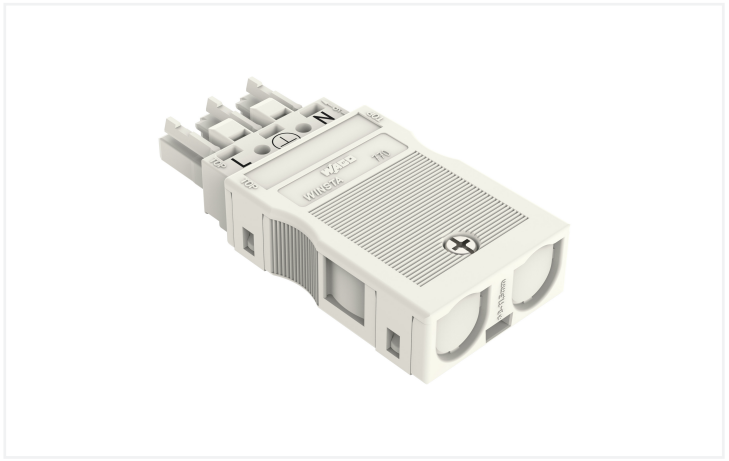
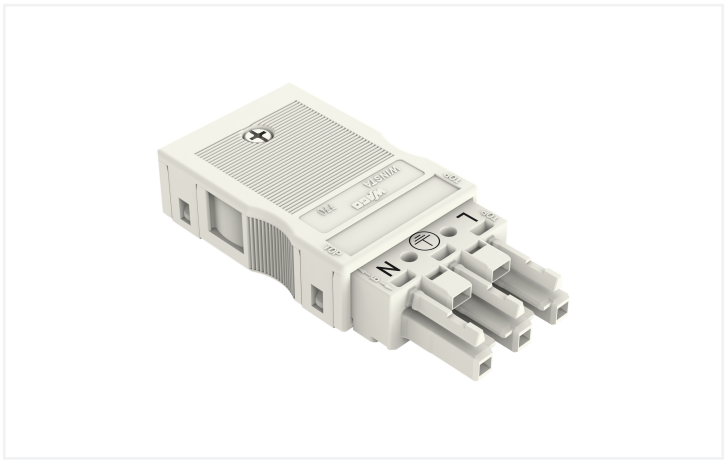
Data Sheet | Item Number: 770-123

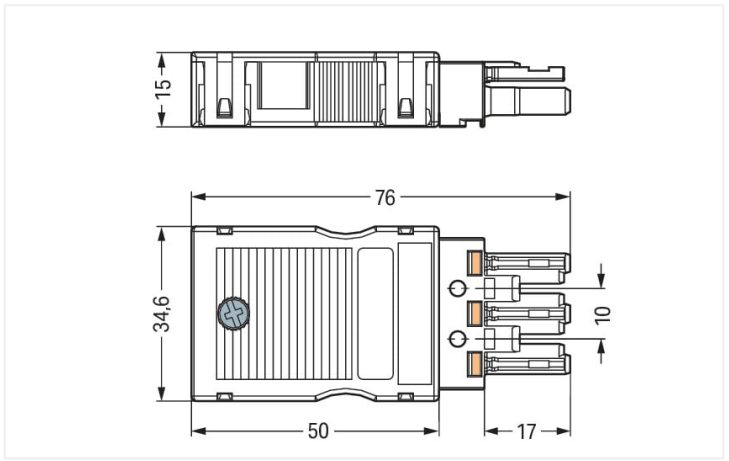
Socket; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; white

https://www.wago.com/770-123

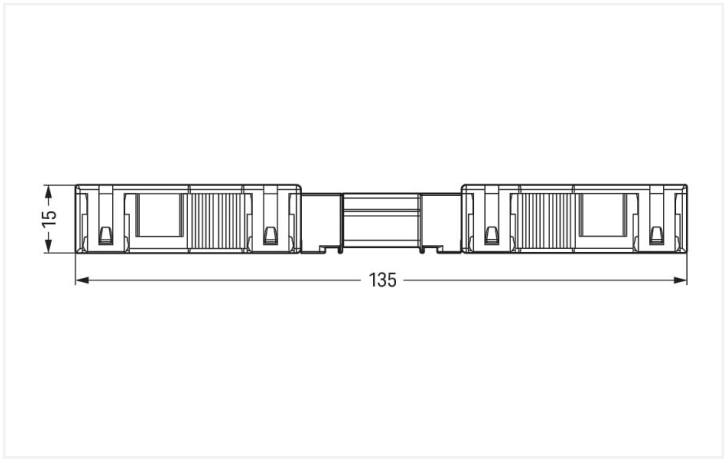


Color: white





Dimensions in mm



Dimensions in mm

Overall length when mated

Female connector/socket *WINSTA*® MIDI 3-pole

Use effective pluggable connections instead of laborious screw connections: With the *WINSTA*® MIDI female connector/socket A coding. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in next to no time. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. 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 electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. The *WINSTA*® MIDI product line allows maximum flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers flexibility for meeting an enormous variety of installation requirements. A range up to 55 mm can be used for the strip length.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It offers error-free installation of cables and components, quickly and reliably. Choose durability and quality – with marking from WAGO makes the installation of electrical components noticeably easier.

