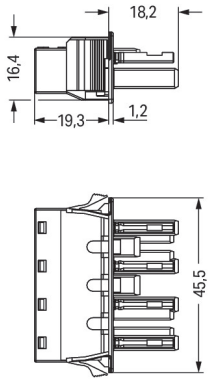
# Data Sheet | Item Number: 770-704/009-000

Snap-in socket; with protruding mating face; 4-pole; Cod. A; black

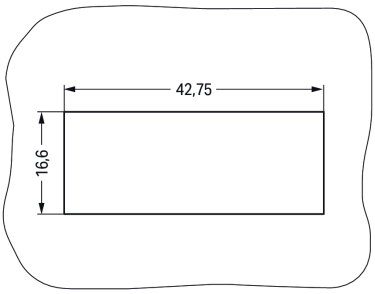
https://www.wago.com/770-704/009-000






Color: ■ black

Dimensions in mm




Dimensions in mm
Plate thickness: 0.5 … 2 mmCutout tolerance: + 0.1 mm Please note!

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

The *WINSTA*® MIDI female connector/socket A coding supports rapid, correct installation. The pluggable installation connectors with spring pressure connection technology function without screw connections. They allow flexible, 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 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!)). The *WINSTA*® MIDI pluggable installation connector with A coding in black or white is usually used for general mains applications in power distribution. This pluggable installation connector can be employed for a current load of up to 25 A. As a result, it can also be used for high power loads. Our *WINSTA*® MIDI product line offers total flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers flexibility for meeting an enormous variety of installation requirements.

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 ensures 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 protection against mismating from WAGO.

- protection against mismating eliminates errors
- simple circuits
- suitable for any application

- ready to install and use immediately
- rapid, structured electrical installation

## Notes

| | |
|---|---|
| General safety information | **NOTICE: Observe installation and safety instructions!**<br><br>• Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden!<br>• Nicht unter Spannung/Last installieren!<br>• Nur für bestimmungsgemäßen Gebrauch einsetzen!<br>• Nationale Vorschriften/Normen/Richtlinien beachten!<br>• Technische Daten der Produkte beachten!<br>• Auf die richtige Polbelegung achten!<br>• Keine beschädigten/verschmutzten Komponenten verwenden!<br>• Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten!<br>• Leiter bis zum Anschlag einführen!<br>• Nur mit Verriegelungsklinke und Zugentlastung verwenden!<br>• Originalzubehör verwenden!<br><br>**To be sold only with installation instructions!** |
| Note | The snap-in connectors must be relieved of tensile and transverse forces.<br>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.<br>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 | | |
|---|---|---|---|
| Overvoltage 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/socket |

## Connection Data

| | |
|---|---|
| Clamping units | 8 |
| Total number of potentials | 4 |

### Connection 1

| | |
|---|---|
| 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 | 4 |
| Conductor entry direction to mating direction | 0 ° |


Continued on next page

## Physical data

| | |
|---|---|
| Pin spacing | 10 mm / 0.394 inches |
| Width | 45.5 mm / 1.791 inches |
| Height | 18.5 mm / 0.728 inches |
| Depth | 37.5 mm / 1.476 inches |

## Mechanical data

| | |
|---|---|
| Use | General mains applications |
| Coding | A |
| Variable coding | Yes |
| Marking | N ⏚ 2/L 1/L' |
| Potential marking | N ⏚ 2/L 1/L' |
| 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 |
| Design | with protruding interface |
| 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 | 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). |

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | black |
| 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 | 0.24 MJ |
| Weight | 11.9 g |


Continued on next page

## 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) | 100 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4045454655068 |
| 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 Inc. | UL 1977 | E45171 |
| cURus<br>Underwriters Laboratories Inc. | UL 1059 | E 45172 |

### Declarations of conformity and manufacturer's declarations

| 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 |

 Continued on next page

## Downloads

### Environmental Product Compliance

| Compliance Search |
| --- |
| Environmental Product Compliance 770-704/009-000 |

### Documentation

| Bid Text | | | |
| --- | --- | --- | --- |
| 770-704/009-000 | 19.02.2019 | xml 2.96 KB | |
| 770-704/009-000 | 08.06.2015 | doc 23.50 KB | |

### CAD/CAE-Data

| CAD data | CAE data |
| --- | --- |
| 2D/3D Models 770-704/009-000 | WSCAD Universe 770-704/009-000 |
| | ZUKEN Portal 770-704/009-000 |

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Cable assembly



Item No.: 771-9994/206-101
pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black



Item No.: 771-9994/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; black

#### 1.1.2 Male connector/plug



Item No.: 770-214
Plug; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-114
Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black

## 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.: 770-644
Lockout cap; 4-pole; for cutouts; Plastic; black



Item No.: 770-694
Lockout cap; 4-pole; for cutouts; Plastic; white

### 1.2.2 Tool

#### 1.2.2.1 Operating tool



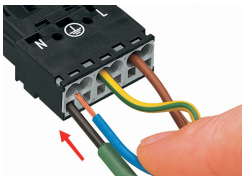
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

## Installation Notes

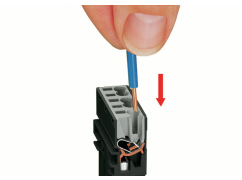
### Conductor termination



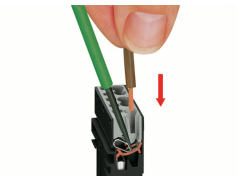

1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

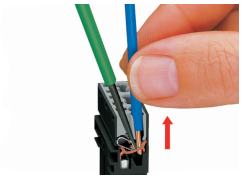


Insert the stripped solid conductor until it hits the backstop.



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.