

Data sheet | Item number: 770-252
Plug; 2-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-252



Color:

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

WAGO GmbH & Co. KG
Hansastr. 27
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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.



Item description

Male connector/plug *WINSTA*® MIDI 2-pole

The *WINSTA*® MIDI male connector/plug with protection type IP20 supports rapid, correct installation. WAGO pluggable installation connectors are used when criteria repeat or are planned on a specific grid, for example for installing grid lighting or flush-mount lighting. 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!)). Pluggable installation connectors with B coding from the *WINSTA*® MIDI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Your own pole marking is possible in addition. 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 suitable for robust loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy and maximally flexible installation.

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

The *WINSTA*® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, even more reliable, and error-free. Using this pre-assembled system decreases time spent on assembly and errors during installation at the construction site. Now you can also lower installation expenses without compromising safety and quality: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

-
- protection against mismatching eliminates errors
- for automation controllers
- with B coding for use in automation of processes, such as lighting technology, for instance
- flexible installation to save space
- quick replacement of defective units during ongoing operation

Data

Notes

Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

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

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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
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

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



Conductor entry direction to mating direction	0°
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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	Control technology
Coding	B
Variable coding	No
Marking	2 1
Potential marking	2 1
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 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).

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Material Data

Note (material data)

Information on material specifications can be found here

Color	gray
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	0.137 MJ
Weight	6.4 g

Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Insulating parts for temperatures \leq 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	4050821541875
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 61984	NL-32104
	CCA DEKRA Certification B.V.	EN 61984	2173495.01
	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	-	-
	UK-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.770-1601 T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray	www.wago.com/770-1601
Item no.770-1608 h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; gray	www.wago.com/770-1608
Item no.770-1651 h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray	www.wago.com/770-1651
Item no.770-1658	

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h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; gray	www.wago.com/770-1658
Item no.770-1704 3-way distribution connector; 2-pole; Cod. B; 1 input; 3 outputs; gray	www.wago.com/770-1704
Item no.770-1701 T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray	www.wago.com/770-1701
Item no.770-1751 h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray	www.wago.com/770-1751
Item no.770-242 Socket; 2-pole; Cod. B; 4,00 mm ² ; gray	www.wago.com/770-242
Item no.771-8992/005-103 pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm ² ; 1 m; 1,00 mm ² ; gray	www.wago.com/771-8992/005-103
Item no.771-8992/105-103 pre-assembled connecting cable; Eca; Socket/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm ² ; 1 m; 1,00 mm ² ; gray	www.wago.com/771-8992/105-103

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

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

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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

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

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

770-252 X81 - Datei	2019 年2月19日	xml 3.0 kB	Download
770-252 doc - Datei	2015 年6月8日	doc 24.1 kB	Download

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CAD/CAE-Data

CAD data

2D/3D Models 770-252	URL	Download
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CAE data

EPLAN Data Portal 770-252	URL	Download
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ZUKEN Portal 770-252	URL	Download
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WSCAD Universe 770-252	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-252	URL	Download
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Plug; 2-pole; Cod. B; 4,00 mm²; gray

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.

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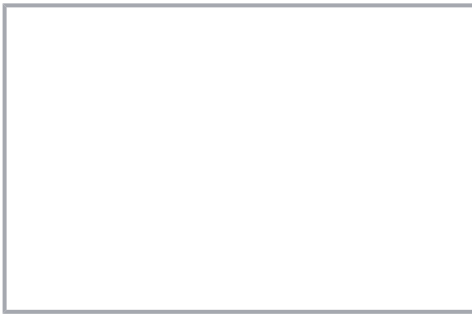


Insert the stripped solid conductor until it hits the backstop.



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



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).

Coding



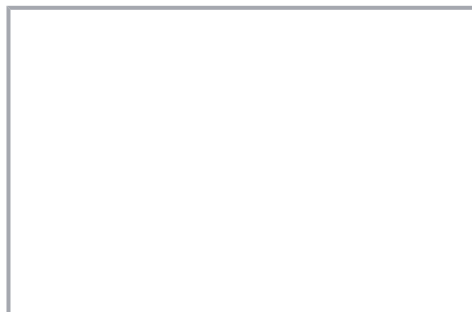
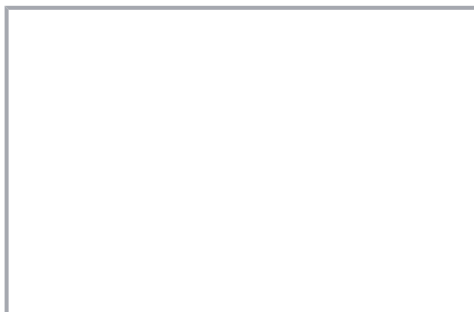
Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

Mismatching protection

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



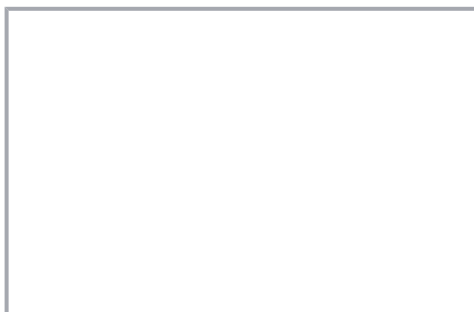
B-coded connectors with different colors can be plugged together.

Important note:

Different colors and/or pole markings are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.

B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.



Easy circuit identification via different marking and colors

Product family

WINSTA® MIDI

[Show all products from the family](#)

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