

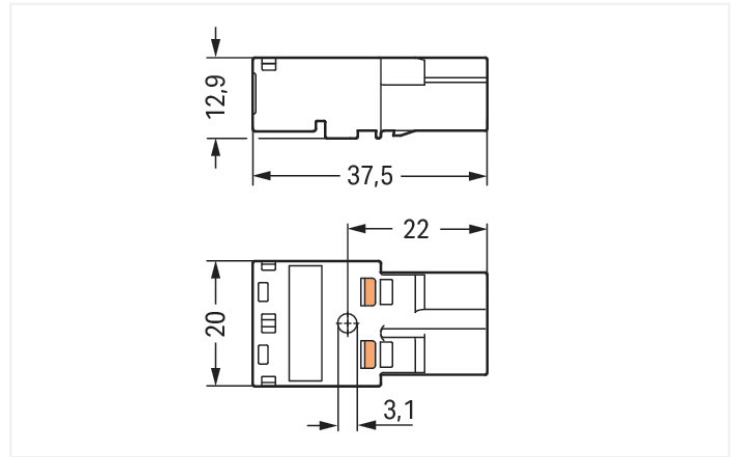
Data Sheet | Item Number: 770-272

Plug; 2-pole; Cod. B; light green

<https://www.wago.com/770-272>



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 B coding. WAGO pluggable installation connectors are useful when criteria repeat or are distributed on a specific grid, 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 mismating. 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!)). That results in the fact 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 gray, light green, or pink, allowing you to distinguish different circuits, for example for light, pumps or, sun blinds. Customer-specific pole marking is possible, too. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Due to the integrated test slot, connections can be checked 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 allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Now you can also lower installation costs without compromising quality and safety: with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismating
- pre-assembled versions
- for automation controllers

- ready to install and use immediately
- 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!

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

Variants:

Electrical data				
Ratings per		IEC/EN 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage	250 V	-	-	-
Rated impulse withstand 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

Connection Data		
Clamping units	4	
Total number of potentials	2	

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	2
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	10 mm / 0.394 inches
Width	20 mm / 0.787 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Mechanical data

Use	Control technology
Coding	B
Variable coding	No
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 <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	0.127 MJ
Weight	6.5 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	4050821541899
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		Declarations of conformity and manufacturer's declarations									
  											
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									
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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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 770-272

Documentation

Bid Text			
770-272	19.02.2019	xml 2.96 KB	
770-272	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data
2D/3D Models 770-272

CAE data
EPLAN Data Portal 770-272
WSCAD Universe 770-272
ZUKEN Portal 770-272

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-8992/105-105
pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; 1 m; 1,00 mm²; light green



Item No.: 771-8992/005-105
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm²; 1 m; 1,00 mm²; light green

1.1.2 Distribution connector



Item No.: 770-1705
3-way distribution connector; 2-pole; Cod. B; 1 input; 3 outputs; light green



Item No.: 770-1609
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; light green



Item No.: 770-1659
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; light green



Item No.: 770-1652
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; light green



Item No.: 770-1752
h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; light green



Item No.: 770-1602
T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; light green



Item No.: 770-1702
T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; light green



1.1.3 Female connector/socket



Item No.: [770-262](#)
Socket; 2-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

1.2.2 Strain relief

1.2.2.1 Strain relief housing



Item No.: [770-502/042-000](#)
Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; black



Item No.: [770-512/042-000](#)
Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; white



Item No.: [770-502/041-000](#)
Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; black



Item No.: [770-512/041-000](#)
Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 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.: [897-2003](#)
Protective cap; Type2; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: [897-2100](#)
Mounting plate; for Snap-in; Plastic; for detectors and sensors ; Ø 200 mm; red



Item No.: [770-317](#)
Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black



Item No.: [770-337](#)
Snap-in frame; 2-pole; 1.0 ... 3.0 mm; white

1.3.3 Tool

1.3.3.1 Operating tool



Item No.: 770-382
Operating tool; 2-way; green



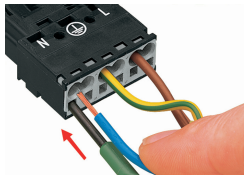
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

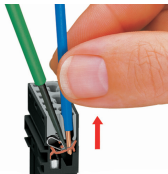


Insert the stripped solid conductor until it hits the backstop.



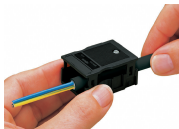
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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.

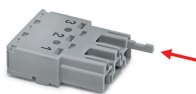


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding

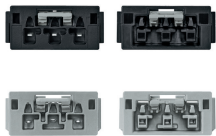
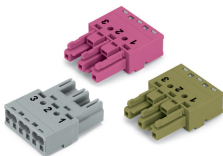


Simply cut off the coding pin from the socket.



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

Mismating 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