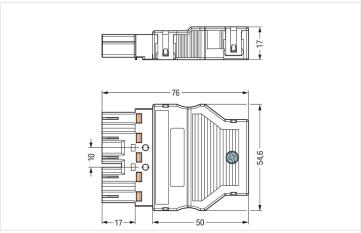
Plug; with strain relief housing; 5-pole; 4,00 mm<sup>2</sup>; black

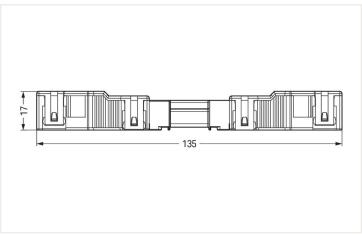
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Dimensions in mm



Dimensions in mm Overall length when mated

# Male connector/plug WINSTA® MIDI rated current 25 A

The WINSTA® MIDI male connector/plug rated current 25 A supports fast, reliable installation. WAGO pluggable installation connectors can be used when requirements repeat or are distributed on a defined grid, for example for installing grid lighting or flush-mount lighting. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. The pluggable installation connector offers protection against contact with live components 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!)). The WINSTA® MIDI pluggable installation connector with A coding in white or black is normally used for general mains applications in power distribution. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. Our WINSTA® MIDI product line guarantees total flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers flexibility and customization for meeting all installation requirements. 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 significantly reduces the need for servicing and lowers costs. Now you can also cut installation expenses without compromising safety and quality: The WINSTA® MIDI pluggable installation connector with protection type IP20 reduces the need for servicing and prevents unnecessary downtime.

- protection against mismating eliminates errors
- · simple circuits
- · with A coding for a great number of uses
- flexible installation to save space
- · convenient installation and commissioning

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# Item includes



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



<u>Item no.: 770-505</u>

1

<u>Item no.: 770-215</u>

Plug; 5-pole; 4,00 mm²; black

Electrical data	
Ratings per IEC/EN	
Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL	
Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

# General

Note on contact resistance

approx. 1 m  $\Omega$  of contact resistance approx. 0.25 m  $\Omega$  contact transition plug/

Connection data	
Total number of connection points	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
Connectable sheathed cable diameter	9 13 mm
Conductor entry direction to mating direction	0°
Strip length (outer insulation)	55 mm

# Data sheet | Item number: 770-115 https://www.wago.com/770-115



Physical data	
Pin spacing	10 mm / 0.394 inches
Width	54.6 mm / 2.15 inches
Height	17 mm / 0.669 inches
Denth	75.9 mm / 2.988 inches

Mechanical data	
Application	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:
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 data can be found here
Color	black
Cover color	gray
Material group	1
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
Fire load	0.676 MJ
Weight	29.7 g

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



# 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 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4044918254441
Customs tariff number VKOrg Germany	85366990990

# Approvals and certificates

# **Country specific Approvals**







Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 61535	2173495.02
CCA DEKRA Certification B.V.	IEC 61535	NL-32105
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61984	40002889
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61535	40029808

# Ship Approvals







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	02/20050 (E6)

# **UL-Approvals**



Approval	Standard	Certificate name
cURus Underwriters Laboratories Inc.	UL 1977	E45171

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



# Downloads

#### **Environmental Product Compliance**

# Compliance Search

**Environmental Product** Compliance 770-115



# Documentation

Bid Text			
770-115	19.02.2019	xml 3.01 KB	$\overline{\downarrow}$
770-115	08.06.2015	doc 23.50 KB	$\underline{\downarrow}$
ausschreiben.de 770-115			$\overline{\downarrow}$

# 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 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

# Item no.: 771-9995/006-101

pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; 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

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



#### 1.1.3 Distribution connector



Item no.: 770-609
3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; black



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

S S



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-po-le/3-pole; Cod. A; 1 input; 2 outputs; with cable connection on the input side; black



Three-phase to single-phase distribution connector; with phase selection; 5-po-le/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 mm<sup>2</sup>; black



Snap-in socket; with protruding mating face; 5-pole; Cod. A; 4,00 mm²; black



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;  $5 \times 2.5 \text{ mm}^2$ +  $2 \times 1.5 \text{ mm}^2$ ; 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

# 1

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

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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 Marking

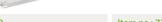
# 1.3.3.1 Marker











Item no.: 770-450 Marker card; Plastic; white

Item no.: 770-450/000-006

Marker card; Plastic; blue







Item no.: 770-450/000-012 Marker card; Plastic; orange



Item no.: 770-450/000-005

Marker card; Plastic; red

# 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

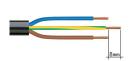
### 1.3.4.2 Wiring aid



Item no.: 770-100

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

#### 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.

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# MAGO

# Installation notes

#### 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).

Subject to changes. Please also observe the further product documentation!