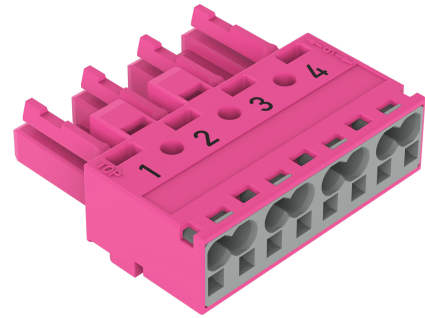
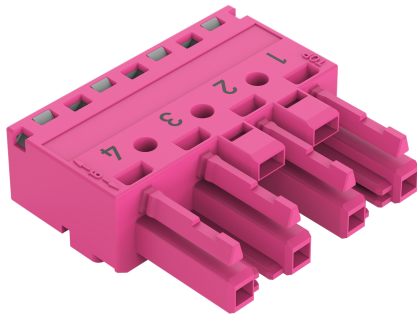


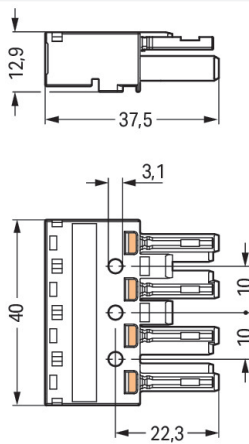
Data Sheet | Item Number: 770-284

Socket; 4-pole; Cod. B; pink

<https://www.wago.com/770-284>



Color: ■ pink



Dimensions in mm

Female connector/socket *WINSTA*® MIDI rated current 25 A

The *WINSTA*® MIDI female connector/socket with protection against mismatching allows installation of solid and fine-stranded conductors. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of requirements in next to no time. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector is protected against ingress by solid objects 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 pink, light green, or gray, allowing you to distinguish different circuits, for example for light, pumps or, sun blinds. Your own pole marking is possible, too. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects 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!

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It offers error-free installation of cables and components, quickly and reliably. Now you can also lower installation costs without compromising safety and quality: with protection against mismatching eliminates the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- for automation controllers
- for automation controllers
- exact dimensions



- fast, secure installation

Notes	
General safety information	NOTICE: Observe installation and safety instructions! • Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden! • Nicht unter Spannung/Last installieren! • Nur für bestimmungsgemäßen Gebrauch einsetzen! • Nationale Vorschriften/Normen/Richtlinien beachten! • Technische Daten der Produkte beachten! • Auf die richtige Polbelegung achten! • Keine beschädigten/verschmutzten Komponenten verwenden! • Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten! • Leiter bis zum Anschlag einführen! • Nur mit Verriegelungsklinke und Zugentlastung verwenden! • Originalzubehör verwenden! To be sold only with installation instructions!
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 impulse withstand voltage	6 kV	-	-
Rated current	25 A	-	-

Ratings per IEC/EN – Notes	
Rated current (note)	25 A for 3-pole load 20 A for 4-pole load

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	
Clamping units	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

Use	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 (main housing)	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	0.213 MJ
Weight	12.7 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)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821446224
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 10.0	EC002560
ECCN	NO US CLASSIFICATION

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	-	24-0095977-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; pink



[Item No.: 770-794](#)
Snap-in plug; 4-pole; Cod. B; 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; 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 Strain relief

1.3.4.1 Strain relief housing



Item No.: 770-504/020-000
Strain relief housing; 4-pole; for 1 cable;
11.5 ... 16.5 mm; 71 mm; black

1.3.5 Tool

1.3.5.1 Operating tool



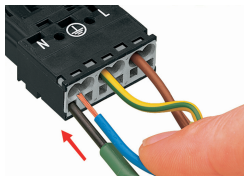
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft

Installation Notes

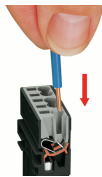
Conductor termination



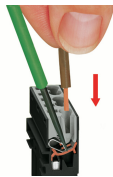
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

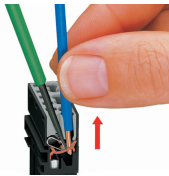


Insert the stripped solid conductor until it hits the backstop.



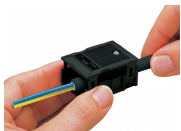
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

Installation



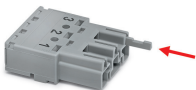
We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.

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).

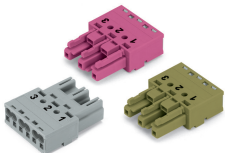
Coding



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