

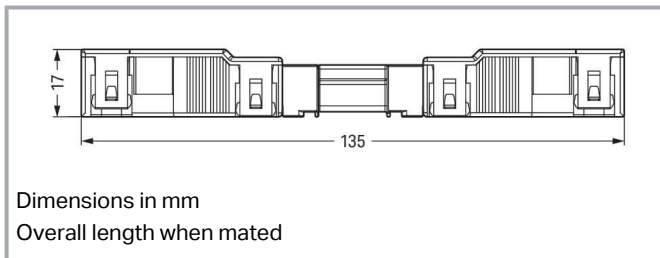
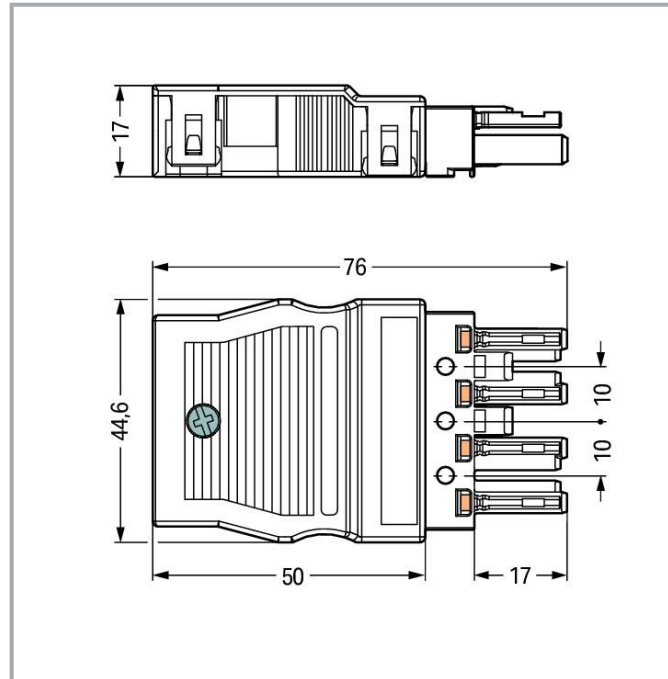
Data sheet | Item number: 770-104

Socket; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black

www.wago.com/770-104



Color: ■



Dimensions in mm

Overall length when mated

Item description

Female connector/socket WINSTA® MIDI with protection type IP20

For power and signal transmission: The WINSTA® MIDI female connector/socket A coding. WAGO pluggable installation connectors can be used when specifications repeat or are distributed on a specific grid, for example for installing grid lighting or flush-mount lighting. For greater protection in electrical installations, the pluggable installation connector is equipped with mechanical 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 elements. The WINSTA® MIDI pluggable installation connector with A coding in white or black is normally used for general mains

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

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applications in power distribution. This pluggable installation connector is designed for a voltage load of up to 25 A. As a result, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in a broad range of individual products you can use for quick, easy and maximally flexible installation. The strip length is 55 mm.

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

WINSTA® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Choose quality and durability – with marking from WAGO makes the installation of electrical components visibly easier.

- protection against mismatching eliminates errors
- pre-assembled versions
- with A coding for a great number of applications
- exact dimensions
- 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)	400 V
Rated impulse voltage (III/3)	6 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

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approx. 0.25 mΩ contact transition plug/socket

Connection data

Connection points	8
Total number of potentials	4

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	4
Conductor entry direction to mating direction	0°
Strip length (outer insulation)	55 mm

Physical data

Pin spacing	10 mm / 0.394 inches
Width	44.6 mm / 1.756 inches
Height	17 mm / 0.669 inches
Depth	76 mm / 2.992 inches

Mechanical Data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N ∇ 2/L 1/L'
Potential marking	N ∇ 2/L 1/L'
Mating force of a plug-in connection	approx. 20 ... 70 N (depending on pole number)

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



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)	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	0.584 MJ
Weight	24.4 g

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

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)	25 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918252126
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
	cULus Underwriters Laboratories Inc.	UL 1977	E45171
	cULus Underwriters Laboratories Inc.	UL 1059	E 45172

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



VDE
VDE Prüf- und Zertifizierungsinstitut

EN 61535

40029808




VDE
VDE Prüf- und Zertifizierungsinstitut




EN 61984

40002889

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

Counterpart



Item no. 770-114
Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black

www.wago.com/770-114

Item no. 770-214
Plug; 4-pole; Cod. A; 4,00 mm²; black

www.wago.com/770-214










Item no. 770-626
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black

www.wago.com/770-626

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	Item no.770-627 T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	www.wago.com/770-627
	Item no.770-714 Snap-in plug; 4-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-714
	Item no.770-714/007-000 Snap-in plug; with direct ground contact; 4-pole; Cod. A; 4,00 mm ² ; black	www.wago.com/770-714/007-000
	Item no.770-814 Plug for PCBs; straight; 4-pole; Cod. A; black	www.wago.com/770-814
	Item no.770-814/011-000 Plug for PCBs; angled; 4-pole; Cod. A; black	www.wago.com/770-814/011-000
	Item no.770-944 h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black	www.wago.com/770-944
	Item no.770-945 h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black	www.wago.com/770-945
	Item no.771-9994/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-9994/006-101
	Item no.771-9994/206-101 pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-9994/206-101

