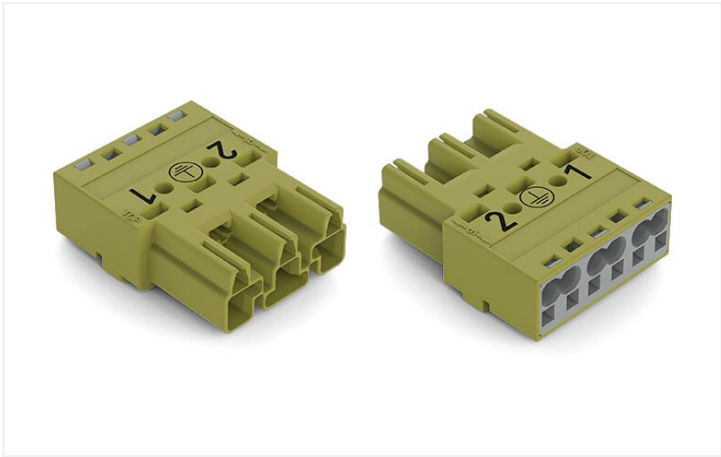
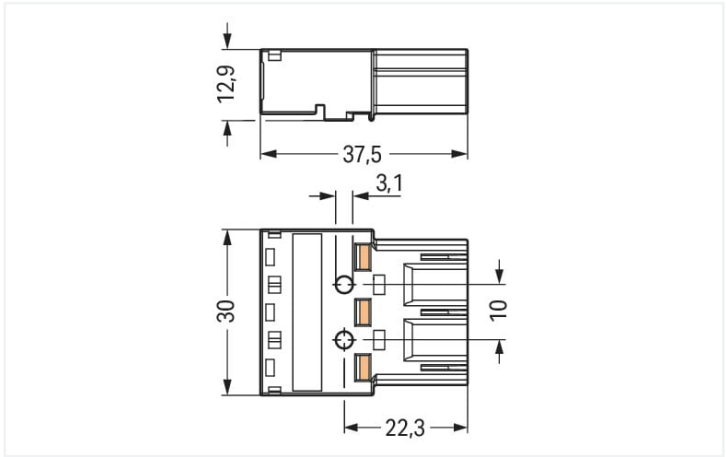




Color: ■ light green



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI male connector/plug 3-pole. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to an enormous variety of requirements in seconds. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. 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!)). B coding enables the WINSTA® MIDI pluggable installation connectors to be used for control in applications in automation, robotics, and mechanical engineering. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. The WINS- TA® MIDI product line allows flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers flexibility and customization for meeting all 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 allows fast, secure and, above all, error-free installation of components and cables. Enjoy the benefits 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
- for automation controllers
- ready for immediate use
- convenient installation and commissioning

Notes	
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	250 V	-	-	
Rated surge voltage	4 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 approx. 0.25 mΩ contact transition plug/ socket
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Connection data

Connection points	6
Total number of potentials	3

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool 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	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

Application	Control technology
Coding	B
Variable coding	Yes
Marking	2 1
Potential marking	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 WINSTA® 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	light green
Cover color	gray
Material group	I
Insulation material	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	0.212 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

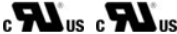
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821553403
Customs tariff number	85366990990



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 770-273/073-000	

Documentation

Bid Text			
770-273/073-000	19.02.2019	xml 2.96 KB	
770-273/073-000	08.06.2015	doc 24.00 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 770-273/073-000	

CAE data	
WSCAD Universe 770-273/073-000	
ZUKEN Portal 770-273/073-000	



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



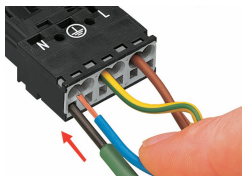
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft

Installation Notes

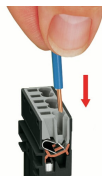
Conductor termination



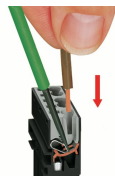
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

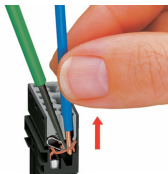


Insert the stripped solid conductor until it hits the backstop.



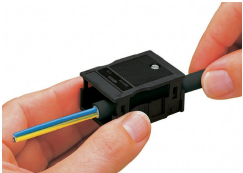
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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.

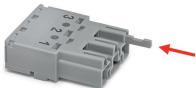


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding

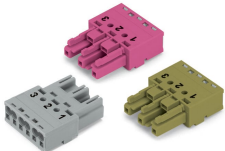


Simply cut off the coding pin from the socket.



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