

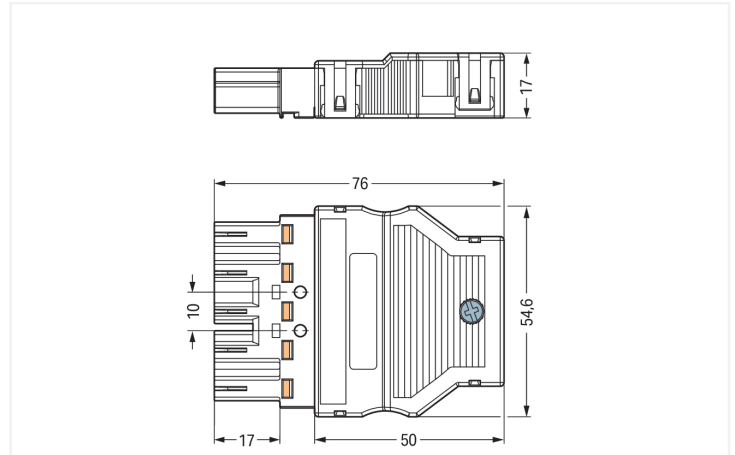
## Data Sheet | Item Number: 770-315

Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black

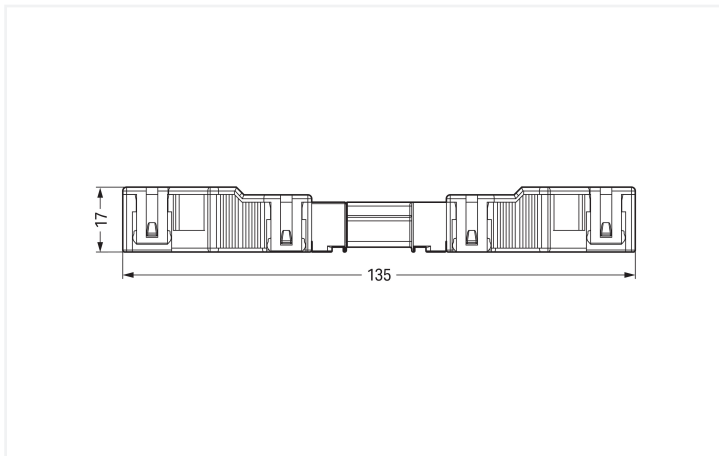
<https://www.wago.com/770-315>



Color: ■ black



Dimensions in mm



Dimensions in mm  
Overall length when mated

### Male connector/plug WINSTA® MIDI A coding

The WINSTA® MIDI male connector/plug 5-pole supports fast, reliable installation. WAGO pluggable installation connectors are useful when specifications repeat or are planned on a defined pattern, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector offers touch-proof protection 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!)). 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 is designed for a voltage load of up to 25 A. Therefore, it can also be used for high power loads. The WINSTA® MIDI product line allows flexibility for the electrical installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers customization and flexibility for meeting an enormous variety of installation requirements. 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 perfectly tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation expenses without compromising quality and safety: with strain relief hosting reduces the need for servicing and prevents unnecessary downtime.

- protection against mismatching eliminates errors
- for automation controllers
- for any mains application



- ready to install and use immediately
- quick replacement of defective units during ongoing operation

This item includes:



|                                                                            |   |                                                    |   |
|----------------------------------------------------------------------------|---|----------------------------------------------------|---|
| Item No.: 770-505                                                          | 1 | Item No.: 770-415                                  | 1 |
| Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black |   | Plug; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; black |   |

Notes

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General safety information | <ol style="list-style-type: none"><li>1. Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100).</li><li>2. Do not install while energized or under load.</li><li>3. Use only for its intended purpose.</li><li>4. Observe applicable national regulations, standards and directives.</li><li>5. Observe the technical specifications of the products.</li><li>6. Ensure correct polarity assignment.</li><li>7. Do not use damaged or contaminated components.</li><li>8. Observe conductor types, conductor cross-sections, strip lengths and cable diameters.</li><li>9. Insert conductors up to the stop.</li><li>10. Use only with locking lever and strain relief.</li><li>11. Use original accessories only.</li></ol> <b>To be sold only with installation instructions!</b> |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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<br>approx. 0.25 mΩ contact transition plug/socket |

