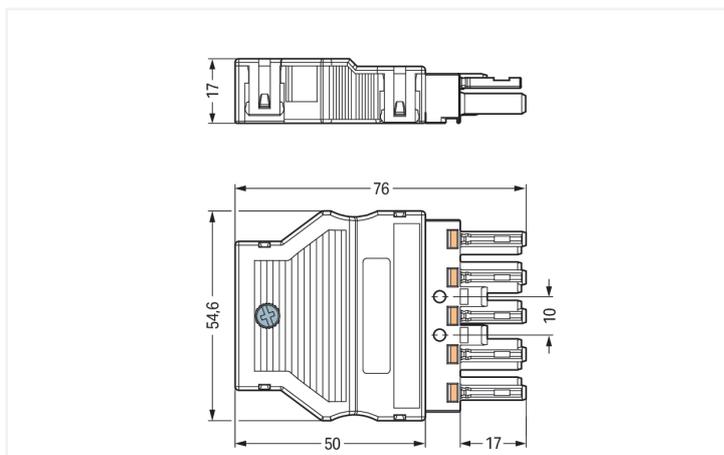
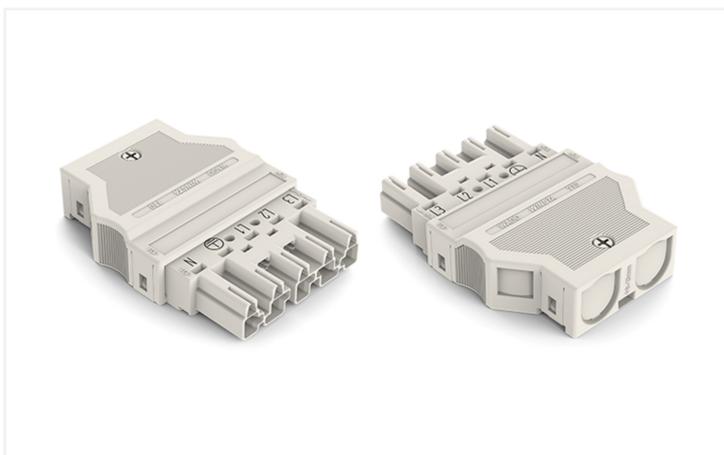
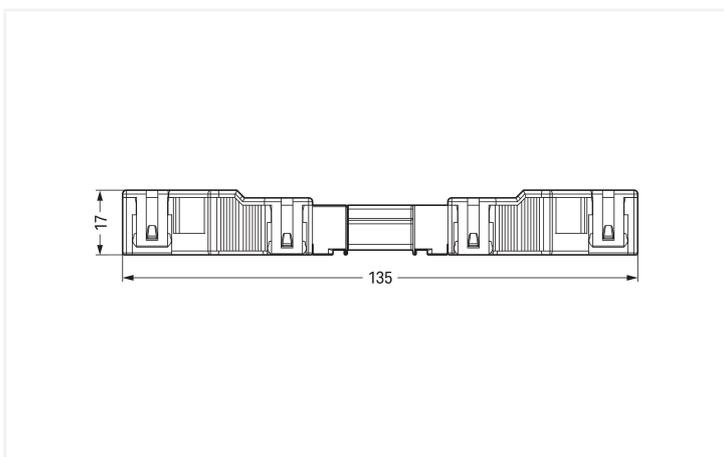




Color: ■ white



Dimensions in mm



Dimensions in mm  
Overall length when mated

#### Male connector/plug WINSTA® MIDI with strain relief

For signal and power transmission: The WINSTA® MIDI male connector/plug with protection type IP20. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow flexible, error-free installation in numerous possible uses.

For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. The pluggable installation connector is protected 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!)). This means that users' fingers will never come into contact with energised contact elements. Thanks to the color coding and mechanical A coding of WINSTA® MIDI pluggable installation connectors, you can clearly distinguish different circuits. The rated current and voltage are important criteria for selecting a pluggable installation connector: They tell us about the product's domains of use. This product has a current rating of 25 A – so it is also suitable for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in a broad range of individual products you can use for quick, easy, secure, tailored electrical installation. The strip length is 55 mm.

