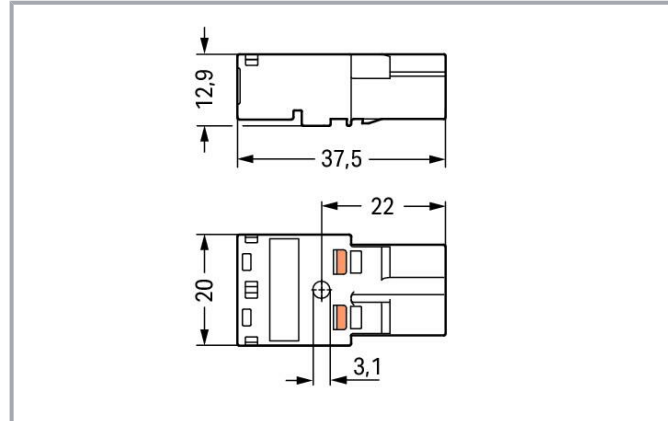


Data sheet | Item number: 770-212
Plug; 2-pole; Cod. A; 4,00 mm²; black

www.wago.com/770-212



Item description

Male connector/plug *WINSTA*® MIDI A coding

For power and signal transmission: The *WINSTA*® MIDI male connector/plug with protection type IP20. Whether 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. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical 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!)). Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. Our *WINSTA*® MIDI product line achieves flexibility for the electrical installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees time-saving, error-free installation and offers flexibility and customization for meeting an enormous variety of installation requirements.

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 consequently faster, even 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

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

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Phone: +49571 887-0 | Fax: +49571 887-169
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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.



technology too! Plan your installation with *WINSTA*® MIDI pluggable installation connectors with protection against mismatching from WAGO.

-
- protection against mismatching eliminates errors
- simple circuits
- with A coding for a great number of uses
- custom-engineered solutions
- convenient installation and commissioning

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
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Connection data

Connection points	4
Total number of potentials	2

Connection 1

Connection technology

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



	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	General mains applications
Coding	A
Variable coding	Yes
Marking	N L
Potential marking	N L
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
------------------------------------	---------------------

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



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	black
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

Commercial data

Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-05

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



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	4050821028291
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

Declarations of conformity and manufacturer's declarations

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



Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1868589- PDA








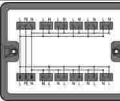
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	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

Counterpart

	Item no.770-1606 T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	www.wago.com/770-1606
	Item no.770-102/041-000 Socket; with strain relief housing; 2-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-102/041-000
	Item no.770-1615 T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	www.wago.com/770-1615
	Item no.770-1634 h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black	www.wago.com/770-1634
	Item no.770-1636 h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black	www.wago.com/770-1636
	Item no.770-202 Socket; 2-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-202
	Item no.771-8992/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-8992/006-101
	Item no.771-8992/106-101 pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-8992/106-101
	Item no.899-631/477-000 Distribution box; Single-phase current (230 V); 1 input; 11 outputs; Cod. A; MIDI	www.wago.com/899-631/477-000

Required accessories

Locking levers

Locking system

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



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

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



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

Optional accessories

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

Mounting

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

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

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

Downloads

Documentation

Bid Text

770-212 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-212 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 770-212		URL	Download
WSCAD Universe 770-212		URL	Download
ZUKEN Portal 770-212		URL	Download

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

CAD data

2D/3D Models 770-212

[URL](#)

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-212

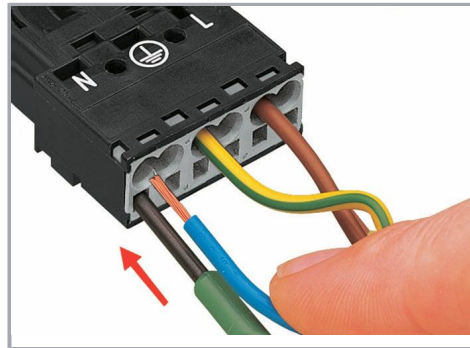
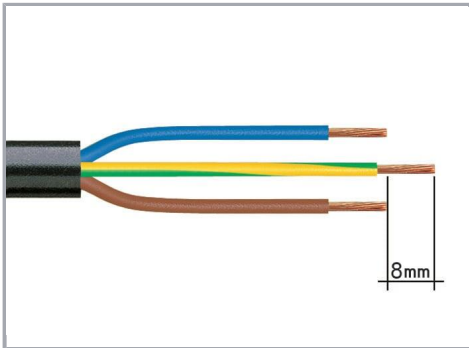
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[Download](#)

