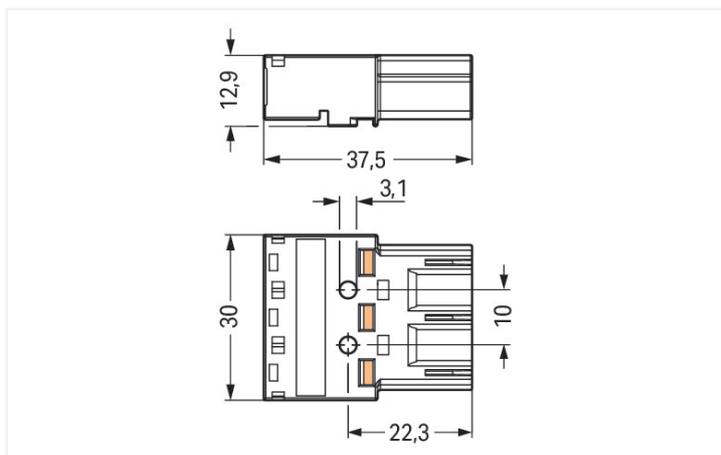
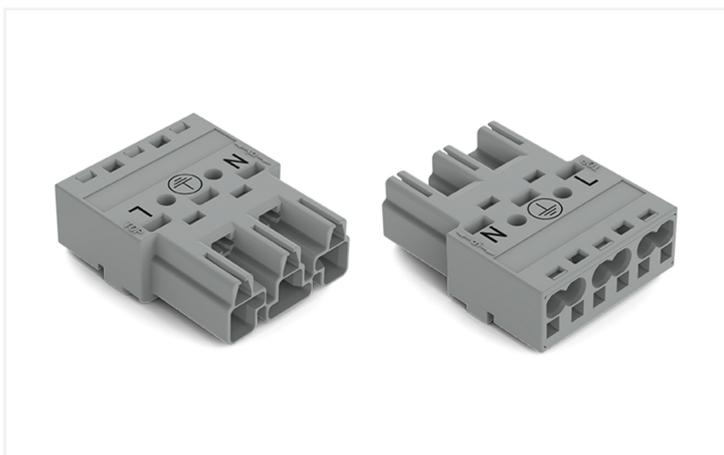




Color: ■ gray



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

The WINSTA® MIDI male connector/plug with protection against mismatching supports fast, reliable installation. Our pluggable installation connectors with spring pressure connection technology function entirely without screw connections. They allow resource-efficient, error-free installation in a large number of applications. 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 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 energised contact elements. Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are suitable for process control, for example, 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 suitable for robust loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy, flexible, and secure installation.

Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Choose quality and durability – with marking from WAGO makes the electrical installation of electrical components substantially easier.

- pluggable installation connectors with protection against mismatching
- pre-assembled versions
- with B coding for use in automation of processes, such as lighting technology, among other examples

- custom-engineered solutions
- 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			Approvals per	UL 1977
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	250 V	-	-		
Rated impulse withstand voltage	4 kV	-	-		
Rated current	25 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	6	Connection 1	
Total number of potentials	3	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	3
		Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	30 mm / 1.181 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	N ⊕ L
Potential marking	N ⊕ 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
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	0.197 MJ
Weight	10 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)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821456414
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
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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 770-253/060-000	↓

Documentation

Bid Text

770-253/060-000	19.02.2019	xml 2.96 KB	
770-253/060-000	08.06.2015	doc 24.00 KB	

CAD/CAE-Data

CAD data

2D/3D Models
770-253/060-000



CAE data

WSCAD Universe
770-253/060-000



ZUKEN Portal
770-253/060-000



1 Compatible Products

1.1 Required Accessories

1.1.1 Locking system

1.1.1.1 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 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 770-401

Coding pin; for plugs; Plastic; gray

1.2.2 Cover

1.2.2.1 Cover



Item No.: 770-360

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

1.2.3 Installation

1.2.3.1 Mounting accessories



Item No.: 770-318
Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black



Item No.: 770-338
Snap-in frame; 3-pole; 1.0 ... 3.0 mm; white

1.2.4 Marking

1.2.4.1 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

1.2.5 Strain relief

1.2.5.1 Strain relief housing



Item No.: 770-503/021-000
Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black



Item No.: 770-513/021-000
Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white



Item No.: 770-503/023-000
Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black



Item No.: 770-513/023-000
Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white



Item No.: 770-503
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black



Item No.: 770-513
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-513/032-000
Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white



Item No.: 770-503/035-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black



Item No.: 770-503/038-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black



Item No.: 770-513/035-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white



Item No.: 770-513/038-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white



Item No.: 770-503/032-000
Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

1.2.6 Tool

1.2.6.1 Operating tool



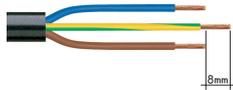
Item No.: 770-383
Operating tool; 3-way; green



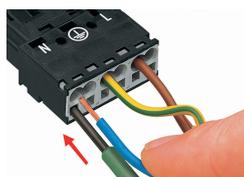
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

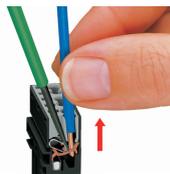


Insert the stripped solid conductor until it hits the backstop.



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