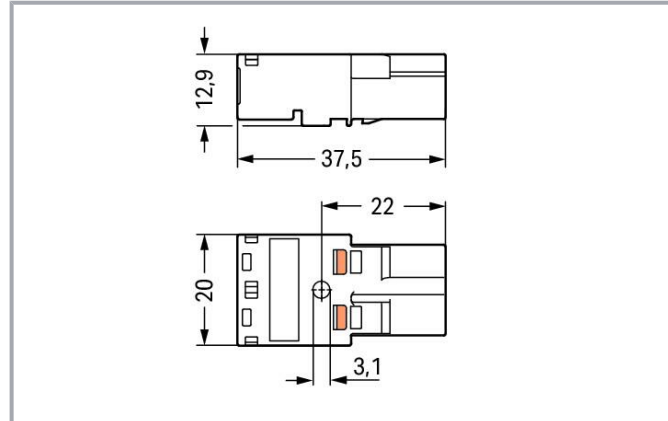


Data sheet | Item number: 770-1112

Plug; 2-pole; Cod. I; 4,00 mm²; blue

www.wago.com/770-1112



Item description

Male connector/plug *WINSTA*® MIDI with protection type IP20

For signal and power transmission: The *WINSTA*® MIDI male connector/plug I coding. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in numerous possible uses. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. 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!)). Controlled lighting equipment, as implemented in the DALI standard, for example, is the main use of *WINSTA*® MIDI pluggable installation connectors with I coding. This pluggable installation connector is designed for a voltage load of up to 25 A. Thus, it can also be used for high power loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in can be found in a variety of projects you can use for quick, easy, flexible, and secure electrical installation.

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

The *WINSTA*® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical

Subject to changes. Please also observe the further product documentation!

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



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. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with *WINSTA*® MIDI pluggable installation connectors with protection type IP20 from WAGO.

-
- protection against mismatching eliminates errors
- pre-assembled versions
- with I coding for lighting control (DALI standard)
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

Data

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) ≙ 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
----------------------------	--

Connection data

Connection points	4
Total number of potentials	2

Subject to changes. Please also observe the further product documentation!



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!)

Subject to changes. Please also observe the further product documentation!

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	0.139 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

Subject to changes. Please also observe the further product documentation!

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
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Approvals / Certificates

General approvals

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




Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-





Subject to changes. Please also observe the further product documentation!



Approvals for marine applications


Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1868589- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

Counterpart

	Item no.770-1102 Socket; 2-pole; Cod. I; 4,00 mm ² ; blue	www.wago.com/770-1102
	Item no.770-7102 Linect® T-connector; 2-pole; Cod. I; 1 input; 2 outputs; white	www.wago.com/770-7102
	Item no.771-8982/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. I; H05VV-F 2 x 1.5 mm ² ; 1 m; 1,50 mm ² ; blue	www.wago.com/771-8982/006-101
	Item no.771-8982/106-101 pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. I; H05VV-F 2 x 1.5 mm ² ; 1 m; 1,50 mm ² ; blue	www.wago.com/771-8982/106-101

Required accessories

Strain relief

	Strain relief housing	
	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	www.wago.com/770-502/041-000

Subject to changes. Please also observe the further product documentation!



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

www.wago.com/770-502/042-000



Item no.: 770-512/041-000

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

www.wago.com/770-512/041-000



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

www.wago.com/770-512/042-000

Locking levers

Locking system



Item no.: 770-121

Locking lever; for flying leads; for manual operation; white

www.wago.com/770-121



Item no.: 770-131

Locking lever; for flying leads; for tool operation; white

www.wago.com/770-131



Item no.: 770-101

Locking lever; for flying leads; for manual operation; black

www.wago.com/770-101



Item no.: 770-111

Locking lever; for flying leads; for tool operation; black

www.wago.com/770-111

Optional accessories

Mounting

Snap-in frame



Item no.: 770-317

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-317



Item no.: 770-337

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-337

Mounting accessories



Item no.: 897-2100

Mounting plate; for Snap-in; Plastic; for detectors and sensors ; Ø 200 mm; red

www.wago.com/897-2100

Cover

Subject to changes. Please also observe the further product documentation!

