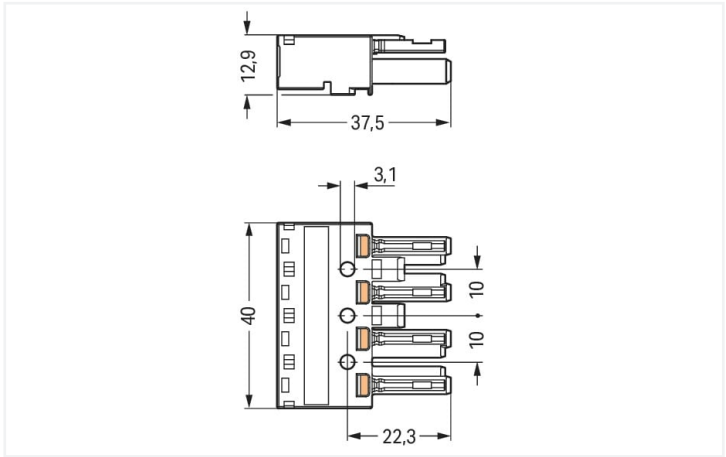




Color: ■ gray



Dimensions in mm

Female connector/socket WINSTA® MIDI B coding

The WINSTA® MIDI female connector/socket rated current 25 A is the pluggable solution for your application in control cabinets, for lighting connections or on PCBs. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in seconds. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical 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!)). Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are appropriate for process control, such as for lighting or within data networks. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. Our WINSTA® MIDI product line offers flexibility for the installation of applications. Through its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees time-saving, error-free 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!

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It allows error-free installation of cables and components, quickly and reliably. Choose durability and quality – with protection against mismating from WAGO makes the electrical installation of electrical components noticeably easier.

- effective protection against mismating
- pre-assembled versions
- for automation controllers
- custom-engineered solutions
- rapid, structured electrical installation

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		Approvals per		UL 1977	
Overvoltage category		III	III	II	Rated voltage	600 V	
Pollution degree		3	2	2	Rated current	23 A	
Nominal voltage	400 V	-	-				
Rated surge voltage	6 kV	-	-				
Rated current	25 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	1 2 3 4
Potential marking	1 2 3 4
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 <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	0.32 MJ
Weight	12.6 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

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	4044918252447
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 770-244	

Documentation

Bid Text			
770-244	19.02.2019	xml 2.96 KB	
770-244	08.06.2015	doc 24.00 KB	



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 770-244 	EPLAN Data Portal 770-244 
	WSCAD Universe 770-244 
	ZUKEN Portal 770-244 

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9994/205-103
pre-assembled connecting cable; Eca; Plug/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

1.1.3 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 Male connector/plug



Item No.: 770-854/011-000
Plug for PCBs; angled; 4-pole; Cod. B; gray

Item No.: 770-854
Plug for PCBs; straight; 4-pole; Cod. B; gray

Item No.: 770-254
Plug; 4-pole; Cod. B; 4,00 mm²; gray

Item No.: 770-754
Snap-in plug; 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.: 770-201](#)
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.: 770-319](#)
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; whi-
te

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



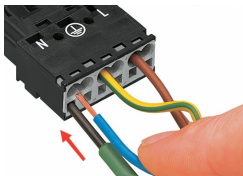
[Item No.: 210-719](#)
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft

Installation Notes

Conductor termination



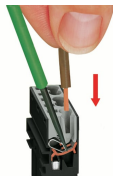
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

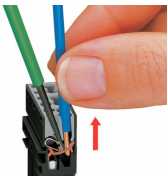


Insert the stripped solid conductor until it hits the backstop.



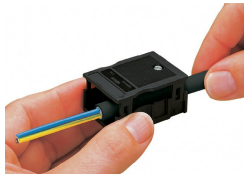
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

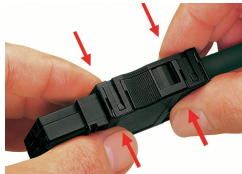
Installation



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.

