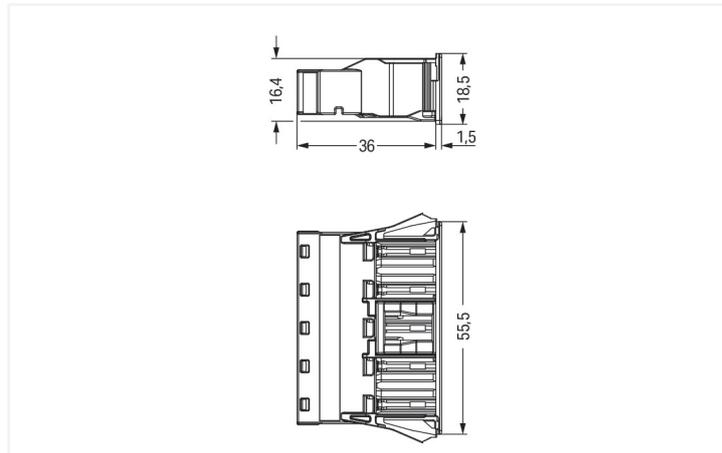


**Data Sheet | Item Number: 770-2105**  
Snap-in socket; 5-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

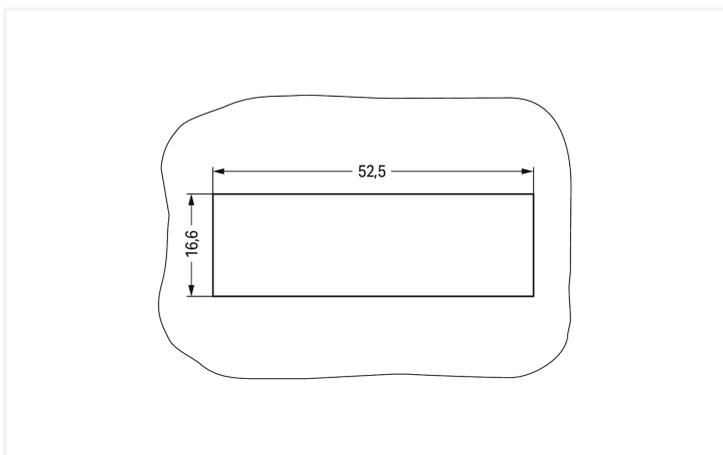
<https://www.wago.com/770-2105>



Color: ■ blue



Dimensions in mm



Dimensions in mm

Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm Please note!

**Female connector/socket WINSTA® MIDI with protection against mismatching**

The WINSTA® MIDI female connector/socket I coding supports fast, reliable installation. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to many different requirements in no time flat. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. The pluggable installation connector is protected against ingress by solid objects in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). WINSTA® MIDI pluggable installation connectors with I coding in blue are above all suitable for easy lighting installation, for instance for the dimming function of DALI lights. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Thanks to the integrated test slot, connections can be checked even when they are plugged in. That saves time and reduces installation labor and costs.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Now you can also cut installation costs without compromising safety and quality: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- simple circuits
- with I coding for use in building automation (lighting control)

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

## 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!**

Note

The snap-in connectors must be relieved of tensile and transverse forces. A surface finish can influence the edge radius of the cutouts. This may affect the snap-in socket fit, so ensure an adequate fit before use. In addition, the punched edge should be on the inside for punched cutouts. The wings of the snap-in connectors must not be mechanically stressed for a long period before use (e.g., due to a pre-locking position).

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |     |    |
|---------------------------------|----------------|-----|----|
| Oversvoltage 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<br>approx. 0.25 mΩ contact transition plug/<br>socket |
|----------------------------|--|

## Connection Data

|                            |    |
|----------------------------|----|
| Clamping units             | 10 |
| Total number of potentials | 5  |

| 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  |
| Conductor entry direction to mating direction              | 0°   |

### Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches   |
| Width       | 55.5 mm / 2.185 inches |
| Height      | 18.5 mm / 0.728 inches |
| Depth       | 37.5 mm / 1.476 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   |
| Housing sheet thickness                 | 0.5 ... 2 mm / 0.02 ... 0.079 inches  |
| Mounting type                           | Snap-in flange  |
| Protection type                         | IP20; When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!) |
| Suitable for through-panel applications | Yes   |

### 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                      | Yes  |
| 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). |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | blue   |
| 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                          | 0.343 MJ   |
| Weight                             | 18.4 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

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 50 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4055143594806 |
| Customs tariff number | 85366990990   |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121421             |
| eCl@ss 10.0 | 27-44-06-02          |
| eCl@ss 9.0  | 27-44-06-02          |
| ETIM 9.0    | EC002566             |
| ETIM 10.0   | EC002566             |
| ECCN        | NO US CLASSIFICATION |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals



| 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<br>Inc.        | UL 1977   | E45171           |
| VDE<br>VDE Prüf- und Zertifizie-<br>rungsinstitut | EN 61535  | 40029808         |

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

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

### Approvals for marine applications



| Approval  | Standard  | Certificate Name |
|---|-----------|------------------|
| 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 770-2105



## Documentation

### Bid Text

|          |            |                 |  |
|----------|------------|-----------------|--|
| 770-2105 | 19.02.2019 | xml<br>2.89 KB  |  |
| 770-2105 | 08.06.2015 | doc<br>23.00 KB |  |

## CAD/CAE-Data

### CAD data

2D/3D Models  
770-2105



### CAE data

EPLAN Data Portal  
770-2105



WSCAD Universe  
770-2105



ZUKEN Portal  
770-2105



## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Cable assembly



**Item No.: 771-9985/216-101**

pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. I; H05Z1Z1-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue



**Item No.: 771-9985/016-101**

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. I; H05Z1Z1-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue

#### 1.1.2 Male connector/plug



**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

## 1.2 Optional 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



**Item No.: 770-645**

Lockout cap; 5-pole; for cutouts; Plastic; black



**Item No.: 770-695**

Lockout cap; 5-pole; for cutouts; Plastic; white

### 1.2.2 Tool

#### 1.2.2.1 Operating tool

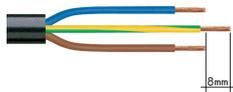


**Item No.: 210-719**

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.

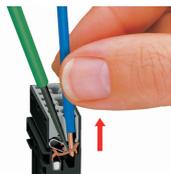


Insert the stripped solid conductor until it hits the backstop.



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.



Seal unused cutout with lockout cap.