

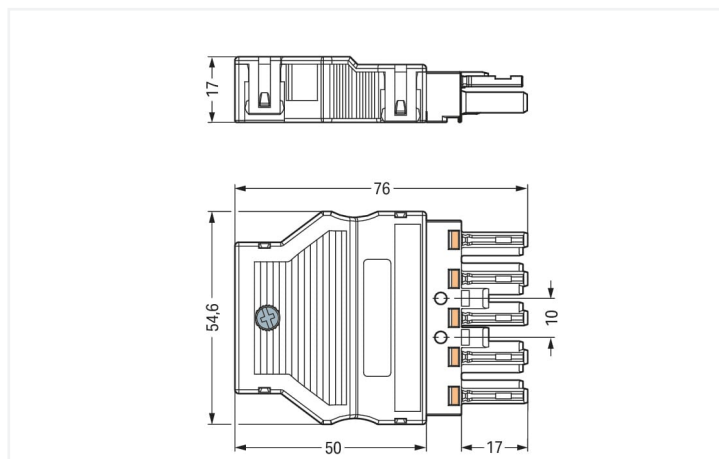
Data Sheet | Item Number: 770-305

Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black

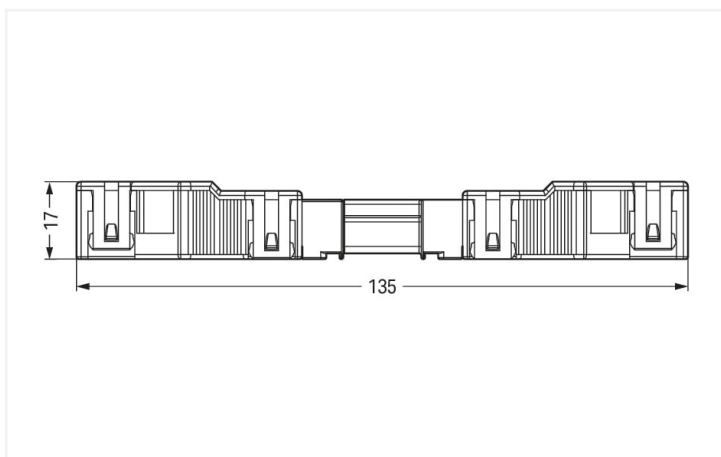
<https://www.wago.com/770-305>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

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. Our pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow fast, efficient, error-free installation in a large number of applications. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. 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!)). That results in the fact that users' fingers will never come into contact with electrified elements. General mains applications for almost any domain of use can be implemented with WINSTA® MIDI pluggable installation connectors with A coding. 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. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Thanks to the included test slot, connections can be checked even when they are plugged in. This saves time, labor, and money. The strip length is 55 mm.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, more reliable, and error-free. Using this pre-assembled system reduces assembly times and installation errors at the construction site. Now you can also reduce installation expenses without compromising safety and quality: The WINSTA® MIDI pluggable installation connector with protection against mismatching reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- for automation controllers
- suitable for any application
- custom-engineered solutions
- fast, secure installation

This item includes:



Item No.: 770-505

1

Item No.: 770-405

1

Strain relief housing; 5-pole; for 2 cables;
9.0 ... 13.0 mm; 55 mm; blackSocket; 5-pole; Cod. A; 4,00 mm²; black

Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1977
Overtoltage 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	-	-		

General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
----------------------------	--

Connection data

Connection points	5	Connection 1	
Total number of potentials	5	Connection technology	Push-in CAGE CLAMP®
		Actuation type	Operating tool Push-in
		Nominal cross-section	4 mm ² / 12 AWG
		Solid conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
		Solid conductor; push-in termination	1.5 ... 4 mm ² / 16 ... 12 AWG
		Stranded conductor	0.5 ... 2.5 mm ² / 20 ... 14 AWG
		Fine-stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 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
		Connectable sheathed cable diameter	9 ... 13 mm
		Conductor entry direction to mating direction	0°
		Strip length (outer insulation)	55 mm

Physical data

Pin spacing	10 mm / 0.394 inches
Width	54.6 mm / 2.15 inches
Height	17 mm / 0.669 inches
Depth	76 mm / 2.992 inches

Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N L1 L2 L3
Potential marking	N L1 L2 L3
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 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).
Strain relief	Strain relief housing

Material data

Note (material data)	Information on material specifications can be found here
Color	black
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	0.64 MJ
Weight	29.2 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)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918252478
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228
CCA DEKRA Certification B.V.	IEC 61535	NL -84761
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61984	40002889

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity 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 770-305



Documentation

Bid Text

770-305	19.02.2019	xml 3.04 KB	
770-305	08.06.2015	doc 24.00 KB	

CAD/CAE-Data

CAD data

2D/3D Models 770-305



CAE data

EPLAN Data Portal 770-305



WSCAD Universe 770-305



ZUKEN Portal 770-305



1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



[Item No.: 771-9995/206-101](#)

pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black

[Item No.: 771-9995/006-101](#)

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Distribution box



[Item No.: 899-631/455-000](#)

Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black



[Item No.: 899-631/187-000](#)

Distribution box; Three-phase current (400 V); 1 input; 5 outputs; Cod. A; MIDI; black



[Item No.: 899-631/346-000](#)

Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black



[Item No.: 899-631/105-000](#)

Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black



[Item No.: 899-631/100-000](#)

Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black



[Item No.: 899-631/302-000](#)

Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black

1.1.3 Distribution connector



Item No.: 770-609

3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; black



Item No.: 770-659

3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; white



Item No.: 770-621

T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 770-622

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



Item No.: 770-640

Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; black

1.1.4 Male connector/plug



Item No.: 770-815/011-000

Plug for PCBs; angled; 5-pole; Cod. A; black



Item No.: 770-815

Plug for PCBs; straight; 5-pole; Cod. A; black



Item No.: 770-215

Plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-415

Plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-115

Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-315

Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-715

Snap-in plug; 5-pole; Cod. A; 4,00 mm²; black



Item No.: 770-715/007-000

Snap-in plug; with direct ground contact; 5-pole; Cod. A; 4,00 mm²; black

1.2 Required Accessories

1.2.1 Cover

1.2.1.1 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

1.2.2 Locking system

1.2.2.1 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

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 897-2005

Protective cap; Type4; for sockets and plugs; PVC; red

1.3.2 Marking

1.3.2.1 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

1.3.3 Tool

1.3.3.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

1.3.3.2 Wiring aid



Item No.: 770-100

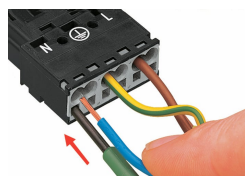
Wiring aid; 2- to 5-pole; Plastic; orange

Installation Notes

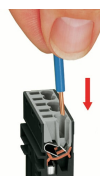
Conductor termination



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.

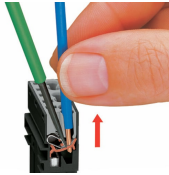


Insert the stripped solid conductor until it hits the backstop.



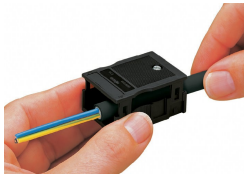
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

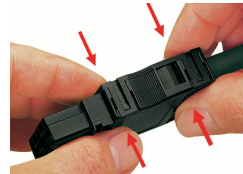
Installation



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).