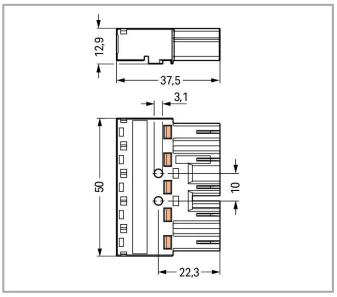
Plug; 5-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

www.wago.com/770-255







#### Item description

#### Male connector/plug WINSTA® MIDI rated current 25 A

For signal and power transmission: The *WINSTA®* MIDI male connector/plug 5-pole. WAGO pluggable installation connectors are useful when specifications repeat or are planned on a specified pattern, 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 mismating. 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!)). This means that users' fingers will never come into contact with energised elements. B coding enables the *WINSTA®* MIDI pluggable installation connectors to be used for control in applications in automation, mechanical engineering and robotics. This pluggable installation connector is designed for a load of up to 25 A. As a result, it can also be used for high power loads. The *WINSTA®* MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Thanks to the included test slot, it is possible to check connections even when they are plugged in. This saves time, labor, and money.

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

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# 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 very strict requirements of building installation. It makes electrical installation pluggable, and therefore faster, more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and errors during installation at the construction site. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MIDI pluggable installation connectors with marking from WAGO.

- protection against mismating eliminates errors
- pre-assembled versions
- with B coding for controllers such as sun blinds and lighting fixtures
- custom-engineered solutions
- rapid, structured electrical installation

# 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
Note (rated current)	25 A for 3-pole load 20 A for 4- and 5-pole load
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.

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Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

#### General

Note on contact resistance	approx. 1 m $\Omega$ of contact resistance
	approx. 0.25 m $\Omega$ 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 <sup>2</sup> / 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	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

# **Mechanical Data**

Application	Control technology
Coding	В

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Variable coding	Yes
Marking	5 4 3 2 1
Potential marking	5 4 3 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).

# **Material Data**

Note (material dat	a)
--------------------	----

Color	gray
Cover color	gray
Material group	1
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

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Contact plating	Tin
Fire load	0.419 MJ
Weight	15.9 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)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918253987
Customs tariff number	85366990990

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

## General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61984	NL-32104
KEMA	CCA DEKRA Certification B.V.	EN 61984	2173495.01

UL 1977



Underwriters Laboratories Inc.

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#### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
CE	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Approvals fo	r marine applications		Certificate
Logo	Approval	Additional Approval Text	name
ABS.	ABS American Bureau of Shipping	-	19- HG1868589- PDA
DNV GNV.COM/AF	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
CI®	LR Lloyds Register	IEC 61984	LR22429487TA

#### Counterpart



Item no.770-1641

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

www.wago.com/770-1641



Item no.770-1741

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray www.wago.com/770-1741



Item no.770-1744

3-way distribution connector; 5-pole; Cod. B; 1 input; 3 outputs; gray

www.wago.com/770-1744



Item no.770-245

Socket; 5-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

www.wago.com/770-245

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Item no.770-745 Snap-in socket; 5-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

www.wago.com/770-745



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

www.wago.com/770-845



Item no.770-845/011-000

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



Socket for PCBs; angled; 5-pole; Cod. B; gray

www.wago.com/771-9995/005-103



Item no.771-9995/105-103

Item no.771-9995/005-103

pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. B; 1 m; 1,00 mm²; gray

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; 1 m; 1,00 mm²; gray

www.wago.com/771-9995/105-103

### Required accessories

#### Locking levers

Locking sy	/stem
------------	-------



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



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

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www.wago.com/770-255





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

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

Coding

Coding



Item no.: 770-401

Coding pin; for plugs; Plastic; gray

www.wago.com/770-401

Tool

Operating tool



Item no.: 210-719

Operating tool; Blade:  $2.5 \times 0.4$  mm; with a partially insulated shaft

www.wago.com/210-719

Marking accessories

Marker



Item no.: 770-450/000-002 Marker card; Plastic; yellow www.wago.com/770-450

/000-002

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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

#### Mounting

Snap-in frame



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



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

# Downloads Documentation

**Bid Text** 

770-255

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Plug; 5-pole; Cod. B; 4,00 mm²; gray

## Installation Notes

Conductor termination

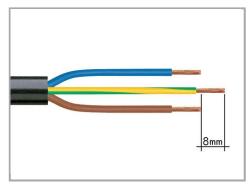
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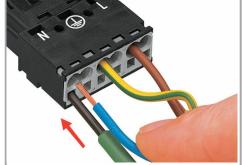
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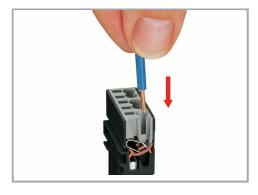


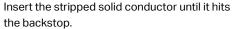


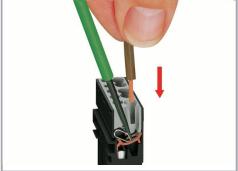


- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm

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.







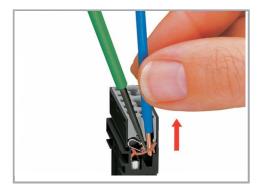
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

#### Conductor removal

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

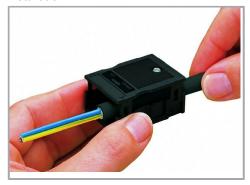
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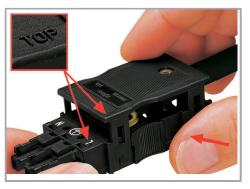


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### 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.

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Prepare strain relief housing by snapping together upper and bottom part.

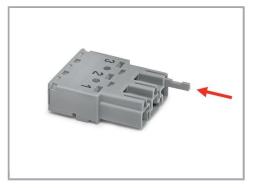


Tighten strain relief screw with screwdriver (2.5 mm blade width).

## Coding



Simply cut off the coding pin from the socket.



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

## Mismating protection

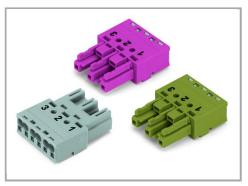
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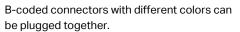
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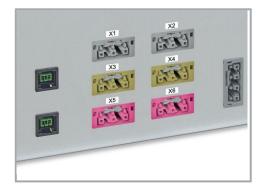
## Important note:

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

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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