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Cover



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

www.wago.com/770-360



Item no.: 897-2003
Protective cap; Type2; for sockets and plugs; PVC; red

www.wago.com/897-2003

Tool

Operating tool



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

www.wago.com/210-719



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

www.wago.com/770-382

Downloads

Documentation

Bid Text

770-1112 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-1112 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 770-1112	URL	Download
WSCAD Universe 770-1112	URL	Download

Environmental Product Compliance

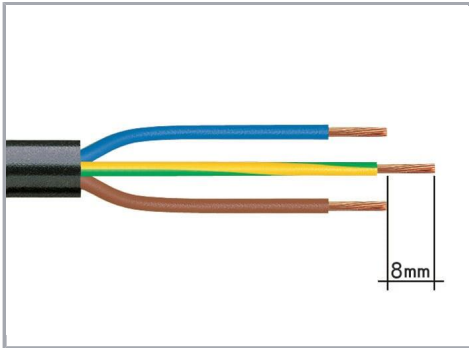
Compliance Search

Environmental Product Compliance 770-1112 Plug; 2-pole; Cod. I; 4,00 mm ² ; blue	URL	Download
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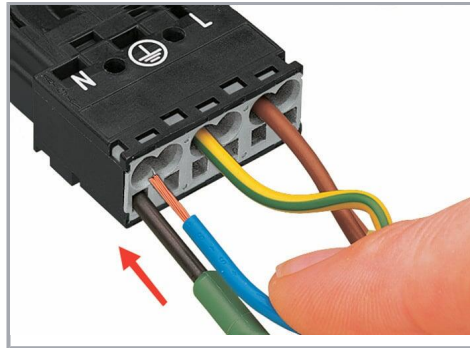
Subject to changes. Please also observe the further product documentation!

Installation Notes

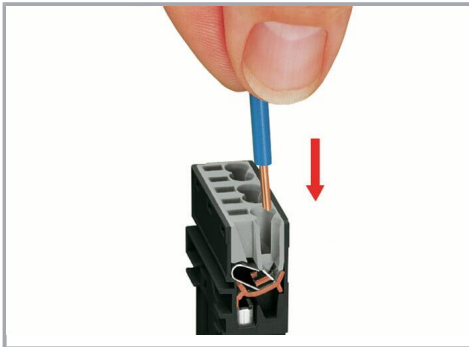
Conductor termination



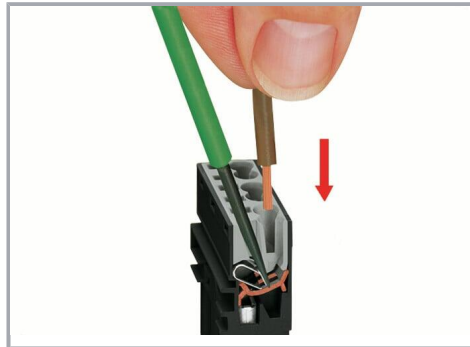
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



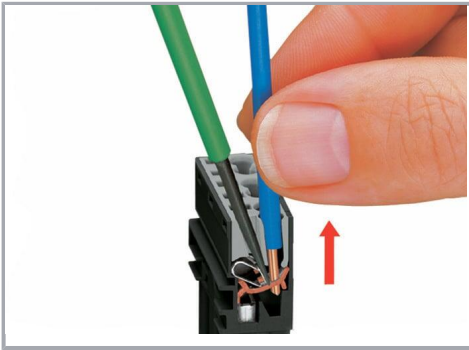
Insert the stripped solid conductor until it hits the backstop.



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.

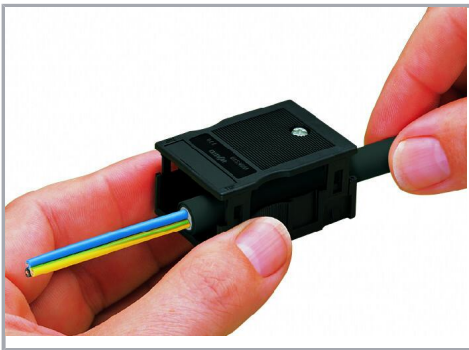
Conductor removal

Subject to changes. Please also observe the further product documentation!



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

Installation

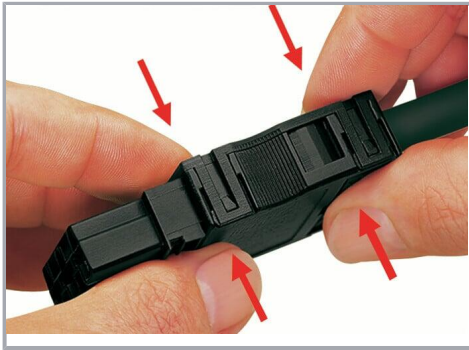


We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug /socket. Note the "TOP" inscription.

Subject to changes. Please also observe the further product documentation!



Prepare strain relief housing by snapping together upper and bottom part.



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

Product family

WINSTA® MIDI

[Show all products from the family](#)

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