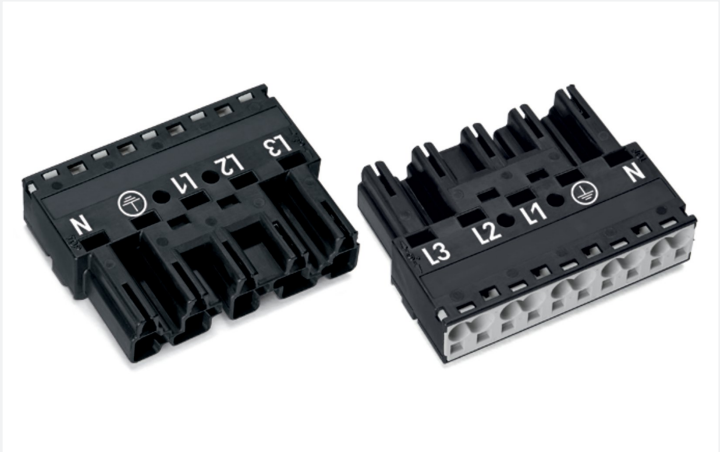
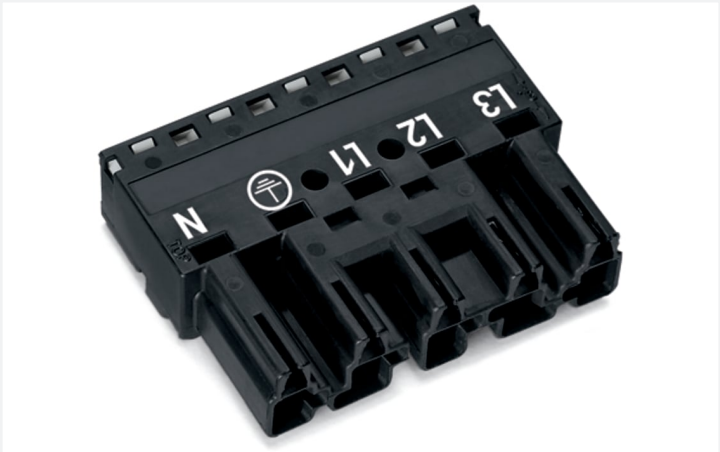
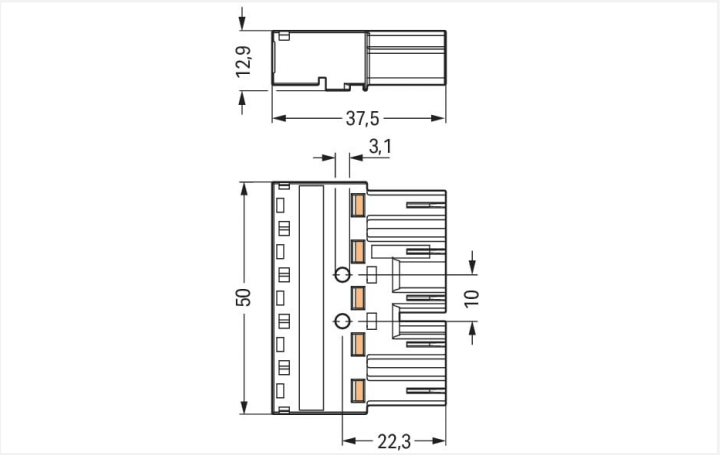


Color: ■ black





Dimensions in mm

Male connector/plug *WINSTA*® MIDI with protection type IP20

For power and signal transmission: The *WINSTA*® MIDI male connector/plug A coding. WAGO pluggable installation connectors can be used when criteria repeat or are distributed on a defined pattern, for example for installing grid lighting or flush-mount lighting. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including 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!)). Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. 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 – so it is suitable for high power loads. Our *WINSTA*® MIDI product line achieves flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers flexibility for meeting all 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 ensures error-free installation of cables and components, quickly and reliably. Now you can also reduce installation expenses without compromising quality and safety: with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismating
- simple circuits
- with A coding for a great number of applications
- exact dimensions
- convenient installation and commissioning

 Continued on next page

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	400 V	-	-
Rated surge voltage	6 kV	-	-
Rated current	25 A	-	-

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	10
Total number of potentials	5
PE function	Preceding PE contact

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	5
Conductor entry direction to mating direction	0 °

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

Use	General mains applications
Coding	A
Variable coding	Yes
Marking	L3 L2 L1 N
Potential marking	L3 L2 L1 N
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	black
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	0.438 MJ
Weight	16.3 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 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918254557
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 Zertifizierungsinstitut	EN 61984	40002889

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	19-HG1868589-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-215

Documentation

Bid Text

770-215	19.02.2019	xml 2.93 KB	
770-215	08.06.2015	doc 23.50 KB	

CAD/CAE-Data

CAD data

2D/3D Models 770-215

CAE data

EPLAN Data Portal
770-215

WSCAD Universe
770-215

ZUKEN Portal 770-215

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 771-9995/106-101
pre-assembled connecting cable; Eca; Socket/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.: 899-681/147-000
Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; white

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.: 899-631/100-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; 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.: 770-611
Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 2 outputs; with cable connection on the input side; 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 Female connector/socket

Item No.: 770-705
Snap-in socket; 5-pole; Cod. A; 4,00 mm²; black

Item No.: 770-705/009-000
Snap-in socket; with protruding mating face; 5-pole; Cod. A; 4,00 mm²; black

Item No.: 770-805/011-000
Socket for PCBs; angled; 5-pole; Cod. A; black

Item No.: 770-805
Socket for PCBs; straight; 5-pole; Cod. A; black

Item No.: 770-205
Socket; 5-pole; Cod. A; 4,00 mm²; black

Item No.: 770-405
Socket; 5-pole; Cod. A; 4,00 mm²; black

Item No.: 770-105
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black

Item No.: 770-305
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black

1.1.5 Tap-off module

Item No.: 772-262
Tap-off module; for flat cable; 5 x 2.5 mm² + 2 x 1.5 mm²; 5-pole; Cod. A; with cable connection on the output side; black

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.: 770-505/021-000
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

Item No.: 770-515
Strain relief housing; 5-pole; for 2 cables; 9.0 … 13.0 mm; 55 mm; white

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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; black

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

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

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

1.3.4 Marking

1.3.4.1 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

1.3.5 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

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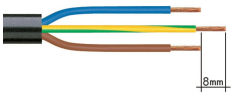
1.3.5.2 Wiring aid

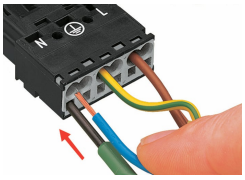
Item No.: 770-100
Wiring aid; 2- to 5-pole; Plastic; orange

Installation Notes

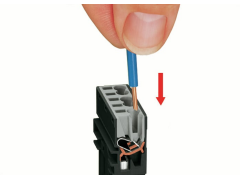
Conductor termination



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



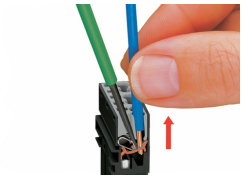
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.



Insert the stripped solid conductor until it hits the backstop.

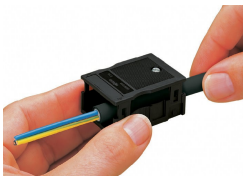
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

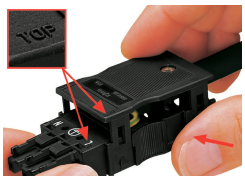


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

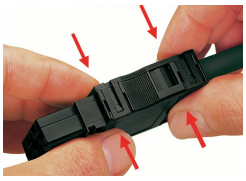
Installation



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).