Plug; 2-pole; Cod. A; 4,00 mm²; black

Installation Notes

Conductor termination



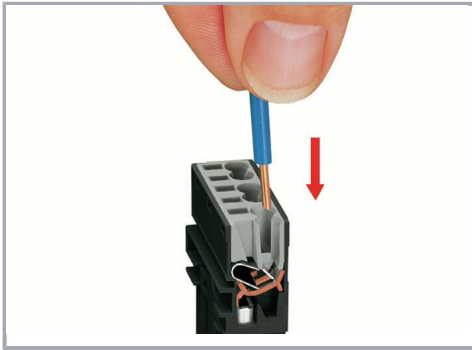
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)

2. Strip length = 9 mm

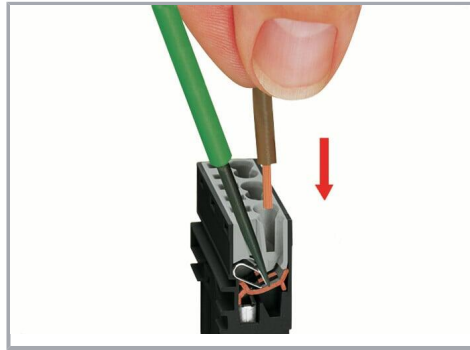
3. Extended ground conductor = 8 mm

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.

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

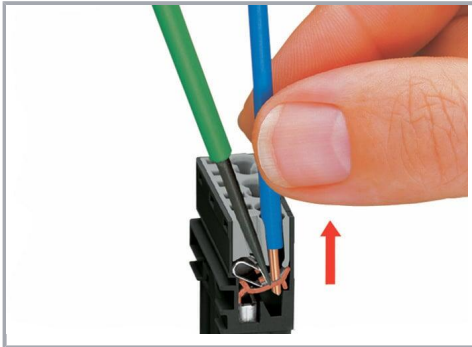


Insert the stripped solid conductor until it hits the backstop.



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.

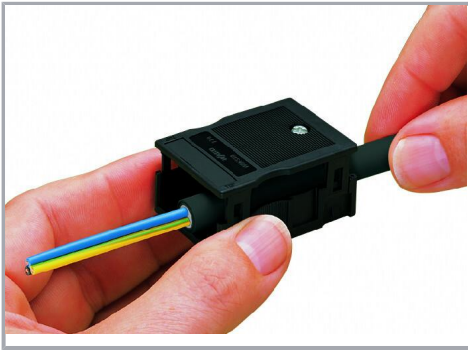
Conductor removal



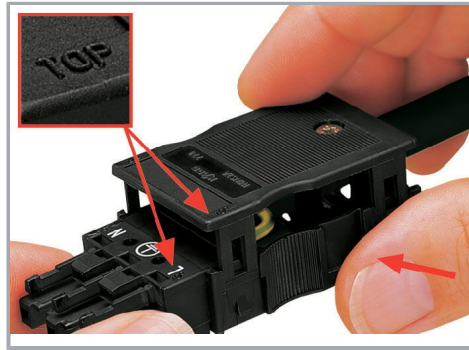
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Installation

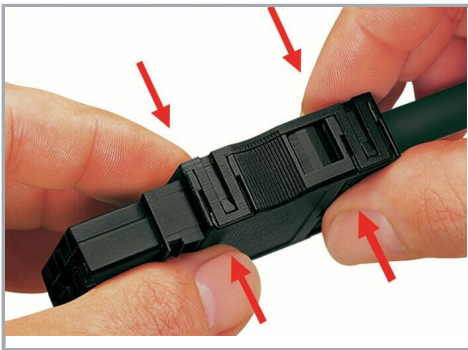
Subject to changes. Please also observe the further product documentation!



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).

Product family

WINSTA® MIDI

[Show all products from the family](#)

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