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 offers fast, secure and, above all, error-free installation of components and cables. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with marking from WAGO.

- pluggable installation connectors with protection against mismatching
- simple circuits
- for any mains application
- exact dimensions
- convenient installation and commissioning

**This item includes:**



Item No.: 770-515

1

Item No.: 770-435

1

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

Plug; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

**Notes**

General safety information

**NOTICE: Observe installation and safety instructions!**

- Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden!
- Nicht unter Spannung/Last installieren!
- Nur für bestimmungsgemäßen Gebrauch einsetzen!
- Nationale Vorschriften/Normen/Richtlinien beachten!
- Technische Daten der Produkte beachten!
- Auf die richtige Polbelegung achten!
- Keine beschädigten/verschmutzten Komponenten verwenden!
- Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten!
- Leiter bis zum Anschlag einführen!
- Nur mit Verriegelungsklinke und Zugentlastung verwenden!
- Originalzubehör verwenden!

**To be sold only with installation instructions!**

**Electrical data**

| Ratings per                     | IEC/EN 60664-1 |     |    | Approvals per | UL 1977 |
|---------------------------------|----------------|-----|----|---------------|---------|
| Overvoltage category            | III            | III | II | Rated voltage | 600 V   |
| Pollution degree                | 3              | 2   | 2  | Rated current | 23 A    |
| Nominal voltage                 | 400 V          | -   | -  |               |         |
| Rated impulse withstand 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

|                            |                      |
|----------------------------|----------------------|
| Clamping units             | 5                    |
| Total number of potentials | 5                    |
| PE function                | Preceding PE contact |

## Connection 1

|                                                            |                                              |
|------------------------------------------------------------|----------------------------------------------|
| Connection technology                                      | Push-in CAGE CLAMP®                          |
| Actuation type                                             | Operating tool<br>Push-in                    |
| Nominal cross-section                                      | 4 mm <sup>2</sup> / 12 AWG                   |
| Solid conductor                                            | 0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG    |
| Solid conductor; push-in termination                       | 1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG    |
| Stranded conductor                                         | 0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG  |
| Fine-stranded conductor                                    | 0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG    |
| Fine-stranded conductor; with insulated ferrule            | 0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG |
| Fine-stranded conductor; with uninsulated ferrule          | 0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1.5 mm <sup>2</sup> / 16 AWG                 |
| Strip length                                               | 9 mm / 0.35 inches                           |
| Pole number                                                | 5                                            |
| 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       | 54.6 mm / 2.15 inches |
| Height      | 17 mm / 0.669 inches  |
| Depth       | 76 mm / 2.992 inches  |

## Mechanical data

|                                         |                                                                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use                                     | General mains applications                                                                                                                             |
| Coding                                  | A                                                                                                                                                      |
| Variable coding                         | Yes                                                                                                                                                    |
| Marking                                 | L3 L2 L1 ⊕ N                                                                                                                                           |
| Potential marking                       | L3 L2 L1 ⊕ 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!) |
| Screw tightening torque                 | 0.5 Nm                                                                                                                                                 |

## Plug-in connection

|                                    |                                                                                                                                                                                                                           |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact type (pluggable connector) | Male connector/plug                                                                                                                                                                                                       |
| Connector (connection type)        | for conductor                                                                                                                                                                                                             |
| Mismating protection               | Yes                                                                                                                                                                                                                       |
| Note on mismating protection       | All <i>WINSTA</i> ® components are 100% protected against mismating when:<br>a.) plugging different numbers of poles<br>b.) plugging while rotated 180<br>c.) plugging while laterally staggered<br>d.) plugging one pole |
| Locking lever                      | Can be retrofitted                                                                                                                                                                                                        |
| Locking of plug-in connection      | Locking lever                                                                                                                                                                                                             |

