





Dimensions in mm

Male connector/plug WINSTA® MIDI rated current 25 A

The WINSTA® MIDI male connector/plug B coding provides the foundation for assembly of fine-stranded and solid conductors. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow resource-efficient, error-free installation in a large number of possible uses. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismating. 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!)). Solutions like the WINSTA® MIDI pluggable installation connectors with B coding are suitable for applications involving process control, such as for lighting or in data networks. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the integrated 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!

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

- pluggable installation connectors with protection against mismating
- · pre-assembled versions
- for automation controllers
- ready for immediate use
- · 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	l-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	-	-		

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Note on contact resistance approx. 1 m Ω of contact resistance

approx. 1 m Ω of contact resistance approx. 0.25 m Ω contact transition plug/

ocket



8	Connection 1	
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 mm ² / 16 AWG
	Strip length	9 mm / 0.35 inches
	Pole number	4
	Conductor entry direction to mating direction	0°
	8 4	Connection technology Actuation type Nominal cross-section Solid conductor Solid conductor; push-in termination Stranded conductor Fine-stranded conductor Fine-stranded conductor; with insulated ferrule Fine-stranded conductor; with uninsulated ferrule Fine-stranded conductor; with ferrule; push-in termination Strip length Pole number Conductor entry direction to mating di-

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	В
Variable coding	Yes
Marking	4321
Potential marking	4321
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!)

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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)	co brof="https://www.uu.go.go.gom/u/matarial_apagificationa"\ Information.ap matarial
	Information on material specifications can be found here
Color	pink
Cover color	gray
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
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 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	4050821446415
Customs tariff number	85366990990

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Environmental Product Compliance

RoHS Compliance Status Compliant, No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	IEC 61984	NL-32104
CCA DEKRA Certification B.V.	EN 61984	2173495.01
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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 770-294



Documentation

Bid Text			
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770-294	08.06.2015	doc 24.50 KB	\perp

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CAD/CAE-Data

CAD data

2D/3D Models 770-294



CAE data

WSCAD Universe 770-294



ZUKEN Portal 770-294



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly





Item No.: 771-9994/105-107

pre-assembled connecting cable; Eca; Socket/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.: 770-1683 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



3-way distribution connector; 4-pole; Cod.

Item No.: 770-1733

Item No.: 770-1736

B; 1 input; 3 outputs; pink

T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; pink

1.1.3 Female connector/socket



Snap-in socket; 4-pole; Cod. B; 4,00 mm²;



pink

Item No.: 770-884/011-000



Socket for PCBs; angled; 4-pole; Cod. B;

Item No.: 770-884

Socket for PCBs; straight; 4-pole; Cod. B;

Ti.



Item No.: 770-284

Socket; 4-pole; Cod. B; 4,00 mm²; pink

1.2 Required Accessories

Item No.: 770-784

1.2.1 Locking system

1.2.1.1 Locking system







Item No.: 770-111

Locking lever; for flying leads; for tool operation; black



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.: 770-131

Locking lever; for flying leads; for tool operation; white

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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; whi-

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.

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Subject to changes. Please also observe the further product documentation!