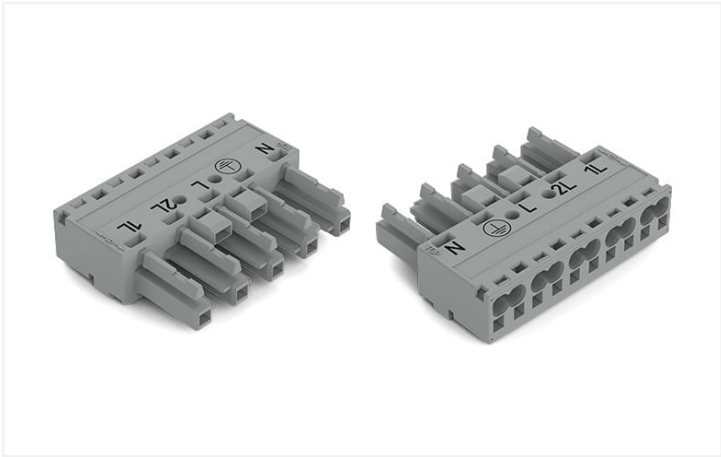
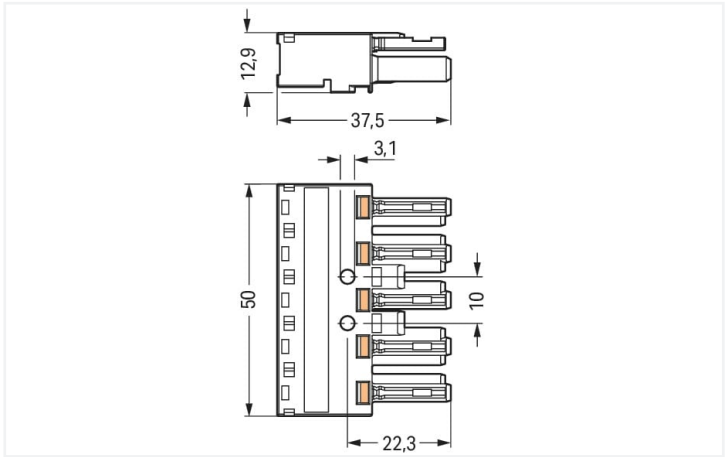




Color: ■ gray



Dimensions in mm

Female connector/socket WINSTA® MIDI B coding

The WINSTA® MIDI female connector/socket B coding is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow fast, efficient, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector offers touch-proof protection with live components 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 in data networks. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Due to the integrated test slot, connections can be checked even when they are plugged in. That saves time and reduces installation labor and expense.

WINSTA® MIDI solutions for your electrical installation – protected against mismatching and maintenance-free

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose durability and quality – with protection against mismatching from WAGO makes the installation of electrical components substantially easier.

- effective protection against mismatching
- pre-assembled versions
- with B coding for use in automation of processes, such as lighting technology, among other examples
- exact dimensions
- quick replacement of defective units during ongoing operation

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	400 V	-	-	
Rated surge voltage	6 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
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Connection data

Connection points	10	Connection 1	
Total number of potentials	5	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	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	B
Variable coding	Yes
Marking	N L 2L 1L
Potential marking	N L 2L 1L
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	0.407 MJ
Weight	16.1 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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821486268
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 770-245/064-000	

Documentation

Bid Text			
770-245/064-000	19.02.2019	xml 2.97 KB	
770-245/064-000	08.06.2015	doc 24.00 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 770-245/064-000	

CAE data	
WSCAD Universe 770-245/064-000	
ZUKEN Portal 770-245/064-000	



1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



[Item No.: 770-855/011-000/064-000](#)
Plug for PCBs; angled; 5-pole; Cod. B; gray



[Item No.: 770-855/064-000](#)
Plug for PCBs; straight; 5-pole; Cod. B; gray



[Item No.: 770-255/064-000](#)
Plug; 5-pole; Cod. B; 4,00 mm²; gray



[Item No.: 770-755/064-000](#)
Snap-in plug; 5-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

1.2.2 Strain relief

1.2.2.1 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



[Item No.: 770-515/021-000](#)
Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white



[Item No.: 770-505/023-000](#)
Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black



[Item No.: 770-515/023-000](#)
Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white



[Item No.: 770-505](#)
Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black



[Item No.: 770-515](#)
Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; 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



[Item No.: 897-2005](#)
Protective cap; Type4; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 770-321
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black



Item No.: 770-341
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white



Item No.: 770-320
Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black



Item No.: 770-340
Snap-in frame; 5-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 Tool

1.3.4.1 Operating tool



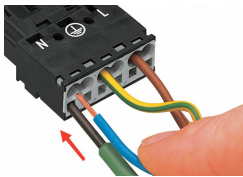
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

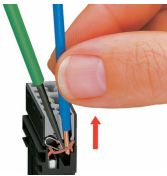


Insert the stripped solid conductor until it hits the backstop.



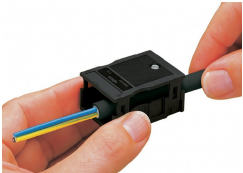
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

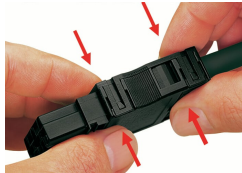
Installation



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.

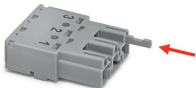


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding

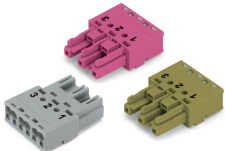


Simply cut off the coding pin from the socket.



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

Mismatching 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