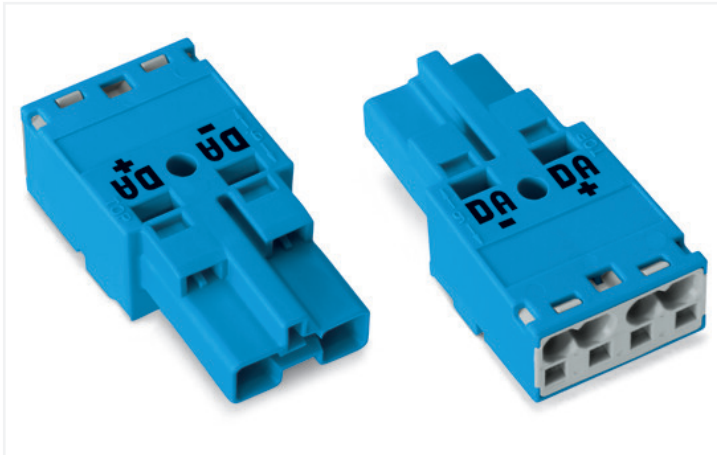


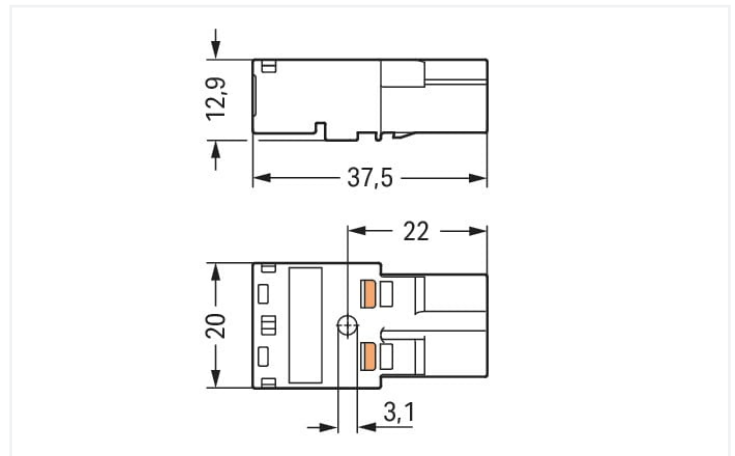
## Data Sheet | Item Number: 770-1112

Plug; 2-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

<https://www.wago.com/770-1112>



Color: ■ blue



Dimensions in mm

Male connector/plug WINSTA® MIDI rated current 25 A

The WINSTA® MIDI male connector/plug 2-pole is the pluggable solution for your application in control cabinets, for lighting connections or on PCBs. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in next to no time. The mechanical coding and color 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!)). That results in the fact that users' fingers will never come into contact with electrified contact elements. Coding in blue is used to identify WINSTA® MIDI pluggable installation connectors, which are used primarily in automation of buildings for controlling lighting. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: 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 offers flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers customization and flexibility for meeting an enormous variety of installation requirements.

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

The WINSTA® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and errors during installation at the construction site. Choose durability and quality – with protection type IP20 from WAGO makes the installation of electrical components visibly easier.

- protection against mismatching eliminates errors
- for automation controllers
- for intelligent, easy lighting installation
- flexible installation to save space
- quick replacement of defective units during ongoing operation



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 surge 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

Connection points	4	Connection 1	
Total number of potentials	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 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

Application	DALI, Lighting Management
Coding	I
Variable coding	No
Marking	DA- DA+
Potential marking	DA- DA+
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)	<a href="#">Information on material specifications can be found here</a>
Color	blue
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	0.125 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)
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	4050821028321
Customs tariff number	85366990990






Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption


Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
   					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	IEC 61535	NL -84761			
cURus Underwriters Laboratories Inc.	UL 1977	E45171			
cURus Underwriters Laboratories Inc.	UL 1059	E 45172			
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61535	40029808			

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 770-1112	



Documentation

Bid Text			
770-1112	19.02.2019	xml 2.93 KB	<a href="#">↓</a>
770-1112	08.06.2015	doc 23.50 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data
2D/3D Models 770-1112



CAE data
EPLAN Data Portal 770-1112
WSCAD Universe 770-1112
ZUKEN Portal 770-1112



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



[Item No.: 771-8982/106-101](#)  
pre-assembled connecting cable; Eca;  
Socket/open-ended; 2-pole; Cod. I;  
H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; blue

[Item No.: 771-8982/006-101](#)  
pre-assembled interconnecting cable;  
Eca; Socket/plug; 2-pole; Cod. I; H05VV-F  
2 x 1.5 mm²; 1 m; 1,50 mm²; blue

1.1.2 Distribution connector



[Item No.: 770-7102](#)  
Linect® T-connector; 2-pole; Cod. I; 1 in-  
put; 2 outputs; white

1.1.3 Female connector/socket



[Item No.: 770-1102](#)  
Socket; 2-pole; Cod. I; 4,00 mm²; blue



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



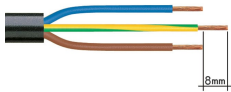
[Item No.: 770-382](#)  
Operating tool; 2-way; green



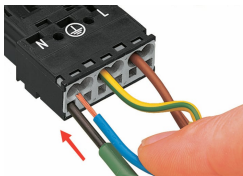
[Item No.: 210-719](#)  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

Conductor termination



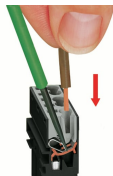
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

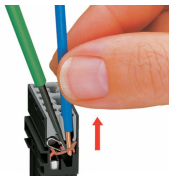


Insert the stripped solid conductor until it hits the backstop.



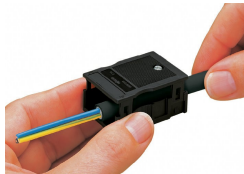
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

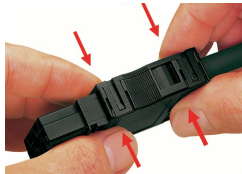
Installation



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).