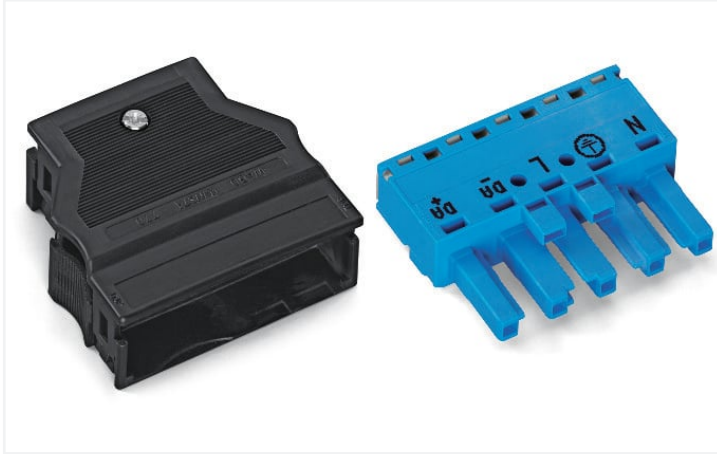


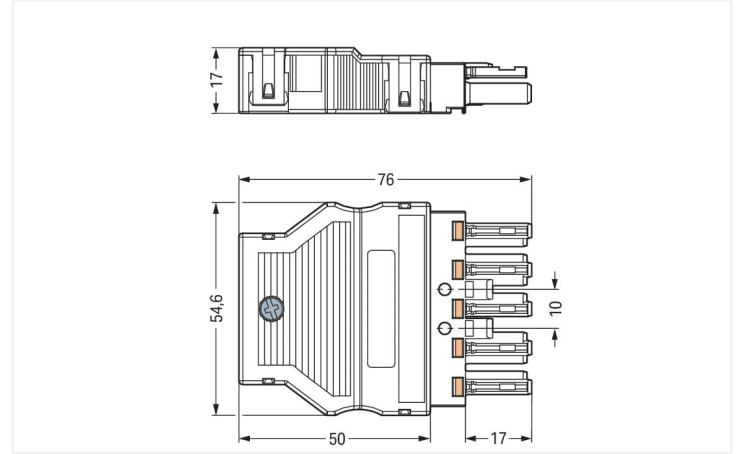
## Data Sheet | Item Number: 770-1105/022-000

Socket; with strain relief housing; 5-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

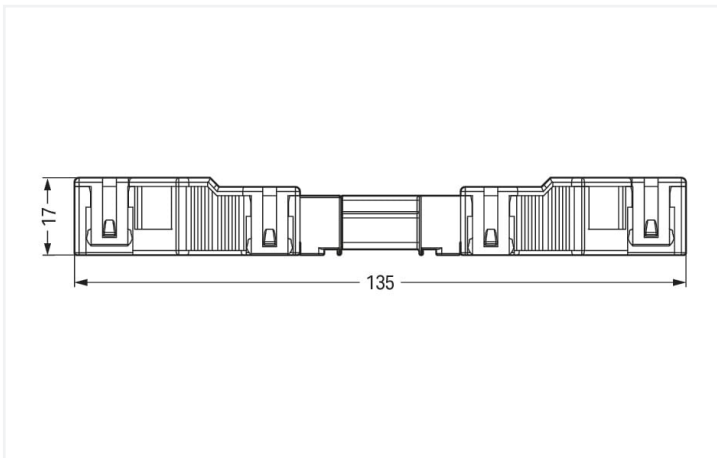
<https://www.wago.com/770-1105/022-000>



Color: ■ blue



Dimensions in mm



Dimensions in mm

Overall length when mated

### Female connector/socket WINSTA® MIDI with strain relief

The WINSTA® MIDI female connector/socket 5-pole allows assembly of fine-stranded and solid conductors. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in numerous applications. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. 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 electrified contact elements. WINSTA® MIDI pluggable installation connectors with I coding in blue are particularly suitable for easy lighting installation, for instance for the dimming function of DALI lights. This pluggable installation connector can be used for a current load of up to 25 A. Thus, it can also be used for high power loads. Our WINSTA® MIDI product line guarantees total flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees time-saving, error-free installation and offers customization and flexibility for meeting an enormous variety of installation requirements. The strip length is 55 mm.

Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus faster, even more reliable, and error-free. Use of this pre-assembled system reduces assembly times and installation errors at the construction site. Choose durability and quality – with marking from WAGO makes the electrical installation of electrical components substantially easier.

- protection against mismating eliminates errors
- pre-assembled versions
- for lighting management
- ready to install and use immediately
- convenient installation and commissioning



This item includes:



|                                                                            |   |                                        |   |
|----------------------------------------------------------------------------|---|----------------------------------------|---|
| Item No.: 770-505                                                          | 1 | Item No.: 770-1105                     | 1 |
| Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black |   | Socket; 5-pole; Cod. I; 4,00 mm²; blue |   |

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 surge 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/<br>socket |
|----------------------------|------------------------------------------------------------------------------------------|

