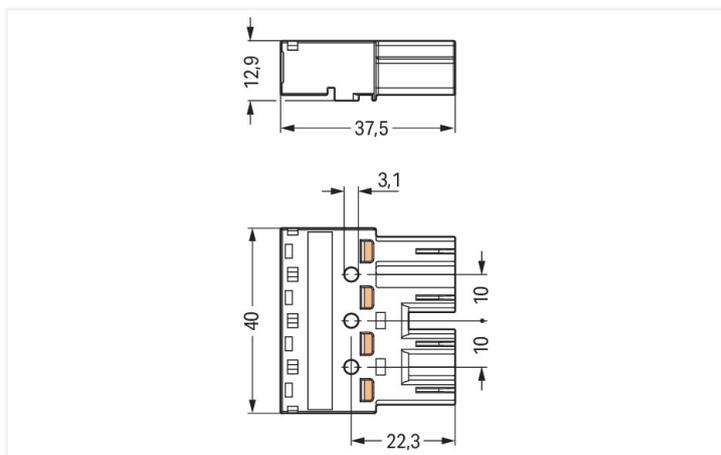




Color: ■ gray



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection against mismatching

The WINSTA® MIDI male connector/plug B coding supports fast, reliable installation. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in a large number of possible uses. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. The pluggable installation connector is protected against ingress by solid objects 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!)). Pluggable installation connectors with B coding from the WINSTA® MIDI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for light, pumps or sun blinds. Usage-specific pole marking is possible, too. This pluggable installation connector can be employed for a load of up to 25 A. As a result, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in can be found in a variety of projects you can use for quick, easy, secure, tailored installation.

WINSTA® MIDI solutions for your electrical installation – protected against mismatching and maintenance-free

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with marking from WAGO.

- pluggable installation connectors with protection against mismatching
- simple circuits
- for automation controllers
- ready to install and use immediately

- convenient installation and commissioning

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!

Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

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 | - | - |

Ratings per IEC/EN – Notes

| | |
|----------------------|--|
| Rated current (note) | 25 A for 3-pole load 20 A for 4-pole load |
|----------------------|--|

| 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 | 8 |
| Total number of potentials | 4 |

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

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches |
| Width | 40 mm / 1.575 inches |
| Height | 12.9 mm / 0.508 inches |
| Depth | 37.5 mm / 1.476 inches |

Mechanical data

| | |
|---|--|
| Use | Control technology |
| Coding | B |
| Variable coding | Yes |
| Marking | 4 3 2 1 |
| Potential marking | 4 3 2 1 |
| 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) | 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: 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). |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| 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 | 0.253 MJ |
| Weight | 13 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) | 50 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4044918253970 |
| 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. | IEC 61984 | NL-32104 |
| CCA DEKRA Certification B.V. | EN 61984 | 2173495.01 |
| cURus Underwriters Laboratories Inc. | UL 1977 | E45171 |
| cURus Underwriters Laboratories Inc. | UL 1059 | E 45172 |

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications



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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-254



Documentation

Bid Text

| | | | |
|---------|------------|-----------------|--|
| 770-254 | 19.02.2019 | xml 2.96 KB | |
| 770-254 | 08.06.2015 | doc 24.00 KB | |

CAD/CAE-Data

CAD data

2D/3D Models 770-254



CAE data

EPLAN Data Portal 770-254



WSCAD Universe 770-254



ZUKEN Portal 770-254



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9994/105-103

pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; gray



Item No.: 771-9994/005-103

pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; gray

1.1.2 Distribution box



Item No.: 899-631/305-000

Distribution box; Crossover switching; 1 input; 5 outputs; Cod. A, B, S; MIDI; black

1.1.3 Distribution connector



Item No.: 770-1734

3-way distribution connector; 4-pole; Cod. B; B; 1 input; 3 outputs; gray



Item No.: 770-1681

h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray



Item No.: 770-1781

h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray



Item No.: 770-1631

T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray



Item No.: 770-1731

T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

1.1.4 Female connector/socket



Item No.: 770-744

Snap-in socket; 4-pole; Cod. B; gray



Item No.: 770-844/011-000

Socket for PCBs; angled; 4-pole; Cod. B; gray



Item No.: 770-844

Socket for PCBs; straight; 4-pole; Cod. B; gray



Item No.: 770-244

Socket; 4-pole; Cod. B; gray

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.: 770-504/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black



Item No.: 770-514/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white



Item No.: 770-504

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black



Item No.: 770-514

Strain relief housing; 4-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.: 770-360

Lockout cap; for plugs; 5-pole; separable; yellow



Item No.: 897-2005

Protective cap; Type4; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 770-319

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black

Item No.: 770-339

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; white

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 Strain relief

1.3.4.1 Strain relief housing



Item No.: 770-504/020-000

Strain relief housing; 4-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black

1.3.5 Tool

1.3.5.1 Operating tool

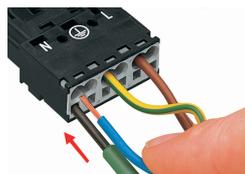
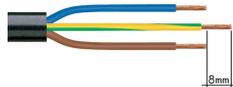


Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

Conductor termination



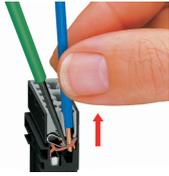
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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).

Coding



Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

Mismatching protection



B-coded connectors with different colors can be plugged together.

Important note:
Different colors and/or pole markings are used for circuit identification.
Only connectors of the same color and same pole marking must be plugged together.



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.



Easy circuit identification via different marking and colors