

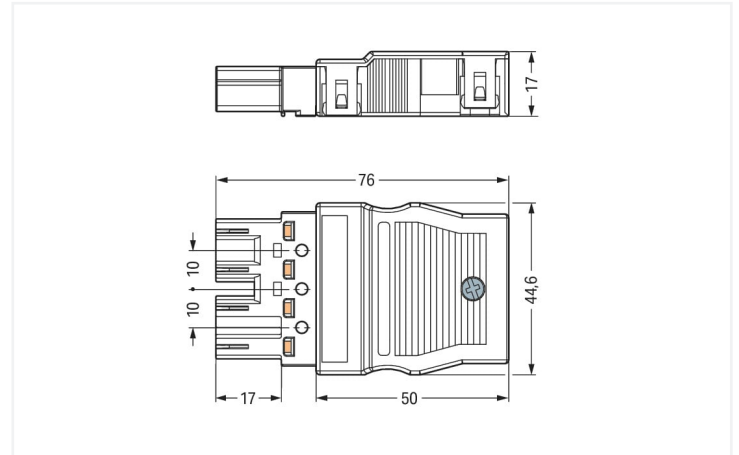
Data Sheet | Item Number: 770-114

Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black

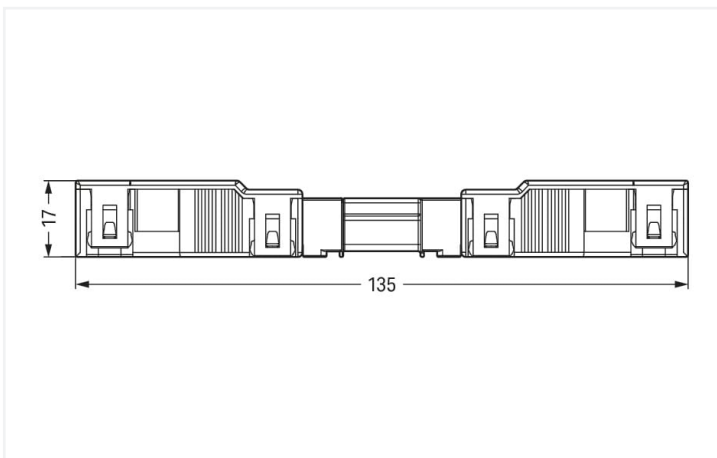
<https://www.wago.com/770-114>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

Male connector/plug WINSTA® MIDI A coding

For power and signal transmission: The WINSTA® MIDI male connector/plug 4-pole. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to an enormous variety of requirements in no time flat. 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 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!)). The WINSTA® MIDI pluggable installation connector with A coding in white or black is usually 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 – so it is suitable for robust loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy, secure, tailored installation. The strip length is 55 mm.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismatching from WAGO.

- effective protection against mismatching
- simple circuits
- with A coding for use in many general mains applications
- custom-engineered solutions
- convenient installation and commissioning

This item includes:



Item No.: 770-504

1

Item No.: 770-214

1

Strain relief housing; 4-pole; for 2 cables;
9.0 ... 13.0 mm; 55 mm; blackPlug; 4-pole; Cod. A; 4,00 mm²; black

Electrical data

| Ratings per | IEC/EN 60664-1 | | | Approvals per | UL 1977 |
|----------------------|----------------|-----|----|---------------|---------|
| Overtoltage category | III | III | II | Rated voltage | 600 V |
| Pollution degree | 3 | 2 | 2 | Rated current | 23 A |
| Nominal voltage | 400 V | - | - | | |
| Rated surge voltage | 6 kV | - | - | | |
| Rated current | 25 A | - | - | | |

General information

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

Connection data

| | | | |
|----------------------------|----------------------|--|--|
| Connection points | 8 | Connection 1 | |
| Total number of potentials | 4 | Connection technology | Push-in CAGE CLAMP® |
| PE function | Preceding PE contact | 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 | 4 |
| | | Connectable sheathed cable diameter | 9 ... 13 mm |
| | | Conductor entry direction to mating direction | 0° |
| | | Strip length (outer insulation) | 55 mm |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches |
| Width | 44.6 mm / 1.756 inches |
| Height | 17 mm / 0.669 inches |
| Depth | 76 mm / 2.992 inches |

