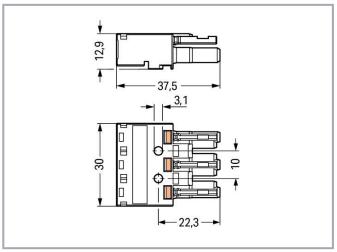
Socket; 3-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

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







#### Item description

### Female connector/socket WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI female connector/socket 3-pole. Our pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow flexible, error-free installation in numerous possible uses. The mechanical coding and color 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 suitable 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. Thus, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in can be found in a variety of projects you can use for quick, easy, secure, tailored electrical installation.

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

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Now you can also reduce installation expenses without compromising quality and safety: The WINSTA® MIDI pluggable installation connector with protection type IP20 reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismating
- pre-assembled versions
- with B coding for controllers, for example sun blinds and lighting fixtures
- flexible installation to save space
- fast, secure 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)	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

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#### General

Note on contact resistance	approx. 1 $\mbox{m}\Omega$ of contact resistance
	approx. 0.25 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 mm² / 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
Variable coding	Yes
Marking	125
Potential marking	125

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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	(materia	l datal

Information on material specifications can be found here

Color	gray
Cover color	gray
Material group	l
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.301 MJ
Weight	9.6 g

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

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### **Environmental requirements**

Processing temperature	-5 +40 °C	
Continuous operating temperature	-35 +85 ℃	
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
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	Certificate name
	cURus	UL 1977	E45171
c <b>91</b> 0	Underwriters Laboratories Inc.		

## 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 levers** 

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Locking sy	stem	
1	Item no.: 770-121 Locking lever; for flying leads; for manual operation; white	www.wago.com/770-121
1	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 a	ccessories	
Cover		
1	Item no.: 770-201 Lockout cap; 12-pole, separable; for sockets; Plastic; black	www.wago.com/770-201
Lintelling	Item no.: 770-221 Lockout cap; 12-pole, separable; for sockets; Plastic; white	www.wago.com/770-221
Marking acc	essories	
Marker		
i i	Item no.: 770-450/000-002 Marker card; Plastic; yellow	www.wago.com/770-450 /000-002
The state of the s	Item no.: 770-450/000-001 Marker card; Plastic; green	www.wago.com/770-450 /000-001
F	Item no.: 770-450/000-005 Marker card; Plastic; red	www.wago.com/770-450 /000-005
400	Item no.: 770-450 Marker card; Plastic; white	www.wago.com/770-450

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Marker card; Plastic; white

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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.: 770-318

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

#### 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

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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



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



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

/023-000

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

Downloads CAD/CAE-Data

**CAE** data

WSCAD Universe 770-243/081-000

URL

Download

WSCAD Universe 770-243/081-000

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**Environmental Product Compliance** 

Compliance Search

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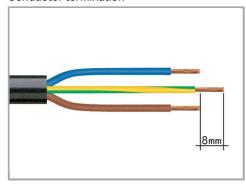


Environmental Product Compliance 770-243/081-000 Socket; 3-pole; Cod. B; 4,00 mm²; gray URL

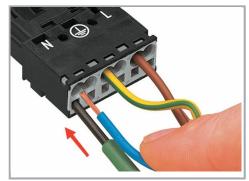
Download

### **Installation Notes**

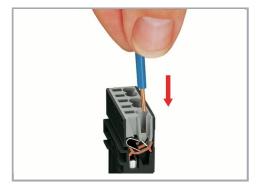
#### Conductor termination



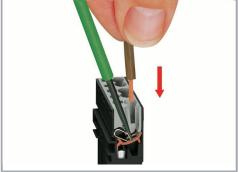
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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

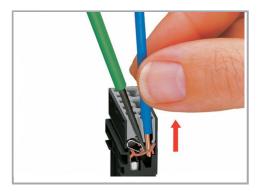
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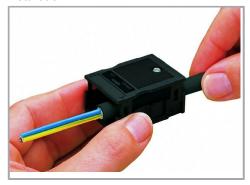
www.wago.com/770-243/081-000



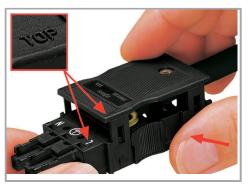


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### 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.

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

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

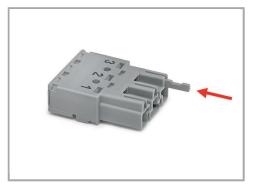


Tighten strain relief screw with screwdriver (2.5 mm blade width).

#### Coding



Simply cut off the coding pin from the socket.



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

#### Mismating protection

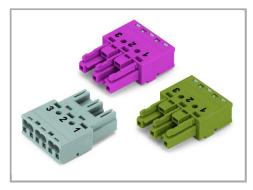
 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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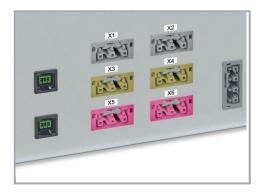
B-coded connectors with different colors can be plugged together.

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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