

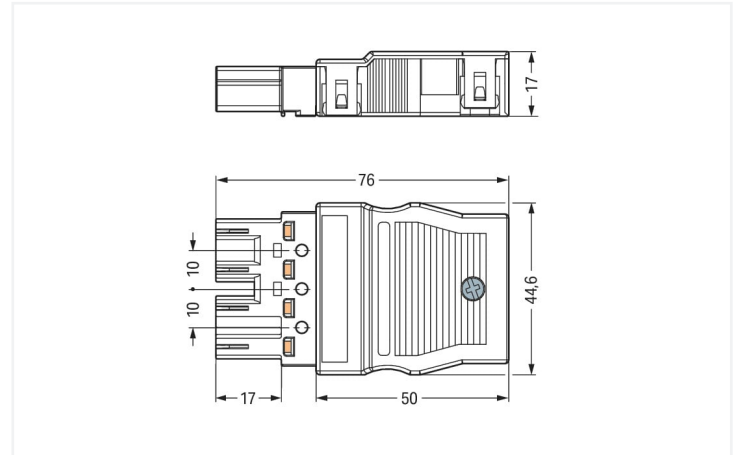
Data Sheet | Item Number: 770-114

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

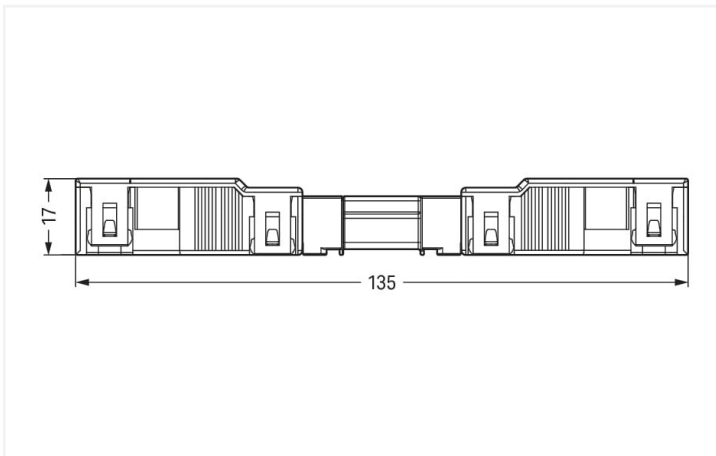
<https://www.wago.com/770-114>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

Male connector/plug WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI male connector/plug A coding. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to various requirements in seconds. The coding options reduce installation errors, allowing fast, secure wiring of all components. 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 electrified elements. General mains applications for almost any domain of use can be implemented with WINSTA® MIDI pluggable installation connectors with A coding. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is especially suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Due to the integrated test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and expense. The strip length is 55 mm.

Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose durability and quality – with protection against mismating from WAGO makes the electrical installation of electrical components noticeably easier.

- protection against mismating eliminates errors
- for automation controllers
- with A coding for use in a large number of general mains applications
- custom-engineered solutions
- rapid, structured electrical installation



This item includes:



Item No.: 770-504	1	Item No.: 770-214	1
Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black		Plug; 4-pole; Cod. A; 4,00 mm²; black	

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	-	-			

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

Connection points	8	Connection 1	
Total number of potentials	4	Connection technology	Push-in CAGE CLAMP®
PE function	Preceding PE contact	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	4
		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	44.6 mm / 1.756 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	1/L' 2/L N	
Potential marking	1/L' 2/L 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!)	

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	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	0.612 MJ	
Connector color	black	
Strain relief color	black	
Weight	24.9 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	4044918254410	
Customs tariff number	85366990990	

Environmental Product Compliance		
RoHS Compliance Status	Compliant, No Exemption	

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
    			Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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			

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 770-114


Documentation

Bid Text			
770-114	08.06.2015	doc 23.50 KB	
770-114	19.02.2019	xml 3.01 KB	
ausschreiben.de 770-114			
			

CAD/CAE-Data

CAD data
2D/3D Models 770-114


CAE data
EPLAN Data Portal 770-114

WSCAD Universe 770-114

ZUKEN Portal 770-114


1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-9994/106-101
pre-assembled connecting cable; Eca;
Socket/open-ended; 4-pole; Cod. A;
H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²;
black

Item No.: 771-9994/006-101
pre-assembled interconnecting cable;
Eca; Socket/plug; 4-pole; Cod. A; H05VV-
F 4G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Distribution box



Item No.: 899-631/180-000
Distribution box; Motion/presence detec-
tor; 1 input; 5 outputs; Cod. A; MIDI; black

Item No.: 899-631/453-000
Distribution box; supply cable entry; 4
outputs; Cod. A; MIDI; black



1.1.3 Distribution connector



Item No.: 770-944
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



Item No.: 770-945
h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



Item No.: 770-626
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



Item No.: 770-627
T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

1.1.4 Female connector/socket



Item No.: 770-704
Snap-in socket; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-704/009-000
Snap-in socket; with protruding mating face; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-804/011-000
Socket for PCBs; angled; 4-pole; Cod. A; black



Item No.: 770-804
Socket for PCBs; straight; 4-pole; Cod. A; black



Item No.: 770-204
Socket; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-104
Socket; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; 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 Cover

1.3.1.1 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

1.3.2 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

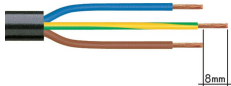
1.3.3.1 Operating tool



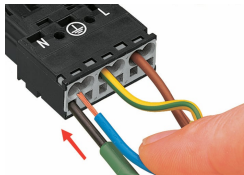
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

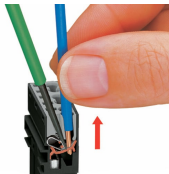


Insert the stripped solid conductor until it hits the backstop.



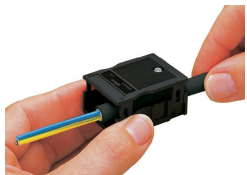
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

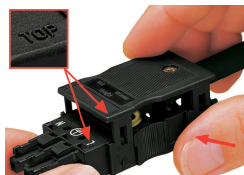


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

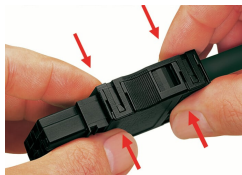
Installation



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).