Connection Data

| Connection Data            |                      | Connection 1                                               |                                              |
|----------------------------|----------------------|------------------------------------------------------------|----------------------------------------------|
| Clamping units             | 5                    | Connection technology                                      | Push-in CAGE CLAMP®                          |
| Total number of potentials | 5                    | Actuation type                                             | Operating tool<br>Push-in                    |
| PE function                | Preceding PE contact | 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                                  |



| Connection 1                                  |       |
|-----------------------------------------------|-------|
| 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                                                                                                                                                                                                                                                                                                    |
| 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                              | black                                                                    |
| 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                          | 0.617 MJ                                                                 |
| Connector color                    | black                                                                    |
| Strain relief color                | black                                                                    |
| Weight                             | 29.7 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                  | 4044918254663 |
| 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 Ship-<br>ping               | -         | 24-0095977-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<br>Compliance 770-315 |



Documentation

| Bid Text |            |                 |  |
|----------|------------|-----------------|--|
| 770-315  | 19.02.2019 | xml<br>3.04 KB  |  |
| 770-315  | 08.06.2015 | doc<br>23.50 KB |  |

CAD/CAE-Data

| CAD data             |
|----------------------|
| 2D/3D Models 770-315 |



| CAE data                     |
|------------------------------|
| EPLAN Data Portal<br>770-315 |
| WSCAD Universe<br>770-315    |
| ZUKEN Portal 770-315         |



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



|                                                                                                                                                                |                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Item No.: 771-9995/106-101</b><br>pre-assembled connecting cable; Eca;<br>Socket/open-ended; 5-pole; Cod. A;<br>H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²;<br>black | <b>Item No.: 771-9995/006-101</b><br>pre-assembled interconnecting cable;<br>Eca; Socket/plug; 5-pole; Cod. A; H05VV-<br>F 5G 1.5 mm²; 1 m; 1,50 mm²; black |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|



1.1.2 Distribution box



**Item No.: 899-631/187-000**  
Distribution box; Three-phase current (400 V); 1 input; 5 outputs; Cod. A; MIDI; black



**Item No.: 899-631/346-000**  
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black



**Item No.: 899-631/100-000**  
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black

1.1.3 Distribution connector



**Item No.: 770-609**  
3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; black



**Item No.: 770-659**  
3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; white



**Item No.: 770-621**  
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



**Item No.: 770-622**  
T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black



**Item No.: 770-611**  
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; black

**Item No.: 770-612**  
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; black



**Item No.: 770-640**  
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; black

1.1.4 Female connector/socket



**Item No.: 770-705**  
Snap-in socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-705/009-000**  
Snap-in socket; with protruding mating face; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-805/011-000**  
Socket for PCBs; angled; 5-pole; Cod. A; black



**Item No.: 770-805**  
Socket for PCBs; straight; 5-pole; Cod. A; black



**Item No.: 770-205**  
Socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-405**  
Socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-105**  
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-305**  
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black

1.1.5 Tap-off module



**Item No.: 772-262**  
Tap-off module; for flat cable; 5 x 2.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup>; 5-pole; Cod. A; with cable connection on the output side; 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 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



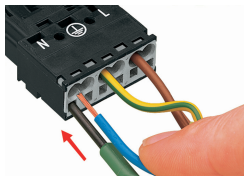
[Item No.: 770-100](#)  
Wiring aid; 2- to 5-pole; Plastic; orange

Installation Notes

Conductor termination



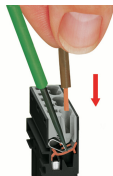
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

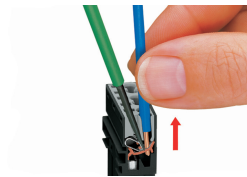


Insert the stripped solid conductor until it hits the backstop.



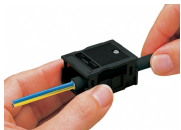
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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).