

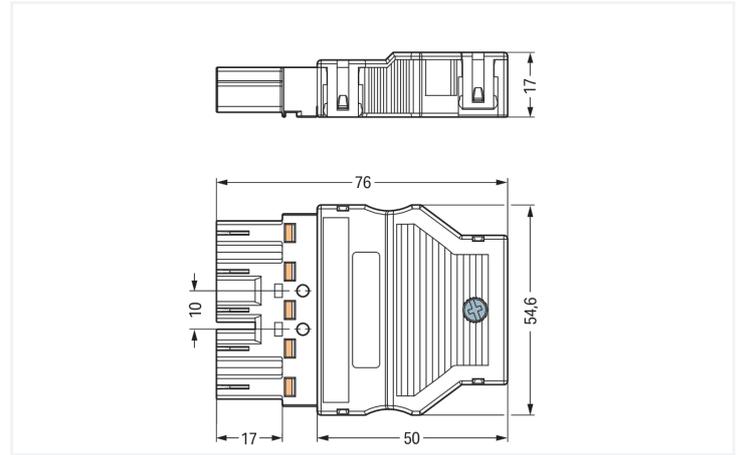
Data Sheet | Item Number: 770-115

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

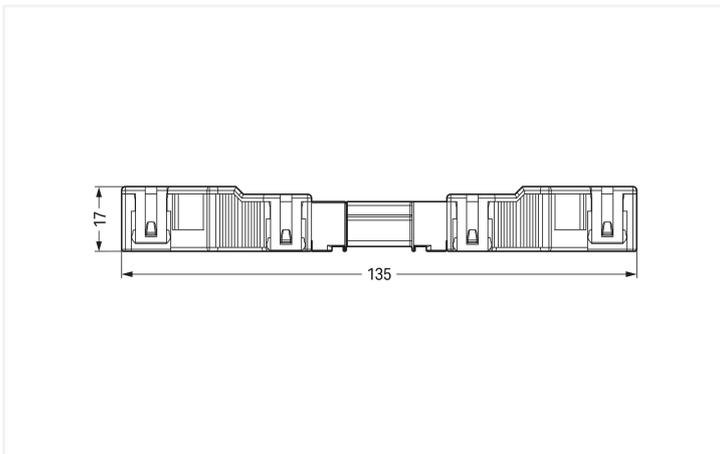
<https://www.wago.com/770-115>



Color: ■ black



Dimensions in mm



Dimensions in mm
Overall length when mated

Male connector/plug WINSTA® MIDI with strain relief

The WINSTA® MIDI male connector/plug A coding supports fast, reliable installation. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow flexible, error-free installation in numerous 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!)). This means that users' fingers will never come into contact with live contact elements. Thanks to the color coding and mechanical A coding of WINSTA® MIDI pluggable installation connectors, you can clearly distinguish different circuits. This pluggable installation connector can be used for a current load of up to 25 A. As a result, it can also be used for high power loads. Our WINSTA® MIDI product line achieves flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers flexibility and customization for meeting various installation requirements. 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 thus faster, more reliable, and error-free. Using this pre-assembled system reduces assembly times and errors during installation at the construction site. Now you can also cut installation costs without compromising quality and safety: with strain relief hosting eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismatching eliminates errors

- for automation controllers
- with A coding for use in a large number of general mains applications
- exact dimensions
- fast, secure installation

This item includes:



Item No.: [770-505](#)

1

Item No.: [770-215](#)

1

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

Plug; 5-pole; Cod. A; 4,00 mm²; black

Notes

General safety information

NOTICE: Observe installation and safety instructions!

- Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden!
- Nicht unter Spannung/Last installieren!
- Nur für bestimmungsgemäßen Gebrauch einsetzen!
- Nationale Vorschriften/Normen/Richtlinien beachten!
- Technische Daten der Produkte beachten!
- Auf die richtige Polbelegung achten!
- Keine beschädigten/verschmutzten Komponenten verwenden!
- Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten!
- Leiter bis zum Anschlag einführen!
- Nur mit Verriegelungsklinke und Zugentlastung verwenden!
- Originalzubehör verwenden!

To be sold only with installation instructions!

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	400 V	-	-
Rated impulse withstand 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
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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 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 un-insulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 16 AWG

Connection 1

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

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!)
Screw tightening torque	0.5 Nm

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).
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 (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	0.687 MJ

Material data

Connector color	black
Strain relief color	black
Weight	29.8 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)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918254441
Customs tariff number	8536690990

Product Classification

UNSPSC	39121402
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 10.0	EC002560
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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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
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61535	40029808

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	-	24-0095977-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 770-115

Documentation

Bid Text			
770-115	19.02.2019	xml 3.01 KB	
770-115	08.06.2015	doc 23.50 KB	
ausschreiben.de 770-115			

CAD/CAE-Data

CAD data
2D/3D Models 770-115

CAE data
EPLAN Data Portal 770-115
WSCAD Universe 770-115
ZUKEN Portal 770-115

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); 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.: 770-612
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

1.3 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 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

1.3.4.2 Wiring aid



Item No.: 770-100

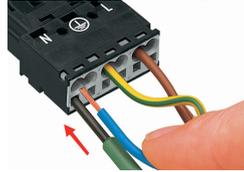
Wiring aid; 2- to 5-pole; Plastic; orange

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.

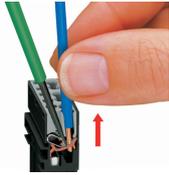


Insert the stripped solid conductor until it hits the backstop.



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).