Connection data

|                            |    |                                                            |                                  |
|----------------------------|----|------------------------------------------------------------|----------------------------------|
| Clamping units             | 10 | Connection 1                                               |                                  |
| Total number of potentials | 5  | 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                                                | 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                                     | DALI, Lighting Management                                                                                                                              |
| Coding                                  | I                                                                                                                                                      |
| Variable coding                         | No                                                                                                                                                     |
| Marking                                 | N L DA- DA+                                                                                                                                            |
| Potential marking                       | N L DA- DA+                                                                                                                                            |
| 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) | Female connector/socket                                                                                                                                                                                                                                                                                          |
| Connector (connection type)        | for conductor                                                                                                                                                                                                                                                                                                    |
| Mismating protection               | Yes                                                                                                                                                                                                                                                                                                              |
| Note on mismating protection       | All WINSTA® 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                              | blue                                                                     |
| 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                          | 0.73 MJ                                                                  |
| Connector color                    | blue                                                                     |
| Strain relief color                | black                                                                    |
| Weight                             | 28.9 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       |               |
|-----------------------|---------------|
| eCl@ss 10.0           | 27-44-06-05   |
| eCl@ss 9.0            | 27-44-06-05   |
| ETIM 9.0              | EC002560      |
| ETIM 8.0              | EC002560      |
| PU (SPU)              | 25 pcs        |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4050821223016 |
| Customs tariff number | 85366990990   |

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

Approvals / Certificates

General approvals



| Approval                                   | Standard | Certificate Name |
|--------------------------------------------|----------|------------------|
| cURus<br>Underwriters Laboratories<br>Inc. | UL 1059  | E 45172          |

Downloads

Environmental Product Compliance

| Compliance Search                                       |  |
|---------------------------------------------------------|--|
| Environmental Product<br>Compliance<br>770-1105/022-000 |  |

CAD/CAE-Data

| CAD data                         |  |
|----------------------------------|--|
| 2D/3D Models<br>770-1105/022-000 |  |



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



**Item No.: 771-9985/206-101**  
pre-assembled connecting cable; Eca;  
Plug/open-ended; 5-pole; Cod. I; H05VV-F  
5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue

**Item No.: 771-9985/006-101**  
pre-assembled interconnecting cable;  
Eca; Socket/plug; 5-pole; Cod. I; H05VV-F  
5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue

1.1.2 Distribution box



**Item No.: 899-631/313-000**  
Distribution box; DALI; 1 input; 5 outputs;  
Cod. I; MIDI; black

1.1.3 Distribution connector



**Item No.: 770-618**  
3-way distribution connector; 5-pole; Cod.  
I; 1 input; 3 outputs; blue



**Item No.: 770-1947**  
5-way distribution connector; 5-pole;  
Cod. I; 1 input; 5 outputs; blue



**Item No.: 770-992**  
h-distribution connector; 5-pole; Cod. I; 1  
input; 2 outputs; outputs on both sides; 2  
locking levers; blue



**Item No.: 770-993**  
h-distribution connector; 5-pole; Cod. I; 1  
input; 2 outputs; outputs on both sides; 3  
locking levers; for flying leads; blue



**Item No.: 770-7105**  
Linect® T-connector; 5-pole; Cod. I; 1 in-  
put; 2 outputs; blue



**Item No.: 770-617**  
T-distribution connector; 5-pole; Cod. I; 1  
input; 2 outputs; 2 locking levers; blue



**Item No.: 770-620**  
T-distribution connector; 5-pole; Cod. I; 1  
input; 2 outputs; 3 locking levers; for flying  
leads; blue

1.1.4 Male connector/plug



**Item No.: 770-3115/011-000**  
Plug for PCBs; angled; 5-pole; Cod. I; blue



**Item No.: 770-3115**  
Plug for PCBs; straight; 5-pole; Cod. I;  
blue



**Item No.: 770-1115**  
Plug; 5-pole; 4,00 mm<sup>2</sup>; blue



**Item No.: 770-1115/022-000**  
Plug; with strain relief housing; 5-pole;  
Cod. I; 4,00 mm<sup>2</sup>; blue



**Item No.: 770-2115**  
Snap-in plug; 5-pole; Cod. I; 4,00 mm<sup>2</sup>;  
blue



**Item No.: 770-2115/007-000**  
Snap-in plug; with direct ground contact;  
5-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

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



1.2.2 Strain relief

1.2.2.1 Strain relief housing



[Item No.: 770-505/021-000](#)  
Strain relief housing; 5-pole; for 1 cable;  
11.5 ... 16.5 mm; 71 mm; black



[Item No.: 770-515/021-000](#)  
Strain relief housing; 5-pole; for 1 cable;  
11.5 ... 16.5 mm; 71 mm; white



[Item No.: 770-505/023-000](#)  
Strain relief housing; 5-pole; for 2 cables;  
5.0 ... 9.0 mm; 55 mm; black



[Item No.: 770-515/023-000](#)  
Strain relief housing; 5-pole; for 2 cables;  
5.0 ... 9.0 mm; 55 mm; white



[Item No.: 770-505](#)  
Strain relief housing; 5-pole; for 2 cables;  
9.0 ... 13.0 mm; 55 mm; black



[Item No.: 770-515](#)  
Strain relief housing; 5-pole; for 2 cables;  
9.0 ... 13.0 mm; 55 mm; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 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



[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

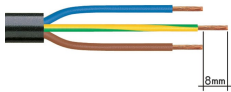
1.3.3.1 Operating tool



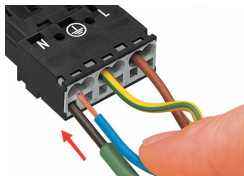
[Item No.: 210-719](#)  
Operating tool; Blade: 2.5 x 0.4 mm; with a  
partially insulated shaft

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.

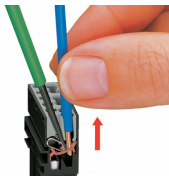


Insert the stripped solid conductor until it hits the backstop.



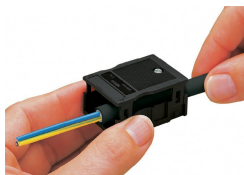
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

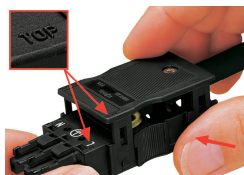


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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).