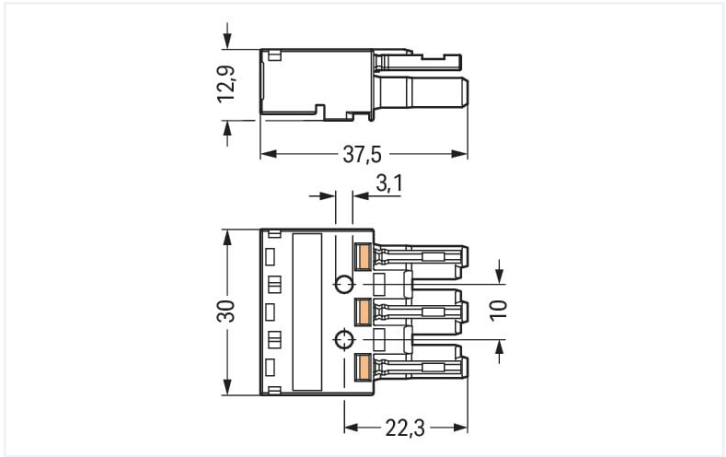




Color: ■ gray

Similar to illustration



Dimensions in mm

Female connector/socket WINSTA® MIDI with protection against mismatching

The WINSTA® MIDI female connector/socket 3-pole provides the foundation for assembly of solid and fine-stranded conductors. Our pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, 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 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 electrified contact elements. B coding enables the WINSTA® MIDI pluggable installation connectors to be used for application control in the domains of automation, robotics, and mechanical engineering. This pluggable installation connector can be used for a load of up to 25 A. Thus, it can also be used for high power loads. The WINSTA® MIDI product line achieves total flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers flexibility and customization for meeting all 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 strict requirements of building installation. It makes electrical installation pluggable, and therefore faster, even more reliable, and error-free. Use of this pre-assembled system reduces time spent on assembly and installation errors at the construction site. Choose durability and quality – with protection type IP20 from WAGO makes the electrical installation of electrical components noticeably easier.

- protection against mismatching eliminates errors
- for automation controllers
- with B coding for controllers such as lighting fixtures and sun blinds
- ready to install and use immediately
- convenient installation and commissioning

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 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage	250 V	-	-	-
Rated surge voltage	4 kV	-	-	-
Rated current	25 A	-	-	-
Approvals per		UL 1977		
Rated voltage		600 V		
Rated current		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	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	B
Variable coding	Yes
Marking	1 2 5
Potential marking	1 2 5
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)	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	0.301 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

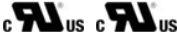
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821517542
Customs tariff number	85366990990



Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 770-243/081-000	

CAD/CAE-Data

CAE data	
WSCAD Universe 770-243/081-000	

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



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



1.2 Required Accessories			
1.2.1 Locking system			
1.2.1.1 Locking system			
			
Item No.: 770-101 Locking lever; for flying leads; for manual operation; black	Item No.: 770-121 Locking lever; for flying leads; for manual operation; white	Item No.: 770-111 Locking lever; for flying leads; for tool operation; black	Item No.: 770-131 Locking lever; for flying leads; for tool operation; white
1.3 Optional Accessories			
1.3.1 Cover			
1.3.1.1 Cover			
			
Item No.: 770-201 Lockout cap; 12-pole, separable; for sockets; Plastic; black	Item No.: 770-221 Lockout cap; 12-pole, separable; for sockets; Plastic; white		
1.3.2 Installation			
1.3.2.1 Mounting accessories			
			
Item No.: 770-318 Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black	Item No.: 770-338 Snap-in frame; 3-pole; 1.0 ... 3.0 mm; white		
1.3.3 Marking			
1.3.3.1 Marker			
			
Item No.: 770-450/000-006 Marker card; Plastic; blue	Item No.: 770-450/000-001 Marker card; Plastic; green	Item No.: 770-450/000-012 Marker card; Plastic; orange	Item No.: 770-450/000-005 Marker card; Plastic; red
			
Item No.: 770-450 Marker card; Plastic; white	Item No.: 770-450/000-002 Marker card; Plastic; yellow		
1.3.4 Strain relief			
1.3.4.1 Strain relief housing			
			
Item No.: 770-503/021-000 Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black	Item No.: 770-513/021-000 Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white	Item No.: 770-503/023-000 Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black	Item No.: 770-513/023-000 Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white
			
Item No.: 770-503 Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black	Item No.: 770-513 Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white	Item No.: 770-513/032-000 Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white	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

1.3.4.1 Strain relief housing



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



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



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



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

1.3.5 Tool

1.3.5.1 Operating tool



Item No.: 770-383
Operating tool; 3-way; green



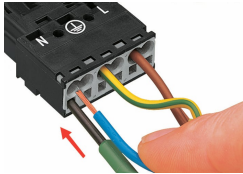
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

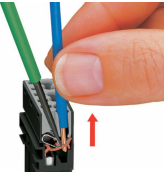


Insert the stripped solid conductor until it hits the backstop.



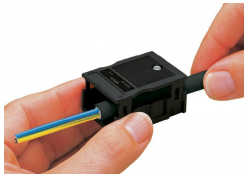
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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).

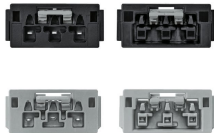
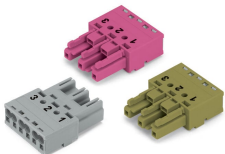
Coding



Simply cut off the coding pin from the socket.

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.

Easy circuit identification via different marking and colors