|

Installation Notes

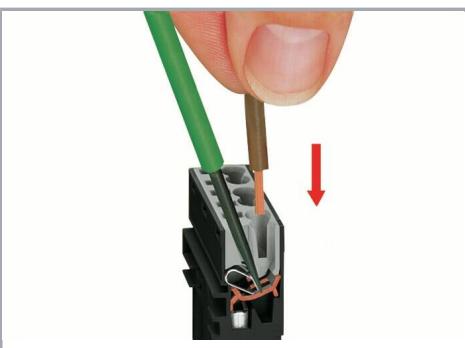
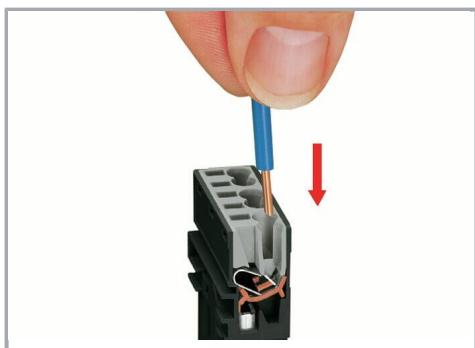
Conductor termination

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



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

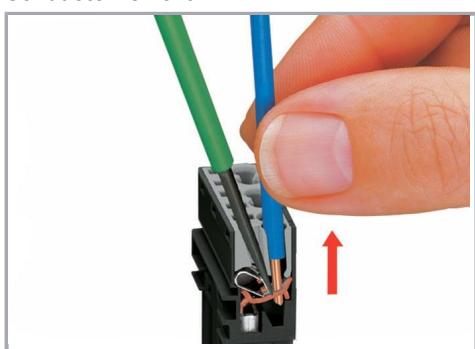
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.



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.

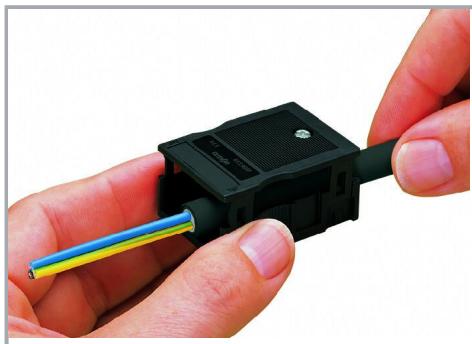
Conductor removal



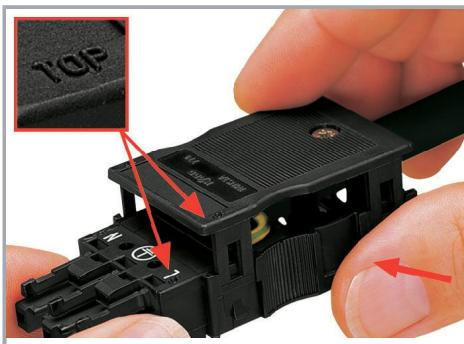
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

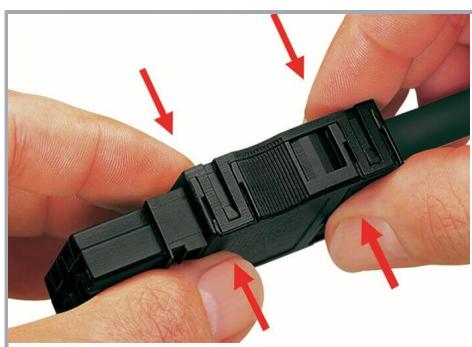
Installation



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).

Product family

WINSTA® MIDI

[Show all products from the family](#)

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