





Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

The WINSTA® MIDI male connector/plug B coding supports rapid, correct installation. The pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow resource-efficient, error-free installation in numerous possible uses. For greater protection 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!)). 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 light, pumps or, sun blinds. Usage-specific pole marking is possible, too. The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – therefore it is also suitable for powerful 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 installation.

WINSTA® MIDI solutions for your electrical installation – protected against mismating and maintenance-free

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. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with WINSTA® MIDI pluggable installation connectors with marking from WAGO.

- · protection against mismating eliminates errors
- for automation controllers
- for automation controllers
- · ready to install and use immediately
- · fast, secure 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	-	-		

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https://www.wago.com/770-275



General information

Note on contact resistance

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

ection data				
ection points	10		Connection 1	
Total number of potentials 5		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	5	

Physical data	
Pin spacing	10 mm / 0.394 inches
Width	50 mm / 1.969 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

rection

Conductor entry direction to mating di-

0°

Mechanical data	
Application	Control technology
Coding	В
Variable coding	Yes
Marking	54321
Potential marking	54321
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)	Information on material
	specifications can be found here
Color	light green
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	0.364 MJ
Weight	16.6 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	4050821446217
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 770-275



Documentation

Bid Text			
770-275	19.02.2019	xml 2.96 KB	<u>↓</u>
770-275	08.06.2015	doc 24.00 KB	<u>↓</u>

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CAD/CAE-Data

CAD data

2D/3D Models 770-275



CAE data

WSCAD Universe 770-275



ZUKEN Portal 770-275



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly





Item No.: 771-9995/105-105

pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. B; 1 m; 1,00 mm²; light green

Item No.: 771-9995/005-105

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; 1 m; 1,00 mm²; light green

1.1.2 Distribution connector







Item No.: 770-1745

3-way distribution connector; 5-pole; Cod. B; 1 input; 3 outputs; light green

Item No.: 770-1642

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; light green

Item No.: 770-1742

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; light green

1.1.3 Female connector/socket









Item No.: 770-765

Snap-in socket; 5-pole; Cod. B; 4,00 mm²; light green

Item No.: 770-865/011-000

Socket for PCBs; angled; 5-pole; Cod. B; light green

Item No.: 770-865

Socket for PCBs; straight; 5-pole; Cod. B; light green

Item No.: 770-265

Socket; 5-pole; Cod. B; 4,00 mm²; light green

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

https://www.wago.com/770-275



1.2.2 Strain relief

1.2.2.1 Strain relief housing



Item No.: 770-505/021-000

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black



Item No.: 770-515/021-000

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white



Item No.: 770-505/023-000

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black



Item No.: 770-515/023-000

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white



Item No.: 770-505

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

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Item No.: 770-515

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding



Item No.: 770-401

Coding pin; for plugs; Plastic; gray

1.3.2 Cover

1.3.2.1 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

1.3.3 Installation

1.3.3.1 Mounting accessories



Item No.: 770-321

Snap-in frame; 5-pole; 0.5 ... 2.0 mm;

Item No.: 770-341 Snap-in frame; 5-pole; 0.5 ... 2.0 mm; whi-

Item No.: 770-320 Snap-in frame; 5-pole; 1.0 ... 3.0 mm; Item No.: 770-340 Snap-in frame; 5-pole; 1.0 ... 3.0 mm; whi-

1.3.4 Marking

1.3.4.1 Marker



Item No.: 770-450/000-001 Marker card; Plastic; green

Item No.: 770-450/000-012 Marker card; Plastic; orange

Item No.: 770-450/000-006 Marker card; Plastic; blue



Item No.: 770-450

Marker card; Plastic; white

Item No.: 770-450/000-002

Marker card; Plastic; yellow

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Marker card; Plastic; red



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.

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W/AGO

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

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

Current addresses can be found at:: www.wago.com

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