

Item description

Male connector/plug *WINSTA*® MIDI with protection against mismatching

For signal and power transmission: The *WINSTA*® MIDI male connector/plug B coding. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to many different requirements in no time flat. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including 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 energised contact elements. Solutions like the *WINSTA*® MIDI pluggable installation connectors with B coding are appropriate for applications involving process control, such as for lighting or within data networks. This pluggable installation connector can be employed for a current load of up to 25 A. As a result, it can also be used for high power loads. The *WINSTA*® MIDI product line allows flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers customization and flexibility for meeting an enormous variety of installation requirements.

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



Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

The WINSTA® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and therefore more efficient, even more reliable, and error-free. Use of this pre-assembled system decreases assembly times and errors during installation at the construction site. Choose quality and durability – with protection type IP20 from WAGO makes the electrical installation of electrical components substantially easier.

-
- pluggable installation connectors with protection against mismatching
- simple circuits
- with B coding for use in process automation, such as lighting technology, among other examples
- ready to install and use immediately
- 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

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 IEC/EN – Notes

Note (rated current)

25 A for 3-pole load

20 A for 4- and 5-pole load

Ratings per UL 1977

Note for the US market

Some versions may also be used for current interruption in

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

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

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

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



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
----------------------------	--------------------------------------------------------------------------------------

Connection data

Connection points	10
Total number of potentials	5

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	5
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	50 mm / 1.969 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

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

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Mechanical Data

Application	Control technology
Coding	B
Variable coding	Yes
Marking	1L 2L L $\frac{1}{2}$ N
Potential marking	1L 2L L $\frac{1}{2}$ 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 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
Color	gray
Cover color	gray

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



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	0.419 MJ
Weight	16.6 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


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)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821486275
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	cURus Underwriters Laboratories Inc.	UL 1977	E45171

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



cURus
Underwriters Laboratories Inc.

UL 1059

E 45172

Counterpart



Item no. 770-245/064-000
Socket; 5-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-245/064-000



Item no. 770-845/011-000/064-000
Socket for PCBs; angled; 5-pole; Cod. B; gray

www.wago.com/770-845/011-000/064-000



Item no. 770-745/064-000
Snap-in socket; 5-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-745/064-000



Item no. 770-845/064-000
Socket for PCBs; straight; 5-pole; Cod. B; gray

www.wago.com/770-845/064-000

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.: 770-505/021-000
Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black

www.wago.com/770-505/021-000

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

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item no.: 770-505/023-000

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

www.wago.com/770-505/023-000



Item no.: 770-505

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

www.wago.com/770-505



Item no.: 770-515

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

www.wago.com/770-515



Item no.: 770-515/023-000

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

www.wago.com/770-515/023-000



Item no.: 770-515/021-000

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white

www.wago.com/770-515/021-000

Optional accessories

Coding

Coding



Item no.: 770-401

Coding pin; for plugs; Plastic; gray

www.wago.com/770-401

Cover

Cover



Item no.: 770-360

Lockout cap; for plugs; 5-pole; separable; yellow

www.wago.com/770-360



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

Mounting

Mounting accessories



Item no.: 770-320

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-320



Item no.: 770-321

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black

www.wago.com/770-321

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

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

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

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



Item no.: 770-340

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

www.wago.com/770-340



Item no.: 770-341

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white

www.wago.com/770-341

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

Downloads

Documentation

Bid Text

770-255/064-000 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-255/064-000 doc - Datei	2015 Jun 8	doc 24.6 kB	Download

CAD/CAE-Data

CAD data

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

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

2D/3D Models 770-255/064-000

[URL](#)

[Download](#)

CAE data

WSCAD Universe 770-255/064-000

[URL](#)

[Download](#)

ZUKEN Portal 770-255/064-000

[URL](#)

[Download](#)

WSCAD Universe 770-255/064-000

[URL](#)

[Download](#)

Asset Administration Shell

Asset Administration Shell 770-255/064-000

[URL](#)

[Download](#)

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-255/064-000

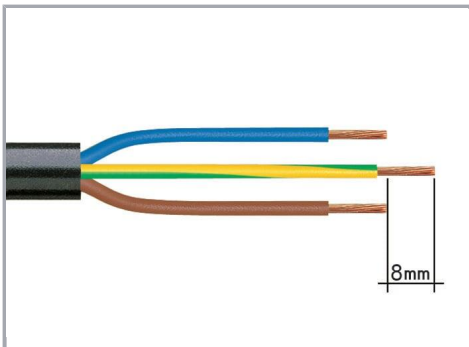
[URL](#)

[Download](#)

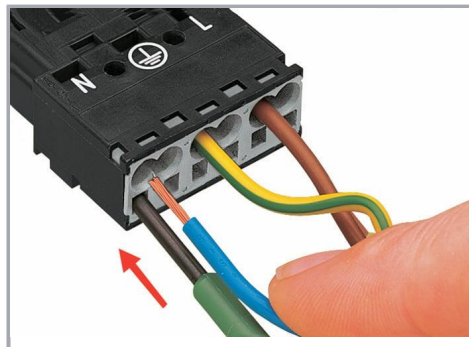
Plug; 5-pole; Cod. B; 4,00 mm²; gray

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.