Mechanical data

| | |
|---|--|
| Application | General mains applications |
| Coding | A |
| Variable coding | Yes |
| Marking | 1/L' 2/L N |
| Potential marking | 1/L' 2/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) | 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). |
| 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 | 0.619 MJ |
| Weight | 24.9 g |

Environmental requirements

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|--|--|
| 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) | 25 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4044918254410 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

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

Approvals / Certificates

General approvals



| Approval | Standard | 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 |
| VDE VDE Prüf- und Zertifizie- rungsinstitut | EN 61984 | 40002889 |
| VDE VDE Prüf- und Zertifizie- rungsinstitut | EN 61535 | 40029808 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |

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

| Compliance Search | |
|--|---|
| Environmental Product Compliance 770-114 | ↓ |

Documentation

| Bid Text | | | |
|----------------------------|------------|-----------------|---|
| 770-114 | 08.06.2015 | doc 23.50 KB | ↓ |
| 770-114 | 19.02.2019 | xml 3.01 KB | ↓ |
| ausschreiben.de 770-114 | | | ↓ |

CAD/CAE-Data

| CAD data | |
|----------------------|---|
| 2D/3D Models 770-114 | ↓ |

| CAE data | |
|------------------------------|---|
| EPLAN Data Portal 770-114 | ↓ |
| WSCAD Universe 770-114 | ↓ |
| ZUKEN Portal 770-114 | ↓ |

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9994/106-101
pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black

Item No.: 771-9994/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Distribution box



Item No.: 899-631/180-000
Distribution box; Motion/presence detector; 1 input; 5 outputs; Cod. A; MIDI; black

Item No.: 899-631/453-000
Distribution box; supply cable entry; 4 outputs; Cod. A; MIDI; black

1.1.3 Distribution connector



Item No.: 770-944

h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



Item No.: 770-945

h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



Item No.: 770-626

T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 770-627

T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

1.1.4 Female connector/socket



Item No.: 770-704

Snap-in socket; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-704/009-000

Snap-in socket; with protruding mating face; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-804/011-000

Socket for PCBs; angled; 4-pole; Cod. A; black



Item No.: 770-804

Socket for PCBs; straight; 4-pole; Cod. A; black



Item No.: 770-204

Socket; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-104

Socket; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black

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

1.3 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.: 897-2005

Protective cap; Type4; for sockets and plugs; PVC; red

1.3.2 Marking

1.3.2.1 Marker



Item No.: 770-450/000-006

Marker card; Plastic; blue



Item No.: 770-450/000-001

Marker card; Plastic; green



Item No.: 770-450/000-012

Marker card; Plastic; orange



Item No.: 770-450/000-005

Marker card; Plastic; red



Item No.: 770-450

Marker card; Plastic; white



Item No.: 770-450/000-002

Marker card; Plastic; yellow

1.3.3 Tool

1.3.3.1 Operating tool



Item No.: 210-719

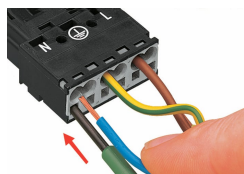
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

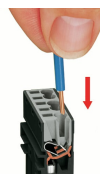
Conductor termination



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.

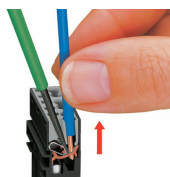


Insert the stripped solid conductor until it hits the backstop.



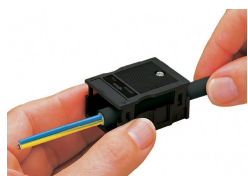
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

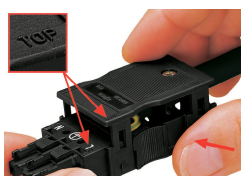


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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).