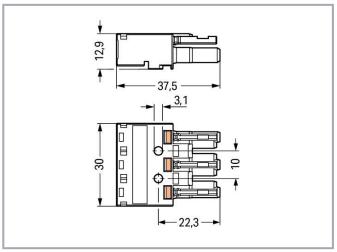
Socket; 3-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

www.wago.com/770-243/081-000







## Item description

#### Female connector/socket WINSTA® MIDI rated current 25 A

The WINSTA® MIDI female connector/socket rated current 25 A supports fast, reliable installation. Our pluggable installation connectors with spring pressure connection technology function without screw connections. They allow flexible, error-free installation in numerous applications. 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 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!)). Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are appropriate for process control, such as for lighting or within data networks. This pluggable installation connector is designed for a current load of up to 25 A. Thus, it can also be used for high power loads. The WINSTA® MIDI product line achieves flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure

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connection technology, it guarantees time-saving, error-free installation and offers customization for meeting various installation requirements.

# 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 consequently more efficient, more reliable, and error-free. Use of this pre-assembled system decreases time spent on assembly and errors during installation at the construction site. Choose quality and durability – with protection type IP20 from WAGO makes the installation of electrical components noticeably easier.

- pluggable installation connectors with protection against mismating
- simple circuits
- with B coding for use in process automation, such as lighting technology, among other examples
- ready for immediate use
- convenient installation and commissioning

# 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)	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.

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

#### General information

Note on contact resistance	approx. 1 m $\Omega$ of contact resistance
	approx. $0.25~\text{m}\Omega$ contact transition plug/socket

## Connection data

Connection points	6
Total number of potentials	3

#### 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	3
Conductor entry direction to mating direction	0°

# Physical data

Pin spacing	10 mm / 0.394 inches
Width	30 mm / 1.181 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	125
Potential marking	125
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)	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).

# Material data

Note (material data	3)
---------------------	----

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)		
Material group  Insulation material  Polyamide (PA66)  Flammability class per UL94  V0	Color	gray
Insulation material Polyamide (PA66) Flammability class per UL94 V0	Cover color	gray
Flammability class per UL94 V0	Material group	1
	Insulation material	Polyamide (PA66)
Clamping spring material Chrome-nickel spring steel (CrNi)	Flammability class per UL94	VO
Champing opining material	Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material Copper or copper alloy; surface-treated	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	0.301 MJ
Weight	9.6 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)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821517542
Customs tariff number	85366990990

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

## General approvals

Logo	Approval	Additional Approval Text	name
c <b>91</b> 2 us	cURus Underwriters Laboratories Inc.	UL 1977	E45171
c <b>Al</b> lus	<b>cURus</b> Underwriters Laboratories Inc.	UL 1059	E 45172

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Cortificato

www.wago.com/770-243/081-000



# Counterpart



Item no.770-253/081-000 Plug; 3-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-253/081-000

## Required accessories

Locking	

- 1	ackina	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

# 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

#### 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

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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

#### Strain relief

Strain relief housing



Item no.: 770-503

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

www.wago.com/770-503



Item no.: 770-503/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black

www.wago.com/770-503 /023-000



Item no.: 770-503/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black

www.wago.com/770-503

/021-000



Item no.: 770-503/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black

www.wago.com/770-503

/035-000



Item no.: 770-503/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; black

www.wago.com/770-503

/038-000



Item no.: 770-503/032-000

Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

www.wago.com/770-503

/032-000



Item no.: 770-513/038-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white

www.wago.com/770-513

/038-000



Item no.: 770-513

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

www.wago.com/770-513



Item no.: 770-513/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white

www.wago.com/770-513 /021-000

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Item no.: 770-513/032-000

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

www.wago.com/770-513 /032-000



Item no.: 770-513/035-000

Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 ... 11.5 mm; 48 mm; white

www.wago.com/770-513

/035-000

/023-000



Item no.: 770-513/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white

www.wago.com/770-513

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.: 770-383

Operating tool; 3-way; green

www.wago.com/770-383

Mounting

Mounting accessories



Item no.: 770-318

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-318



Item no.: 770-338

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; white

www.wago.com/770-338

Downloads CAD/CAE-Data

**CAE** data

WSCAD Universe 770-243/081-000 URL Download

**Environmental Product Compliance** 

WSCAD Universe 770-243/081-000

Compliance Search

Environmental Product Compliance 770-243/081-000

Socket; 3-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

URL Download

Download

URL

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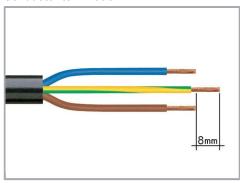
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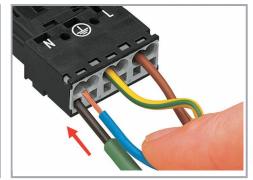
# W/AGO

#### **Installation Notes**

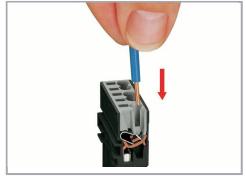
#### Conductor termination



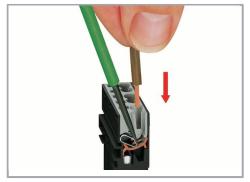
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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

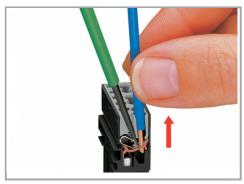
 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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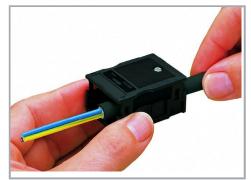
www.wago.com/770-243/081-000



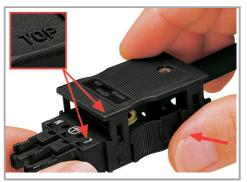


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### 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).

## Coding

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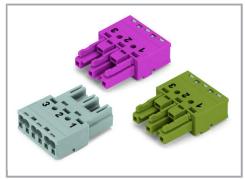






Insert coding pin into plug (break first) until it engages.

## Mismating protection

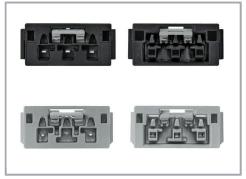


B-coded connectors with different colors can be plugged together.

# 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.

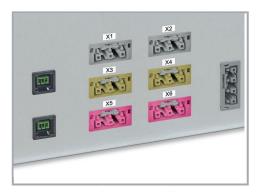


B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

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

www.wago.com/770-243/081-000





Easy circuit identification via different marking and colors

# **Product family**

WINSTA® MIDI Show all products from the family

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