

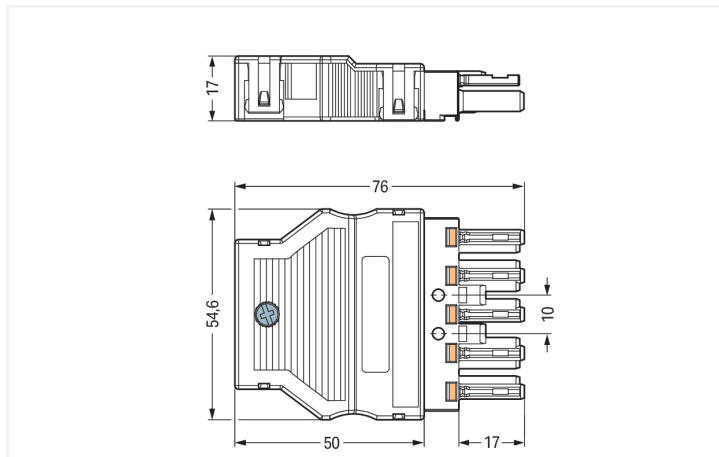
Data Sheet | Item Number: 770-305

Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black

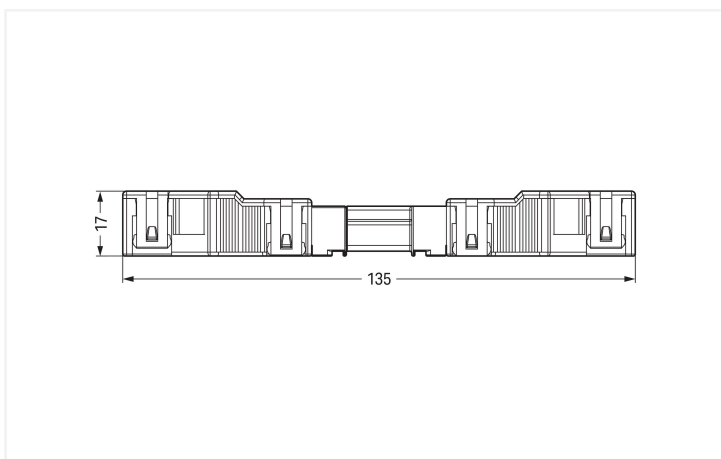
<https://www.wago.com/770-305>



Color: ■ black



Dimensions in mm



Dimensions in mm
Overall length when mated

Female connector/socket WINSTA® MIDI A coding

For power and signal transmission: The WINSTA® MIDI female connector/socket with protection type IP20. The pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow fast, efficient, error-free installation in a large number of possible uses. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. 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 live elements. Thanks to the color coding and mechanical A coding of WINSTA® MIDI pluggable installation connectors, you can clearly distinguish different circuits. This pluggable installation connector is designed for a current load of up to 25 A. As a result, it can also be used for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Due to the built-in test slot, connections can be checked even when they are plugged in. That saves time and reduces installation labor and expense. A range up to 55 mm can be used for the strip length.

Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Take advantage 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
- pre-assembled versions
- suitable for any application

- flexible installation to save space
- quick replacement of defective units during ongoing operation

This item includes:



Item No.: 770-505

1

Item No.: 770-405

1

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

Socket; 5-pole; Cod. A; 4,00 mm²; black

Notes

General safety information

- Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100).
- Do not install while energized or under load.
- Use only for its intended purpose.
- Observe applicable national regulations, standards and directives.
- Observe the technical specifications of the products.
- Ensure correct polarity assignment.
- Do not use damaged or contaminated components.
- Observe conductor types, conductor cross-sections, strip lengths and cable diameters.
- Insert conductors up to the stop.
- Use only with locking lever and strain relief.
- Use original accessories only.

To be sold only with installation instructions!

Electrical data

| Ratings per | IEC/EN 60664-1 | | |
|---------------------------------|----------------|-----|----|
| | III | III | II |
| Oversoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 400 V | - | - |
| Rated impulse withstand voltage | 6 kV | - | - |
| Rated current | 25 A | - | - |

| Approvals per | UL 1977 |
|---------------|---------|
| Rated voltage | 600 V |
| Rated current | 23 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 |

| 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 | 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 | N ⊕ L1 L2 L3 |
| Potential marking | N ⊕ L1 L2 L3 |
| 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) | 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 (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 | 0.565 MJ |
| Connector color | black |
| Strain relief color | black |
| Weight | 29 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 | 4044918252478 |
| 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



| 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 Zerti- fizierungsinstitut | EN 61984 | 40002889 |

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications



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

Downloads

Environmental Product Compliance

| Compliance Search |
|--|
| Environmental Product Compliance 770-305 ↓ |

Documentation

| Bid Text | | | |
|----------|------------|-----------------|-------------------|
| 770-305 | 19.02.2019 | xml 3.04 KB | ↓ |
| 770-305 | 08.06.2015 | doc 24.00 KB | ↓ |

CAD/CAE-Data

| CAD data |
|--|
| 2D/3D Models 770-305 ↓ |

| CAE data |
|---|
| EPLAN Data Portal 770-305 ↓ |
| WSCAD Universe 770-305 ↓ |
| ZUKEN Portal 770-305 ↓ |

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9995/206-101

pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black

Item No.: 771-9995/006-101

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Distribution box



Item No.: 899-631/455-000

Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black



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.: 899-631/105-000

Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 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

Item No.: 899-631/492-000

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



Item No.: 899-631/302-000

Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black



Item No.: 899-631/349-000

Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 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.: 770-640

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

1.1.4 Male connector/plug



Item No.: 770-815/011-000

Plug for PCBs; angled; 5-pole; Cod. A; black



Item No.: 770-815

Plug for PCBs; straight; 5-pole; Cod. A; black



Item No.: 770-215

Plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-415

Plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-115

Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-315

Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-715

Snap-in plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-715/007-000

Snap-in plug; with direct ground contact; 5-pole; Cod. A; 4,00 mm²; black

1.2 Required Accessories

1.2.1 Cover

1.2.1.1 Cover



Item No.: 770-201

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



Item No.: 770-221

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

1.2.2 Locking system

1.2.2.1 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.: 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

1.3.3.2 Wiring aid



Item No.: 770-100

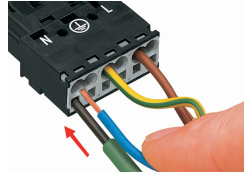
Wiring aid; 2- to 5-pole; Plastic; orange

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.

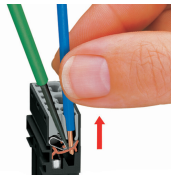


Insert the stripped solid conductor until it hits the backstop.



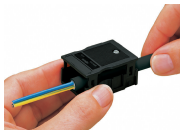
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

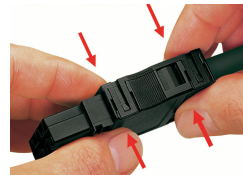
Installation



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).