### Plug-in connection

|                        |                                                                                                                                                                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | white                                                                    |
| 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                          | 0.777 MJ                                                                 |
| Connector color                    | white                                                                    |
| Strain relief color                | white                                                                    |
| Weight                             | 29.9 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)   |
| PU (SPU)              | 25 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4044918254700 |
| 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 10.0   | 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 |
|----------------------------------------------|-----------|------------------|
| CCA<br>DEKRA Certification B.V.              | EN 61535  | 71-123228        |
| CCA<br>DEKRA Certification B.V.              | IEC 61535 | NL -84761        |
| cURus<br>Underwriters Laboratories Inc.      | UL 1977   | E45171           |
| cURus<br>Underwriters Laboratories Inc.      | UL 1059   | E 45172          |
| VDE<br>VDE Prüf- und Zertifizierungsinstitut | EN 61984  | 40002889         |

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

**Approvals for marine applications**



| Approval                                         | Standard  | Certificate Name |
|--------------------------------------------------|-----------|------------------|
| ABS<br>American Bureau of Shipping               | -         | 24-0095977-PDA   |
| DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -         | TAE00001Z6       |
| LR<br>Lloyds Register                            | IEC 61984 | LR22429487TA     |

**Downloads**

**Environmental Product Compliance**

|                                          |
|------------------------------------------|
| <b>Compliance Search</b>                 |
| Environmental Product Compliance 770-335 |

## Documentation

| Bid Text |            |                 |                   |
|----------|------------|-----------------|-------------------|
| 770-335  | 19.02.2019 | xml<br>3.04 KB  | <a href="#">↓</a> |
| 770-335  | 08.06.2015 | doc<br>23.50 KB | <a href="#">↓</a> |

## CAD/CAE-Data

| CAD data                               | CAE data                                    |
|----------------------------------------|---------------------------------------------|
| 2D/3D Models 770-335 <a href="#">↓</a> | EPLAN Data Portal 770-335 <a href="#">↓</a> |
|                                        | WSCAD Universe 770-335 <a href="#">↓</a>    |
|                                        | ZUKEN Portal 770-335 <a href="#">↓</a>      |

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Cable assembly



**Item No.: 771-9995/106-102**

pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; white

**Item No.: 771-9995/006-102**

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; white

#### 1.1.2 Distribution box



**Item No.: 899-681/100-000**

Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MID; white

#### 1.1.3 Distribution connector



**Item No.: 770-6225**

Linect® T-connector; 5-pole; Cod. A; 1 input; 2 outputs; white



**Item No.: 770-671**

T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white



**Item No.: 770-672**

T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white



**Item No.: 770-661**

Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 2 outputs; with cable connection on the input side; white



**Item No.: 770-690**

Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; white

### 1.1.4 Female connector/socket



**Item No.: 770-725**  
Snap-in socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

**Item No.: 770-725/009-000**  
Snap-in socket; with protruding mating face; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

**Item No.: 770-825/011-000**  
Socket for PCBs; angled; 5-pole; Cod. A; white

**Item No.: 770-825**  
Socket for PCBs; straight; 5-pole; Cod. A; white



**Item No.: 770-225**  
Socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

**Item No.: 770-425**  
Socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

**Item No.: 770-125**  
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

**Item No.: 770-325**  
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

### 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 Coding

##### 1.3.1.1 Coding



**Item No.: 770-401**  
Coding pin; for plugs; Plastic; gray

#### 1.3.2 Cover

##### 1.3.2.1 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

#### 1.3.3 Marking

##### 1.3.3.1 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

### 1.3.4 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

#### 1.3.4.2 Wiring aid

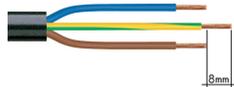


**Item No.: 770-100**

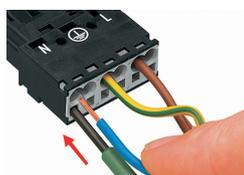
Wiring aid; 2- to 5-pole; Plastic; orange

## 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.

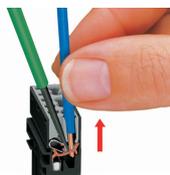


Insert the stripped solid conductor until it hits the backstop.



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).