- protection against mismating eliminates errors
- for automation controllers
- with A coding for a large number of uses
- flexible installation to save space
- fast, secure installation

This item includes:

Item No.: 770-513 — 1

Strain relief housing; 3-pole; for 2 cables; 8.0 … 11.5 mm; 55 mm; white

Item No.: 770-223 — 1

Socket; 3-pole; Cod. A; 4,00 mm²; white

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated surge voltage	4 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

Connection points	6
Total number of potentials	3

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

Continued on next page

Connection 1

Fine-stranded conductor; with ferrule; push-in termination	1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	3
Connectable sheathed cable diameter	8 … 11.5 mm
Conductor entry direction to mating direction	0 °
Strip length (outer insulation)	55 mm

Physical data

Pin spacing	10 mm / 0.394 inches
Width	34.6 mm / 1.362 inches
Height	15 mm / 0.591 inches
Depth	76 mm / 2.992 inches

Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	L N
Potential marking	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	IP2XC; 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

Continued on next page

Material data

Note (material data)	Information on material specifications can be found here
Color	white
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	0.424 MJ
Connector color	white
Strain relief color	white
Weight	19.7 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	4044918252171
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

General approvals

VDE VDE Prüf- und Zertifizierungsinstitut	EN 61535	40029808

 Continued on next page

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 770-123

Documentation

Bid Text

770-123	19.02.2019	xml 3.01 KB
770-123	08.06.2015	doc 23.50 KB
ausschreiben.de 770-123		

CAD/CAE-Data

CAD data

2D/3D Models 770-123

CAE data

EPLAN Data Portal 770-123

WSCAD Universe 770-123

ZUKEN Portal 770-123

Continued on next page

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 771-9993/206-102
pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; white

Item No.: 771-9993/006-102
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; white

1.1.2 Distribution box

Item No.: 899-631/395-000
Distribution box; Single-phase current (230 V); 1 input; 6 outputs; Cod. A; MIDI; black

Item No.: 899-631/327-000
Distribution box; Single-phase current (230 V); 2 inputs; 6 outputs; Cod. A; MIDI; black

1.1.3 Distribution connector

Item No.: 770-657
3-way distribution connector; 3-pole; Cod. A; 1 input; 3 outputs; white

Item No.: 770-658
5-way distribution connector; 3-pole; Cod. A; 1 input; 5 outputs; white

Item No.: 770-688
Distribution connector for switches; Single-pole and throttle two-way circuit; 3-pole; Cod. A/S; 1 input; 5 outputs; white

Item No.: 770-687
Distribution connector for switches; Single-pole switch and series circuit; 3-pole; Cod. A/S; 1 input; 5 outputs; white

Item No.: 770-683
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on both sides; 2 locking levers; white

Item No.: 770-685
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; white

Item No.: 770-684
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; white

Item No.: 770-686
h-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; white

Item No.: 770-6223
Linect® T-connector; 3-pole; Cod. A; 1 input; 2 outputs; white

Item No.: 770-656
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white

Item No.: 770-665
T-distribution connector; 3-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white

1.1.4 Male connector/plug

Item No.: 770-833/011-000
Plug for PCBs; angled; 3-pole; Cod. A; white

Item No.: 770-833
Plug for PCBs; straight; 3-pole; Cod. A; white

Item No.: 770-233
Plug; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-233/002-000
Plug; with direct ground contact; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-133
Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-233/035-050
Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-733
Snap-in plug; 3-pole; Cod. A; 4,00 mm²; white

Item No.: 770-733/007-000
Snap-in plug; with direct ground contact; 3-pole; Cod. A; 4,00 mm²; white

Continued on next page

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.: 770-201
Lockout cap; 12-pole, separable; for sockets; Plastic; black

Item No.: 770-221
Lockout cap; 12-pole, separable; for sockets; Plastic; white

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

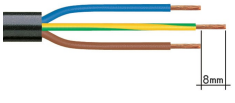
1.3.3.1 Operating tool

Item No.: 770-383
Operating tool; 3-way; green

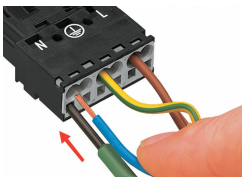
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

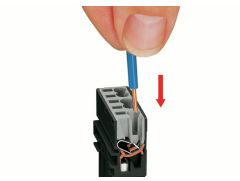
Conductor termination



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.

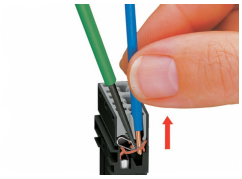


Insert the stripped solid conductor until it hits the backstop.

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.

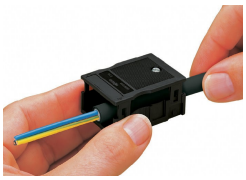
Continued on next page

Conductor removal

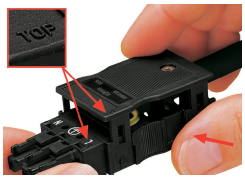


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

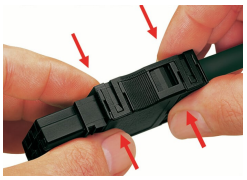
Installation



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.

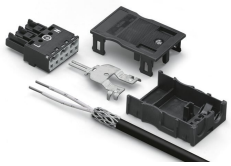
Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding

Simply cut off the coding pin from the socket.

Insert coding pin into plug (break first) until it engages.

Shield termination



Connector with shield termination

Apply the shield to the sheathed cable.

Strip length, outer insulation = 55 mm

Shield length = 10 mm

Push the shield connecting plate into the connector until fully inserted.

First insert the wired connector into a strain relief housing, then snap cover and tighten screw.