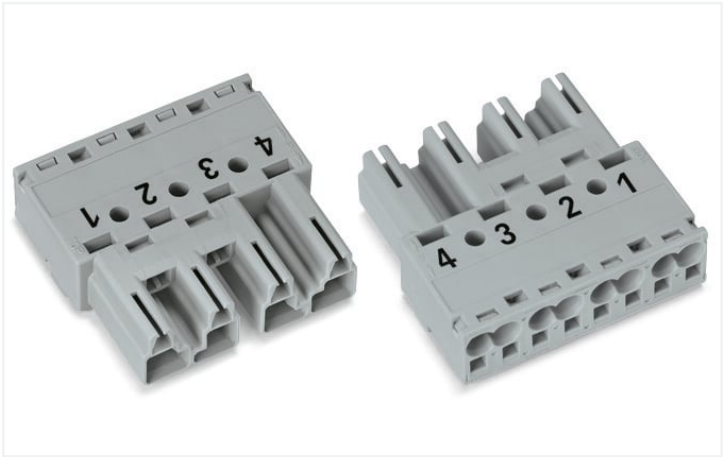
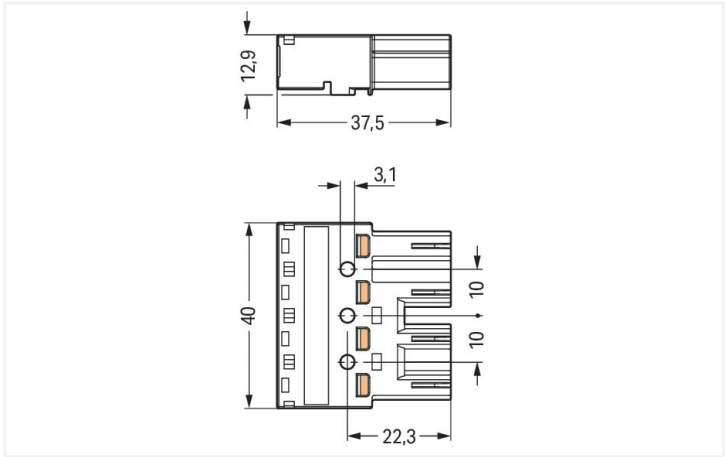




Color: ■ gray



Dimensions in mm

Male connector/plug WINSTA® MIDI B coding

The WINSTA® MIDI male connector/plug with protection type IP20 provides the foundation for installation of solid and fine-stranded conductors. WAGO pluggable installation connectors can be used when specifications repeat or are planned on a defined grid, for example for installing grid lighting or flush-mount lighting. 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 offers protection against contact 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!)). Pluggable installation connectors with B coding from the WINSTA® MIDI line are available in gray, light green, or pink, allowing you to distinguish different circuits, for example for pumps, lighting, or sun blinds. Your own pole marking is possible, too. This pluggable installation connector is designed for a current load of up to 25 A. Therefore, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in a broad range of individual products you can use for quick, easy, flexible, and secure electrical installation.

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 consequently faster, even more reliable, and error-free. Use of this pre-assembled system decreases assembly times and errors during installation at the construction site. Now you can also cut installation costs without compromising quality and safety: with marking reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismating
- simple circuits
- with B coding for use in process automation, such as lighting technology
- ready to install and use immediately
- 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
----------------------------	--

Connection data

Connection points	8	Connection 1	
Total number of potentials	4	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	4 3 2 1
Potential marking	4 3 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 <i>WINSTA</i> ® 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	0.357 MJ
Weight	13 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

Product Group	20 (Winsta)
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	4044918253970
Customs tariff number	85366990990



Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	IEC 61984	NL-32104	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 61984	2173495.01	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
cURus Underwriters Laboratories Inc.	UL 1977	E45171			
cURus Underwriters Laboratories Inc.	UL 1059	E 45172			

Approvals for marine applications

  					
Approval	Standard	Certificate Name			
ABS American Bureau of Ship- ping	-	19-HG1868589-PDA			
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001Z6			
LR Lloyds Register	IEC 61984	LR22429487TA			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 770-254	

Documentation

Bid Text			
770-254	19.02.2019	xml 2.96 KB	
770-254	08.06.2015	doc 24.00 KB	



CAD/CAE-Data	
CAD data 2D/3D Models 770-254 ↓	CAE data EPLAN Data Portal 770-254 ↓ WSCAD Universe 770-254 ↓ ZUKEN Portal 770-254 ↓

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9994/105-103
pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; gray

Item No.: 771-9994/005-103
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; gray

1.1.2 Distribution box

Item No.: 899-631/305-000
Distribution box; Crossover switching; 1 input; 5 outputs; Cod. A, B, S; MIDI; black

1.1.3 Distribution connector

Item No.: 770-1734
3-way distribution connector; 4-pole; Cod. B; 1 input; 3 outputs; gray

Item No.: 770-1681
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray

Item No.: 770-1781
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray

Item No.: 770-1631
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

Item No.: 770-1731
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

1.1.4 Female connector/socket

Item No.: 770-744
Snap-in socket; 4-pole; Cod. B; 4,00 mm²; gray

Item No.: 770-844/011-000
Socket for PCBs; angled; 4-pole; Cod. B; gray

Item No.: 770-844
Socket for PCBs; straight; 4-pole; Cod. B; gray

Item No.: 770-244
Socket; 4-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.: 770-504/023-000](#)
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

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 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

1.3.2 Installation

1.3.2.1 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

1.3.3 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

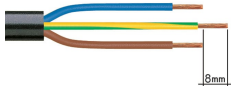
1.3.4.1 Operating tool



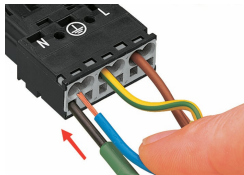
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

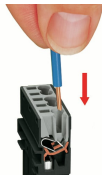
Conductor termination



- 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.

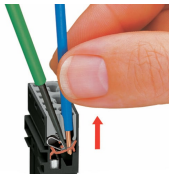


Insert the stripped solid conductor until it hits the backstop.



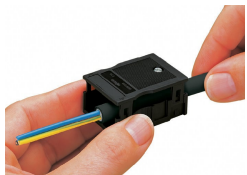
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

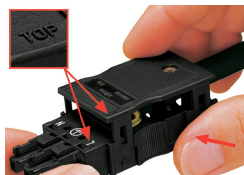


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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

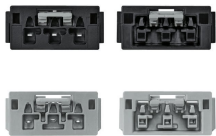
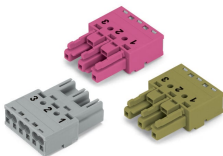


Simply cut off the coding pin from the socket.



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

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