Required accessories



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

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

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

**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****Marking accessories**

Marker

**Item no.: 770-450/000-002**

Marker card; Plastic; yellow

www.wago.com/770-450/000-002**Item no.: 770-450/000-001**

Marker card; Plastic; green

www.wago.com/770-450/000-001**Item no.: 770-450/000-005**

Marker card; Plastic; red

www.wago.com/770-450/000-005**Item no.: 770-450**

Marker card; Plastic; white

www.wago.com/770-450**Item no.: 770-450/000-006**

Marker card; Plastic; blue

www.wago.com/770-450/000-006**Item no.: 770-450/000-012**

Marker card; Plastic; orange

www.wago.com/770-450/000-012**Cover**

Cover

**Item no.: 897-2005**

Protective cap; Type4; for sockets and plugs; PVC; red

www.wago.com/897-2005**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

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Downloads

Documentation

Bid Text

770-104 X81 - Datei	2019 Feb 19	xml 3.1 kB	Download
770-104 doc - Datei	2015 Jun 8	doc 24.1 kB	Download
ausschreiben.de 770-104		URL	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 770-104	URL	Download
WSCAD Universe 770-104	URL	Download
ZUKEN Portal 770-104	URL	Download

CAD data

2D/3D Models 770-104	URL	Download
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Asset Administration Shell

Asset Administration Shell 770-104	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-104 Socket; with strain relief housing; 4-pole; Cod. A; 4,00 mm ² ; black	URL	Download
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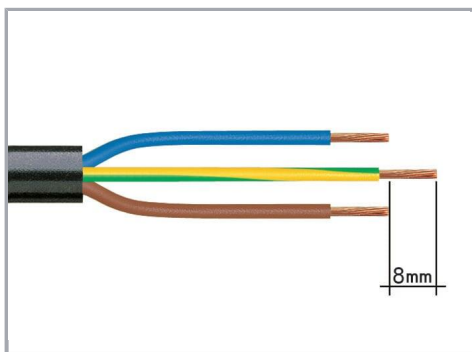
Installation Notes

Conductor termination

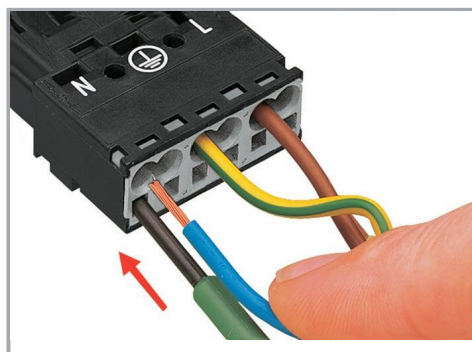
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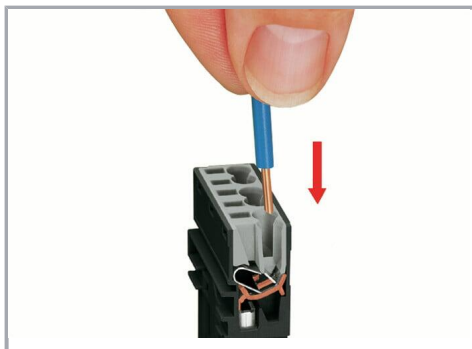
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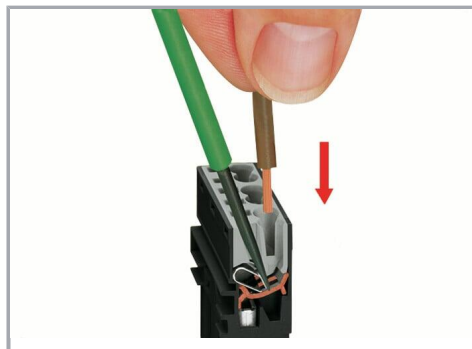
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

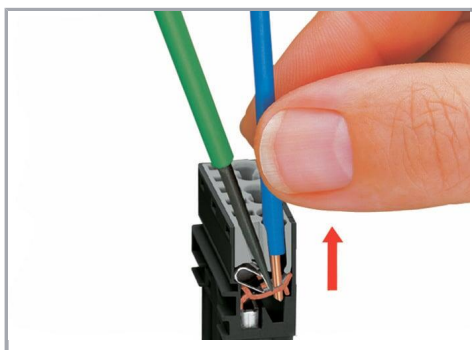


Insert the stripped solid conductor until it hits the backstop.



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.

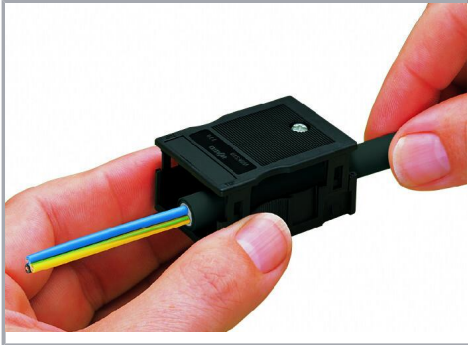
Conductor removal



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

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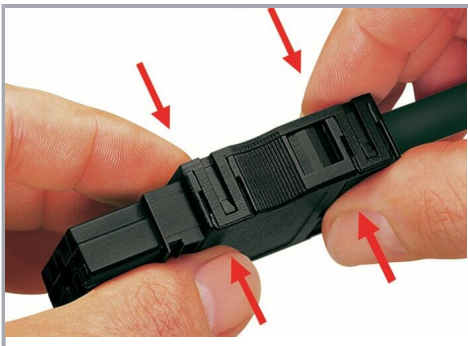
Installation



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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