

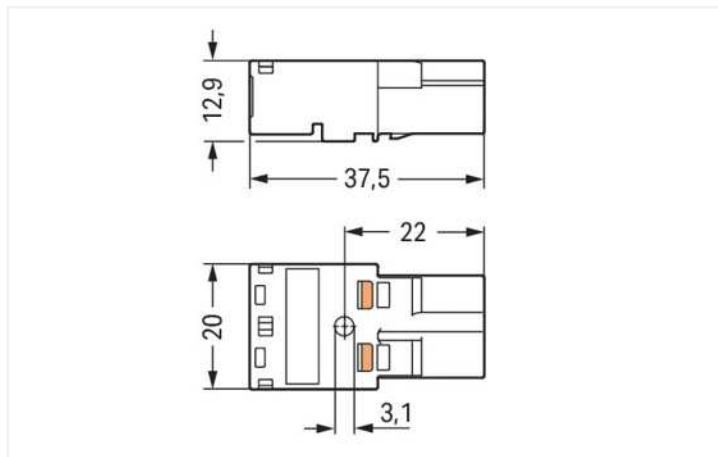
Data Sheet | Item Number: 770-1112

Plug; 2-pole; Cod. I; 4,00 mm²; blue

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



Color: ■ blue



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

The WINSTA® MIDI male connector/plug rated current 25 A allows installation of fine-stranded and solid conductors. WAGO pluggable installation connectors are useful when requirements repeat or are distributed on a specific pattern, for example for installing grid lighting or flush-mount lighting. 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 offers touch-proof protection with live components in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2x0). I coding in blue is used to label WINSTA® MIDI pluggable installation connectors, which are used primarily in building automation for controlling lighting. 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 high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Thanks to the built-in test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and expense.

Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and therefore more efficient, more reliable, and error-free. Using this pre-assembled system reduces assembly times and errors during installation at the construction site. Choose quality and durability – the WINSTA® MIDI pluggable installation connector with marking from WAGO makes the installation of electrical components substantially easier.

- effective protection against mismatching
- for automation controllers
- for intelligent, easy lighting installation
- custom-engineered solutions
- rapid, structured electrical installation

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	25 A
Legend (ratings)	(III / 3) Δ Overvoltage category III / Pollution degree 3

Ratings per UL 1977

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

General

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	4
Total number of potentials	2

Connection 1

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 uninsulated 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	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)	Information on material specifications can be found here
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

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228
CCA DEKRA Certification B.V.	IEC 61535	NL -84761
cURus Underwriters Laboratories Inc.	UL 1977	E45171
VDE VDE Prüf- und Zertifizierungsinstitut	EN 61535	40029808

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	19-HG1868589-PDA
DNV GL Det Norske Veritas, Germanischer 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	
770-1112	08.06.2015	doc 23.50 KB	

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 input; 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

1.3.2.2 Snap-in frame



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; black

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).