

Dimensions in mm

Male connector/plug WINSTA® MIDI with protection against mismating

For power and signal transmission: The *WINSTA*® MIDI male connector/plug B coding. WAGO pluggable installation connectors are used when criteria repeat or are planned on a specified grid, for example for installing grid lighting or flush-mount lighting. The mechanical coding and color 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. 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 pumps, lighting, 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 especially suitable for high power loads. The *WINSTA*® MIDI product line allows total flexibility for the electrical installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees error-free, time-saving installation and offers flexibility for meeting various installation requirements.

Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

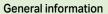
WINSTA® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Choose durability and quality – the WINSTA® MIDI pluggable installation connector with protection against mismating from WAGO makes the electrical installation of electrical components substantially easier.

- pluggable installation connectors with protection against mismating
- for automation controllers
- for automation controllers
- · ready to install and use immediately
- · convenient installation and commissioning

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	C/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	-	-		

https://www.wago.com/770-295



Note on contact resistance

approx. 1 $m\Omega$ of contact resistance approx. 0.25 $m\Omega$ contact transition plug/ socket



10	Connection 1	
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 mm ² / 16 AWG
	Strip length	9 mm / 0.35 inches
	Pole number	5
	Conductor entry direction to mating direction	0°
		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	50 mm / 1.969 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	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!)

Data Sheet | Item Number: 770-295 https://www.wago.com/770-295



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 by of = "lotte or // www.ww.goo.com/w/motorial analytication of by loter motorial and or mo
	Information on material specifications can be found here
Color	pink
Cover color	gray
Material group	
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	0.364 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	4050821446736
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 770-295



Documentation

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DIU	Text

770-295 doc 08.06.2015 24.50 KB

https://www.wago.com/770-295



CAD/CAE-Data

CAD data

2D/3D Models 770-295



CAE data

WSCAD Universe 770-295



ZUKEN Portal 770-295



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly





Item No.: 771-9995/105-107

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

Item No.: 771-9995/005-107

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

1.1.2 Distribution connector







Item No.: 770-1746

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

Item No.: 770-1643

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

Item No.: 770-1743

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

1.1.3 Female connector/socket











Item No.: 770-785

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

Item No.: 770-885/011-000

Socket for PCBs; angled; 5-pole; Cod. B; nink

Item No.: 770-885

Socket for PCBs; straight; 5-pole; Cod. B; pink

Item No.: 770-285

Socket; 5-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

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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

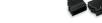


Item No.: 770-505/023-000

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.: 770-450/000-002 Marker card; Plastic; yellow

Item No.: 770-450/000-005 Marker card; Plastic; red

Item No.: 770-450 Marker card; Plastic; white

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1.3.5 Tool

1.3.5.1 Operating tool



Item No.: 210-719

Operating tool; Blade: $2.5 \times 0.4 \, \text{mm}$; 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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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!

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