

Item description

Female connector/socket *WINSTA*® MIDI with protection type IP20

The *WINSTA*® MIDI female connector/socket A coding allows installation of solid and fine-stranded conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of requirements in no time flat. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector offers protection against contact with live components 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 offers total flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers flexibility for meeting an enormous variety of installation requirements. The strip length is 35 mm.

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



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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Choose quality and durability – with protection type IP20 from WAGO makes the installation of electrical components visibly easier.

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- protection against mismatching eliminates errors
- pre-assembled versions
- suitable for any application
- 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 information

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

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Total number of potentials

2

Connection 1

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°
Strip length (outer insulation)	35 mm

Physical data

Pin spacing	10 mm / 0.394 inches
Width	24.6 mm / 0.969 inches
Height	15.9 mm / 0.626 inches
Depth	71 mm / 2.795 inches

Mechanical Data

Application	General mains applications
Coding	A
Variable coding	No
Marking	L N
Potential marking	L N
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

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accessible areas!)

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
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).
Strain relief	strain relief housing

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	0.393 MJ
Weight	13 g

Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C

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Note on continuous operating temperature

Insulating parts for temperatures $\leq 105^{\circ}\text{C}$

Commercial data




eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
ECCN	NO DATA
PU (SPU)	25 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821117919
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.	EN 61535	71-123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity	-	-

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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.770-112/041-000 Plug; with strain relief housing; 2-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-112/041-000
	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.770-1615 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.770-212 Plug; 2-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-212
	Item no.771-8992/206-101 pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-8992/206-101

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**Item no. 771-8992/006-101**pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; blackwww.wago.com/771-8992/006-101

Required accessories

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

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

Cover

Cover

**Item no.: 770-201**

Lockout cap; 12-pole, separable; for sockets; Plastic; black

www.wago.com/770-201**Item no.: 770-221**

Lockout cap; 12-pole, separable; for sockets; Plastic; white

www.wago.com/770-221**Item no.: 897-2003**

Protective cap; Type2; for sockets and plugs; PVC; red

www.wago.com/897-2003

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Downloads Documentation

Bid Text

770-102/041-000 X81 - Datei	2019 Feb 19	xml 3.1 kB	Download
770-102/041-000 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

CAD/CAE-Data

CAD data

2D/3D Models 770-102/041-000	URL	Download
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CAE data

WSCAD Universe 770-102/041-000	URL	Download
ZUKEN Portal 770-102/041-000	URL	Download
WSCAD Universe 770-102/041-000	URL	Download

Asset Administration Shell

Asset Administration Shell 770-102/041-000	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-102/041-000 Socket; with strain relief housing; 2-pole; Cod. A; 4,00 mm ² ; black	URL	Download
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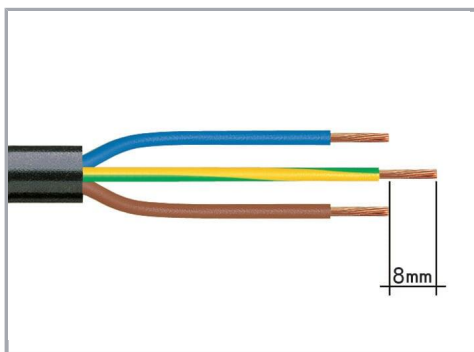
Installation Notes

Conductor termination

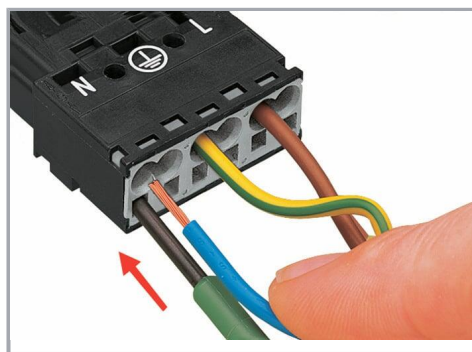
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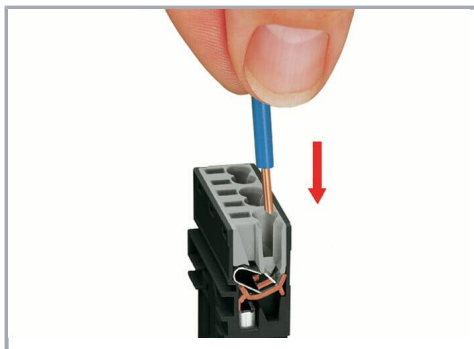
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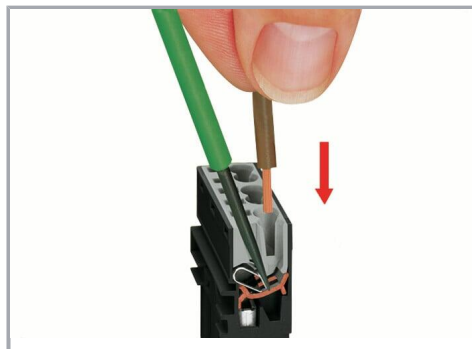
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

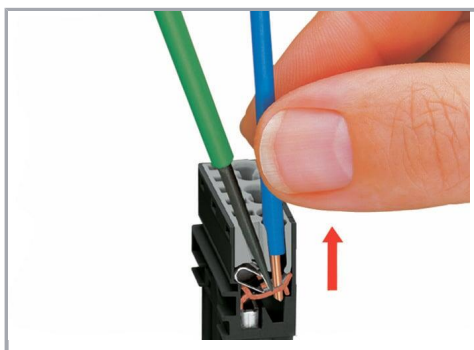


Insert the stripped solid conductor until it hits the backstop.



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.

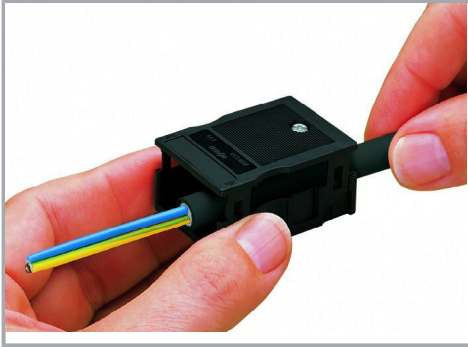
Conductor removal



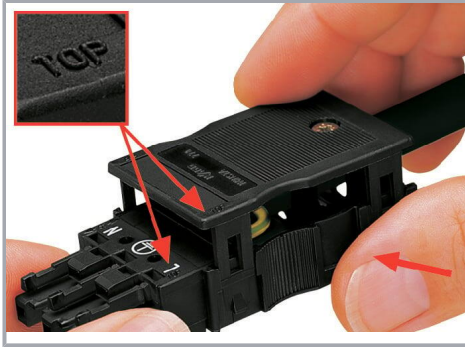
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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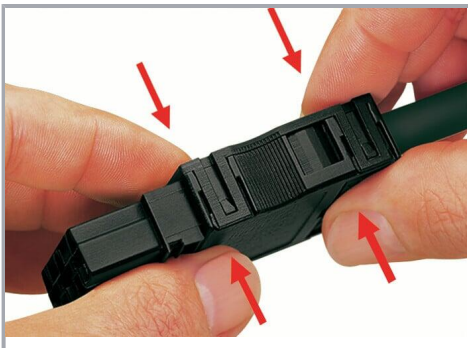
Installation



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).

Product family

WINSTA® MIDI

[Show all products from the family](#)

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