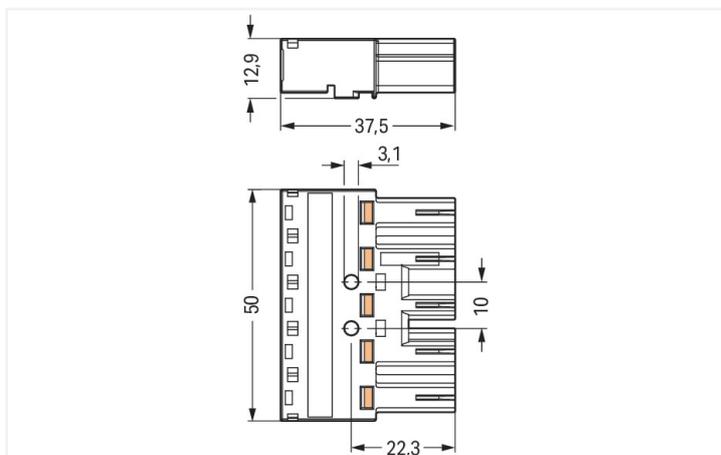
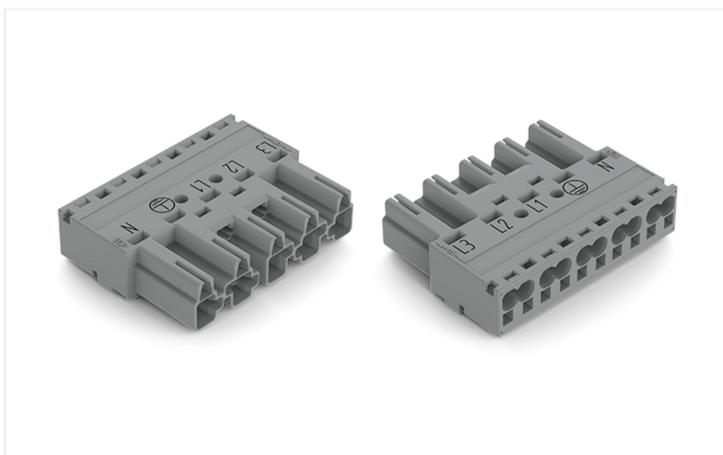


Color: ■ gray



Dimensions in mm

#### Male connector/plug WINSTA® MIDI with protection type IP20

For signal and power transmission: The WINSTA® MIDI male connector/plug with protection type IP20. WAGO pluggable installation connectors are used when criteria repeat or are planned on a specific pattern, for example for installing grid lighting or flush-mount lighting. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismatching. The pluggable installation connector offers protection against contact with live components 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!)). Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are appropriate for process control, such as for lighting or within data networks. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They provide information about possible domains of use and applications. This product has a current rating of 25 A – therefore it is also suitable for robust loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Due to the integrated test slot, it is possible to check connections even when they are plugged in. This saves time, labor, and money.

#### 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 therefore faster, even more reliable, and error-free. Use of this pre-assembled system reduces time spent on assembly and installation errors at the construction site. Now you can also lower installation expenses without compromising safety and quality: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- for automation controllers

- with B coding for controllers, for example sun blinds and lighting fixtures
- exact dimensions
- 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!**

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- and 5-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	10
Total number of potentials	5

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool 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	50 mm / 1.969 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	L3 L2 L1 ⊕ N
Potential marking	L3 L2 L1 ⊕ N
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)	<a href="#">Information on material specifications can be found here</a>
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	0.328 MJ
Weight	16.4 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	4050821494188
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
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

### Downloads

#### Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 770-255/060-000	<a href="#">↓</a>

## Documentation

Bid Text			
770-255/060-000	19.02.2019	xml 2.97 KB	
770-255/060-000	08.06.2015	doc 24.00 KB	

## CAD/CAE-Data

CAD data	CAE data
2D/3D Models 770-255/060-000	WSCAD Universe 770-255/060-000
	ZUKEN Portal 770-255/060-000

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket

<b>Item No.: 770-745/060-000</b> Snap-in socket; 5-pole; Cod. B; 4,00 mm <sup>2</sup> ; gray	<b>Item No.: 770-845/011-000/060-000</b> Socket for PCBs; angled; 5-pole; Cod. B; gray	<b>Item No.: 770-845/060-000</b> Socket for PCBs; straight; 5-pole; Cod. B; gray	<b>Item No.: 770-245/060-000</b> Socket; 5-pole; Cod. B; 4,00 mm <sup>2</sup> ; gray

#### 1.1.2 Tap-off module

<b>Item No.: 772-265/060-000</b> Tap-off module; for flat cable; 5 x 2.5 mm <sup>2</sup> + 2 x 1.5 mm <sup>2</sup> ; 5-pole; Cod. B; with cable connection on the output side; gray	<b>Item No.: 772-278/080-000</b> Tap-off module; for flat cable; 5 x 2.5 mm <sup>2</sup> + 2 x 1.5 mm <sup>2</sup> ; 5-pole; Cod. B; with cable connection on the output side; pink

## 1.2 Required Accessories

### 1.2.1 Locking system

#### 1.2.1.1 Locking system

<b>Item No.: 770-101</b> Locking lever; for flying leads; for manual operation; black	<b>Item No.: 770-121</b> Locking lever; for flying leads; for manual operation; white	<b>Item No.: 770-111</b> Locking lever; for flying leads; for tool operation; black	<b>Item No.: 770-131</b> 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 Coding

#### 1.3.1.1 Coding



**Item No.: 770-401**

Coding pin; for plugs; Plastic; gray

### 1.3.2 Cover

#### 1.3.2.1 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

### 1.3.3 Installation

#### 1.3.3.1 Mounting accessories



**Item No.: 770-321**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black



**Item No.: 770-341**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white



**Item No.: 770-320**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black



**Item No.: 770-340**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

### 1.3.4 Marking

#### 1.3.4.1 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

### 1.3.5 Tool

#### 1.3.5.1 Operating tool

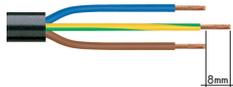


**Item No.: 210-719**

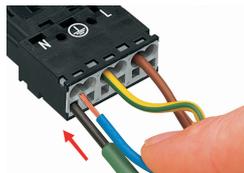
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

### 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.

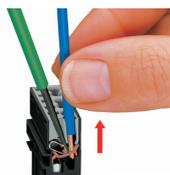


Insert the stripped solid conductor until it hits the backstop.



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