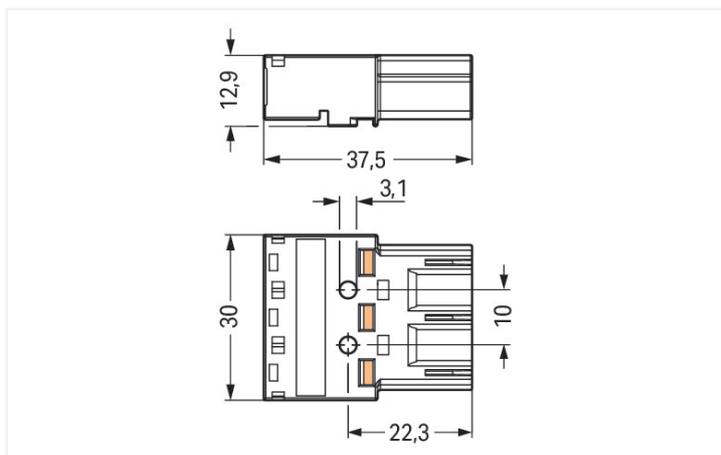




Color: ■ light green



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection against mismatching

The WINSTA® MIDI male connector/plug with protection against mismatching allows installation of fine-stranded and solid conductors. Our pluggable installation connectors with spring pressure connection technology function without screw connections. They allow resource-efficient, error-free installation in a large number of applications. The coding options reduce installation errors, allowing fast, secure wiring of all components. 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 elements. Pluggable installation connectors with B coding from the WINSTA® MIDI line are available in pink, light green, or gray, allowing you to distinguish different circuits, for example for light, pumps or, sun blinds. Customer-specific pole marking is possible in addition. The rated current and voltage are important criteria for selecting a pluggable installation connector: They tell us about the product's domains of use. This product has a current rating of 25 A – so it is also suitable for powerful loads. Our WINSTA® MIDI product line guarantees maximum flexibility for the electrical installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers flexibility for meeting various installation requirements.

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

The WINSTA® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus faster, more reliable, and error-free. Using this pre-assembled system decreases time spent on assembly and installation errors at the construction site. Now you can also lower installation costs without compromising safety and quality: with protection against mismatching reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching

- pre-assembled versions
- for automation controllers
- custom-engineered solutions
- fast, secure installation

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
Overtoltage 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
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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 un-insulated 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	3 2 1
Potential marking	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	light green
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

Product Group	20 (Winsta)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821451112
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
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 770-273



Documentation

Bid Text

770-273	19.02.2019	xml 2.96 KB	
770-273	08.06.2015	doc 24.00 KB	

CAD/CAE-Data

CAD data

2D/3D Models 770-273



CAE data

WSCAD Universe 770-273



ZUKEN Portal 770-273



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9993/105-105

pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. B; H05VV-F 3 x 1.0 mm²; 1 m; 1,00 mm²; light green

Item No.: 771-9993/005-105

pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; H05VV-F 3 x 1.0 mm²; 1 m; 1,00 mm²; light green

1.1.2 Distribution connector



Item No.: 770-1715

3-way distribution connector; 3-pole; Cod. B; 1 input; 3 outputs; light green



Item No.: 770-1765

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; light green



Item No.: 770-1768

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; light green



Item No.: 770-1662

h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; light green



Item No.: 770-1762

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



Item No.: 770-1612

T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; light green



Item No.: 770-1712

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

1.1.3 Female connector/socket



Item No.: 770-763

Snap-in socket; 3-pole; Cod. B; light green

Item No.: 770-863/011-000

Socket for PCBs; angled; 3-pole; Cod. B; light green

Item No.: 770-863

Socket for PCBs; straight; 3-pole; Cod. B; light green

Item No.: 770-263

Socket; 3-pole; Cod. B; light green

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

1.3 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

1.3.3 Installation

1.3.3.1 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

1.3.4 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 Strain relief

1.3.5.1 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

1.3.6 Tool

1.3.6.1 Operating tool



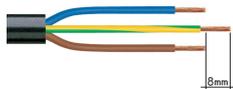
Item No.: 770-383
Operating tool; 3-way; green



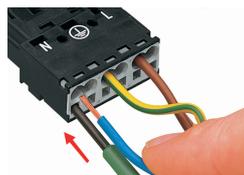
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft

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.

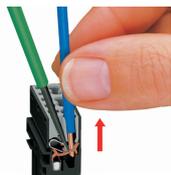


Insert the stripped solid conductor until it hits the backstop.



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