

Data sheet | Item number: 770-232
Plug; 2-pole; Cod. A; 4,00 mm²; white

www.wago.com/770-232



Color:

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

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We are always happy to take your call at +49 (571) 887-44222.



Item description

Male connector/plug *WINSTA*® MIDI A coding

The *WINSTA*® MIDI male connector/plug 2-pole supports rapid, correct installation. The pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in a large number of applications. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. 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!)). The *WINSTA*® MIDI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – as a result it is also suitable for robust loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the built-in test slot, connections can be checked 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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Now you can also cut installation costs without compromising quality and safety: The *WINSTA*® MIDI pluggable installation connector with protection against mismatching eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismatching eliminates errors
- for automation controllers
- with A coding for use in many general mains applications
- 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

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Rated current	25 A
Legend (ratings)	(III / 3) $\hat{=}$ 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 m Ω of contact resistance approx. 0.25 m Ω 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
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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
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

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



Color	white
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
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	4050821028314
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	IEC 61535	NL -84761

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DEKRA Certification B.V.

CCA DEKRA Certification B.V.	EN 61535	71- 123228
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 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.770-122/041-000 Socket; with strain relief housing; 2-pole; Cod. A; 4,00 mm ² ; white	www.wago.com/770-122/041-000
Item no.770-1656 T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white	www.wago.com/770-1656
Item no.770-1665 T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; white	www.wago.com/770-1665
Item no.770-1684 h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white	www.wago.com/770-1684
Item no.770-1686 h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white	www.wago.com/770-1686
Item no.770-222 Socket; 2-pole; Cod. A; 4,00 mm ² ; white	www.wago.com/770-222
Item no.771-8992/106-102 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 ; white	www.wago.com/771-8992/106-102

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Item no. 771-8992/006-102

pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.5 mm²; 1 m; 1,50 mm²; whitewww.wago.com/771-8992

/006-102

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

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

Mounting accessories

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; white

www.wago.com/770-337

Item no.: 897-2100

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

www.wago.com/897-2100

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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.: 770-360

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**

770-232 X81 - Datei	2019 年2月19日	xml 3.0 kB	Download
770-232 doc - Datei	2015 年6月8日	doc 24.1 kB	Download

CAD/CAE-Data**CAD data**

2D/3D Models 770-232	URL	Download
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CAE data

WSCAD Universe 770-232	URL	Download
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ZUKEN Portal 770-232	URL	Download
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EPLAN Data Portal 770-232	URL	Download
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Environmental Product Compliance**Compliance Search**

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Installation Notes

Conductor termination



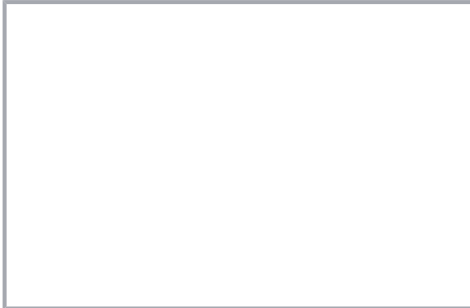
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)

2. Strip length = 9 mm

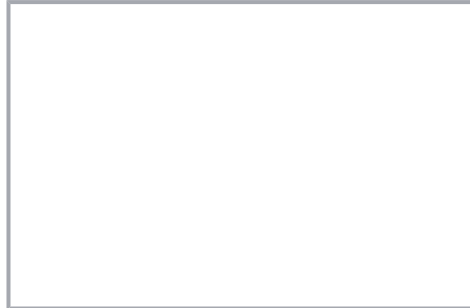
3. Extended ground conductor = 8 mm



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.



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

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[Show all products from the family](#)

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