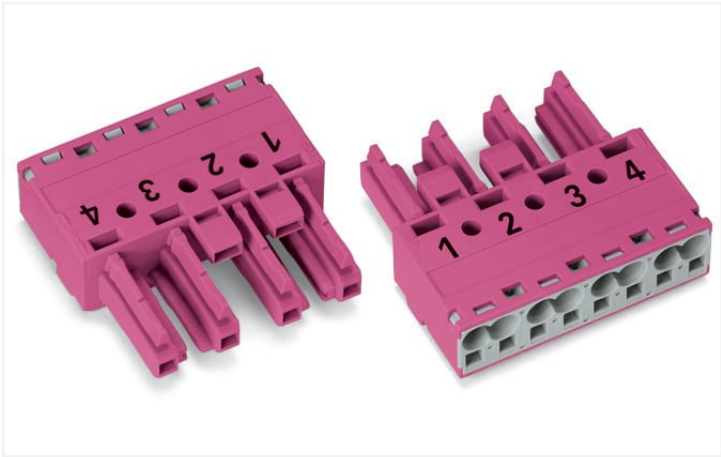
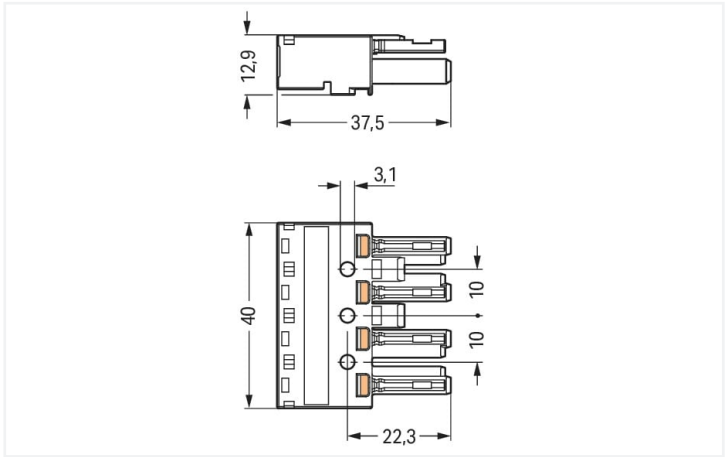




Color: ■ pink



Dimensions in mm

Female connector/socket WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI female connector/socket rated current 25 A. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in next to no time. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. 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 energised elements. B coding enables the WINSTA® MIDI pluggable installation connectors to be used for application control in automation, mechanical engineering and robotics. The rated current and voltage are important criteria for selecting a pluggable installation connector: They tell us about the product's domains of use. This product has a current rating of 25 A – as a result it is suitable for high power loads. Our WINSTA® MIDI product line achieves maximum flexibility for the installation of applications. Through its Push-in CAGE CLAMP® spring pressure connection technology, it achieves error-free, time-saving installation and offers customization and flexibility for meeting various 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 ideally tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismating from WAGO.

- effective protection against mismating
- simple circuits
- with B coding for use in process automation, such as lighting technology, for instance
- flexible installation to save space
- 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		
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	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	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	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	0.221 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	4050821446224
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 770-284	

Documentation

Bid Text			
770-284	19.02.2019	xml 2.96 KB	
770-284	08.06.2015	doc 24.00 KB	



CAD/CAE-Data	
CAD data 2D/3D Models 770-284 ↓	CAE data WSCAD Universe 770-284 ↓
	ZUKEN Portal 770-284 ↓

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9994/205-107
pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; pink

Item No.: 771-9994/005-107
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; pink

1.1.2 Distribution connector



Item No.: 770-1736
3-way distribution connector; 4-pole; Cod. B; 1 input; 3 outputs; pink

Item No.: 770-1683
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; pink

Item No.: 770-1783
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; pink

Item No.: 770-1633
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; pink



Item No.: 770-1733
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; pink

1.1.3 Male connector/plug



Item No.: 770-894/011-000
Plug for PCBs; angled; 4-pole; Cod. B; pink

Item No.: 770-894
Plug for PCBs; straight; 4-pole; Cod. B; pink

Item No.: 770-294
Plug; 4-pole; Cod. B; 4,00 mm²; pink

Item No.: 770-794
Snap-in plug; 4-pole; Cod. B; 4,00 mm²; pink

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



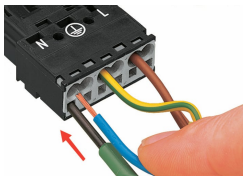
[Item No.: 210-719](#)
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft

Installation Notes

Conductor termination



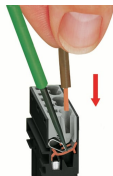
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

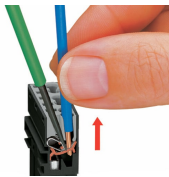


Insert the stripped solid conductor until it hits the backstop.



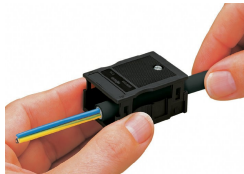
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

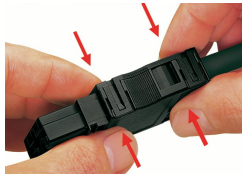
Installation



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.

