

Dimensions in mm

Male connector/plug WINSTA® MIDI rated current 25 A

For power and signal transmission: The *WINSTA*® MIDI male connector/plug A coding. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in next to no time. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. 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!)). Standard mains applications for almost any domain of use can be realised with *WINSTA*® MIDI pluggable installation connectors with A coding. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. Our *WINSTA*® MIDI product line guarantees total flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers customization and flexibility for meeting all installation requirements.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Choose quality and durability – the WINSTA® MIDI pluggable installation connector with protection type IP20 from WAGO makes the electrical installation of electrical components noticeably easier.

- protection against mismating eliminates errors
- pre-assembled versions
- with A coding for a great number of applications
- exact dimensions
- · convenient installation and commissioning

| Electrical data            |  |            |     |               |
|----------------------------|--|------------|-----|---------------|
| Ratings per                | IEC  | C/EN 60664 | 4-1 | Approvals     |
| Overvoltage category       | III  | III        | II  | Rated voltage |
| Pollution degree           | 3  | 2          | 2   | Rated current |
| Nominal voltage            | 400 V                                      | -          | -   |               |
| Rated surge voltage        | 6 kV                                       | -          | -   |               |
| Rated current              | 25 A                                       | -          | -   |               |
|                            |  |            |     |               |
| General information        |  |            |     |               |
| Note on contact resistance | approx. 1 mΩ c<br>approx. 0.25 m<br>socket |            |     |               |



| Connection data            |                      |  |
|----------------------------|----------------------|--|
| Connection points          | 8                    |  |
| Total number of potentials | 4                    |  |
| PE function                | Preceding PE contact |  |

| Connection 1   |                           |
|--|---------------------------|
| 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  | 4                         |
| Conductor entry direction to mating direction              | 0°                        |

| Physical data |                        |
|---------------|------------------------|
| Pin spacing   | 10 mm / 0.394 inches   |
| Width         | 40 mm / 1.575 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                                 | 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                 |  |
|------------------------------------|--|
| Š                                  |  |
| 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). |

https://www.wago.com/770-234



| Material data               |  |
|-----------------------------|--|
| Note (material data)        | <a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a> |
| Color                       | white  |
| Cover color                 | gray   |
| Material group              | 1  |
| Insulation material         | Polyamide (PA66)   |
| Flammability class per UL94 | VO   |
| Clamping spring material    | Chrome-nickel spring steel (CrNi)  |
| Contact material            | Copper or copper alloy; surface-treated  |
| Contact plating             | Tin  |
| Fire load                   | 0.258 MJ   |
| Weight                      | 12.9 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)              | 50 pcs        |
| Packaging type        | Вох           |
| Country of origin     | DE            |
| GTIN                  | 4044918254595 |
| 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<br>Underwriters Laboratories<br>Inc.        | UL 1977   | E45171           |
| cURus<br>Underwriters Laboratories<br>Inc.        | UL 1059   | E 45172          |
| VDE<br>VDE Prüf- und Zertifizie-<br>rungsinstitut | EN 61984  | 40002889         |

#### Declarations of conformity and manufacturer's declarations

| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

https://www.wago.com/770-234



#### Approvals for marine applications







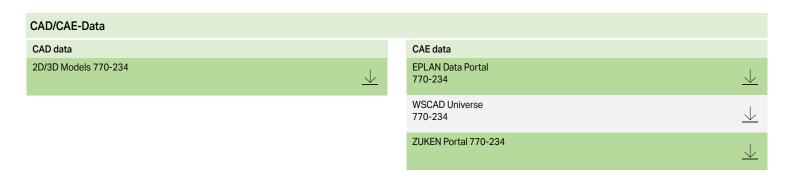
| Approval  | Standard  | Certificate Name |
|---|-----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping               | -         | 19-HG1868589-PDA |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -         | TAE00001Z6       |
| LR<br>Lloyds Register                 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

#### Downloads

#### **Environmental Product Compliance**

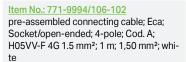
Compliance Search
Environmental Product
Compliance 770-234

# Documentation Bid Text 770-234 xml 2.93 KB ✓ 770-234 doc 23.50 KB ✓



# Compatible Products 1.1 System counterpart 1.1.1 Cable assembly





Item No.: 771-9994/006-102 pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

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#### 1.1.2 Distribution connector









#### Item No.: 770-994

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

#### Item No.: 770-995

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

#### Item No.: 770-6224

Linect® T-connector; 4-pole; Cod. A; 1 input; 2 outputs; white

#### Item No.: 770-676

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

#### Item No.: 770-677

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

#### 1.1.3 Female connector/socket



Snap-in socket; 4-pole; Cod. A; 4,00 mm<sup>2</sup>;



Snap-in socket; with protruding mating

face; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; white

Item No.: 770-724/009-000



Item No.: 770-824/011-000 Socket for PCBs; angled; 4-pole; Cod. A; white

#### Item No.: 770-824

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





Item No.: 770-724

white

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

#### Item No.: 770-124

Socket; with strain relief housing; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; white

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#### 1.2 Required Accessories

#### 1.2.1 Locking system

#### 1.2.1.1 Locking system







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

#### Item No.: 770-131

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

## 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

#### 1.2.2 Strain relief

#### 1.2.2.1 Strain relief housing









#### Item No.: 770-504/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

#### Item No.: 770-514/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

#### Item No.: 770-504

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

#### Item No.: 770-514

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

https://www.wago.com/770-234



#### 1.3 Optional Accessories

#### 1.3.1 Cover

#### 1.3.1.1 Cover





Item No.: 770-360

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

Item No.: 897-2005

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

#### 1.3.2 Installation

#### 1.3.2.1 Mounting accessories





Item No.: 770-319

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black

Item No.: 770-339

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; whi-

#### 1.3.3 Marking

#### 1.3.3.1 Marker

Item No.: 770-450







Marker card; Plastic; orange



Item No.: 770-450/000-005

Marker card; Plastic; red

Item No.: 770-450/000-006

Marker card; Plastic; blue

Marker card; Plastic; white

Item No.: 770-450/000-001 Marker card; Plastic; green



Item No.: 770-450/000-002 Marker card; Plastic; yellow

#### 1.3.4 Tool

#### 1.3.4.1 Operating tool

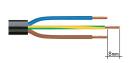


Item No.: 210-719

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.

https://www.wago.com/770-234



#### 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).

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