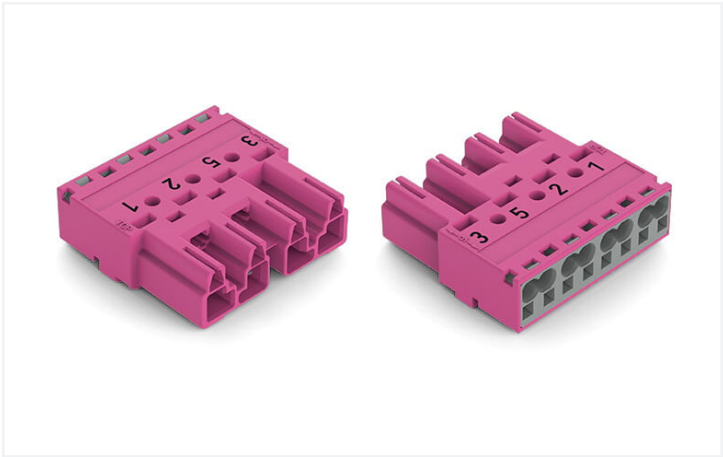
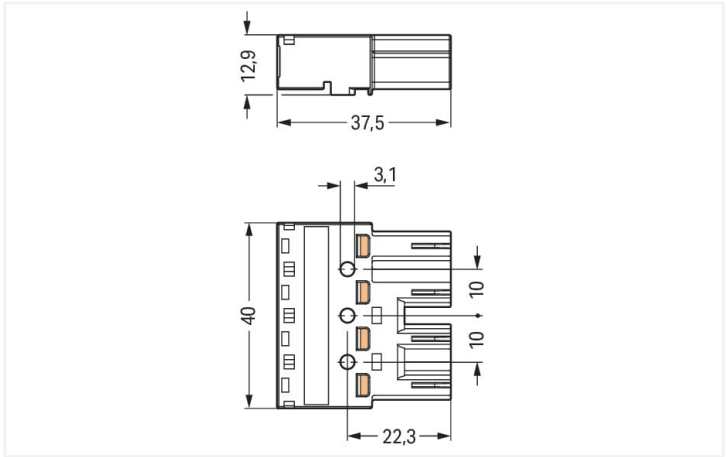




Color: ■ pink



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection against mismating

The WINSTA® MIDI male connector/plug with protection against mismating allows assembly of solid and fine-stranded conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to many different requirements in no time flat. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. 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 electrified elements. Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are suitable for applications related to process control, for example, for lighting or in data networks. This pluggable installation connector can be 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 exemplary electrification. Due to the included test slot, it is possible to check connections even when they are plugged in. This saves time, labor, and money.

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 thus more efficient, more reliable, and error-free. Using this pre-assembled system reduces assembly times and errors during installation at the construction site. Choose quality and durability – the WINSTA® MIDI pluggable installation connector with protection against mismating from WAGO makes the electrical installation of electrical components substantially easier.

- effective protection against mismating
- for automation controllers
- for automation controllers
- exact dimensions
- 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	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	8
Total number of potentials	4

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	4
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	40 mm / 1.575 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	3 5 2 1
Potential marking	3 5 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 data)	Information on material specifications can be found here
Color	pink
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	0.261 MJ
Weight	13.4 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

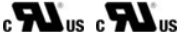
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821555858
Customs tariff number	85366990990



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
770-294/081-000

↓

Documentation				
Bid Text				
770-294/081-000	19.02.2019	xml 2.96 KB	↓	
770-294/081-000	08.06.2015	doc 24.50 KB	↓	

CAD/CAE-Data			
CAD data		CAE data	
2D/3D Models 770-294/081-000	↓	WSCAD Universe 770-294/081-000	↓
		ZUKEN Portal 770-294/081-000	↓



1 Compatible Products					
1.1 Required Accessories					
1.1.1 Locking system					
1.1.1.1 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		
1.1.2 Strain relief					
1.1.2.1 Strain relief housing					
					
Item No.: 770-504/023-000 Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black	Item No.: 770-514/023-000 Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white	Item No.: 770-504 Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black	Item No.: 770-514 Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white		
1.2 Optional Accessories					
1.2.1 Cover					
1.2.1.1 Cover					
					
Item No.: 770-360 Lockout cap; for plugs; 5-pole; separable; yellow	Item No.: 897-2005 Protective cap; Type4; for sockets and plugs; PVC; red				
1.2.2 Installation					
1.2.2.1 Mounting accessories					
					
Item No.: 770-319 Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black	Item No.: 770-339 Snap-in frame; 4-pole; 1.0 ... 3.0 mm; white				
1.2.3 Marking					
1.2.3.1 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				

1.2.4 Tool

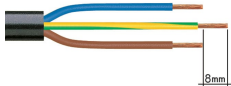
1.2.4.1 Operating tool



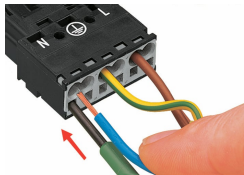
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

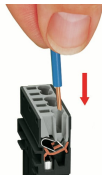
Conductor termination



- 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.

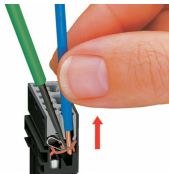


Insert the stripped solid conductor until it hits the backstop.



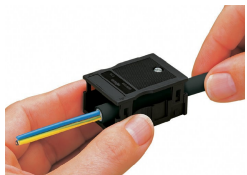
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

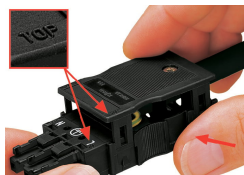


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

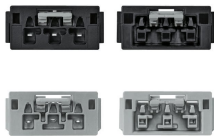
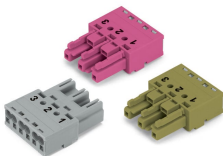


Simply cut off the coding pin from the socket.



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

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