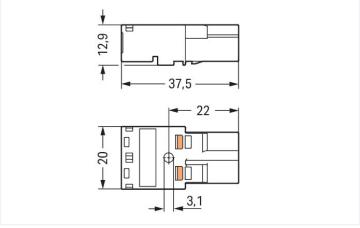
https://www.wago.com/770-272







Dimensions in mm

Male connector/plug WINSTA® MIDI 2-pole

The WINSTA® MIDI male connector/plug with protection against mismating is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow flexible, error-free installation in numerous possible uses. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including 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!)). Pluggable installation connectors with B coding from the WINSTA® MI-DI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Your own pole marking is possible, too. 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 – as a result it is 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 included test slot, connections can be checked even when they are plugged in. This saves time, labor, and money.

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

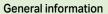
The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose durability and quality – the WINSTA® MIDI pluggable installation connector with protection against mismating from WAGO makes the installation of electrical components significantly easier.

- · pluggable installation connectors with protection against mismating
- pre-assembled versions
- for automation controllers
- · exact dimensions
- · 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	C/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 surge voltage	4 kV	-	-		
Rated current	25 A	-	-		

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



Note on contact resistance

approx. 1 $m\Omega$ of contact resistance approx. 0.25 $m\Omega$ contact transition plug/ socket



Connection data			
Connection points	4	Connection 1	
Total number of potentials 2	2	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 mm ² / 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	
Application	Control technology
Coding	В
Variable coding	No
Marking	21
Potential marking	21
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!)

Data Sheet | Item Number: 770-272 https://www.wago.com/770-272



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	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.14 MJ
Weight	6.1 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)
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	4050821541899
Customs tariff number	85366990990

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



Environmental Product Compliance

RoHS Compliance Status Compliant, No Exemption

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 Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications







Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1868589-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	$\underline{\downarrow}$
770-272	08.06.2015	doc 23.50 KB	$\underline{\downarrow}$

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



CAD data 2D/3D Models 770-272 CAE data EPLAN Data Portal 770-272 WSCAD Universe 770-272 ZUKEN Portal 770-272 L 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

Item No.: 770-1752

3-way distribution connector; 2-pole; Cod. B; 1 input; 3 outputs; light green

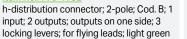
Item No.: 770-1609
h-distribution connector; 2-pole; Cod. B;

1 input; 2 outputs; outputs on both sides; 2 locking levers; light green

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





Socket; 2-pole; Cod. B; 4,00 mm²; light green

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



1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Locking lever; for flying leads; for manual

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

Item No.: 770-101

operation; black

1.2.2.1 Strain relief housing



War Wie

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm;

Item No.: 770-502/041-000

Item No.: 770-512/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm;

Wie Wie

Item No.: 770-502/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm;

Item No.: 770-512/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm;

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 897-2003

Item No.: 770-360 Lockout cap; for plugs; 5-pole; separable;

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; whi-

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.

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



 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$