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

WAGO GmbH & Co. KG

Hansastr. 27

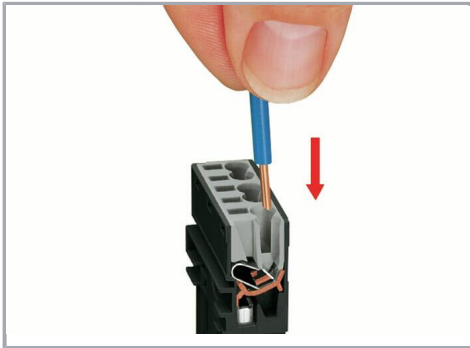
32423 Minden

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

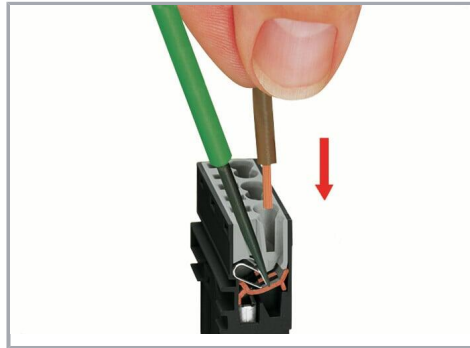
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

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

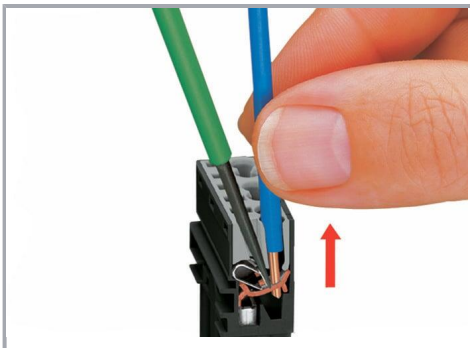


Insert the stripped solid conductor until it hits the backstop.



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.

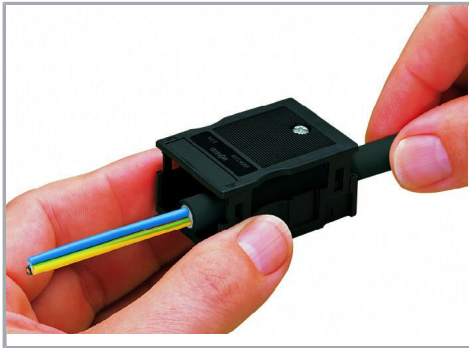
Conductor removal



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

Installation

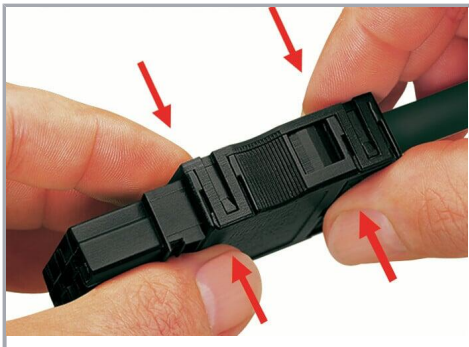
Subject to changes. Please also observe the further product documentation!



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.

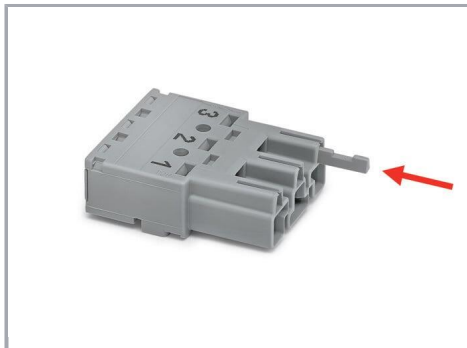


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding



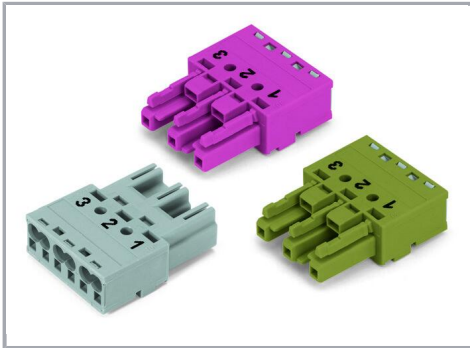
Simply cut off the coding pin from the socket.



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

Mismatching protection

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

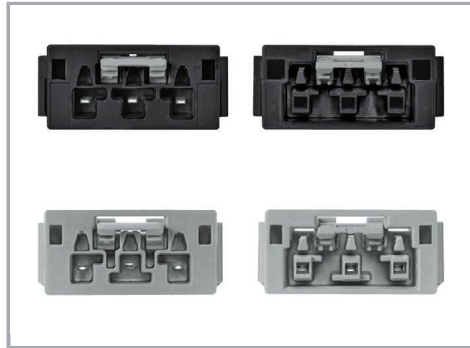


B-coded connectors with different colors can be plugged together.

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](#)

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