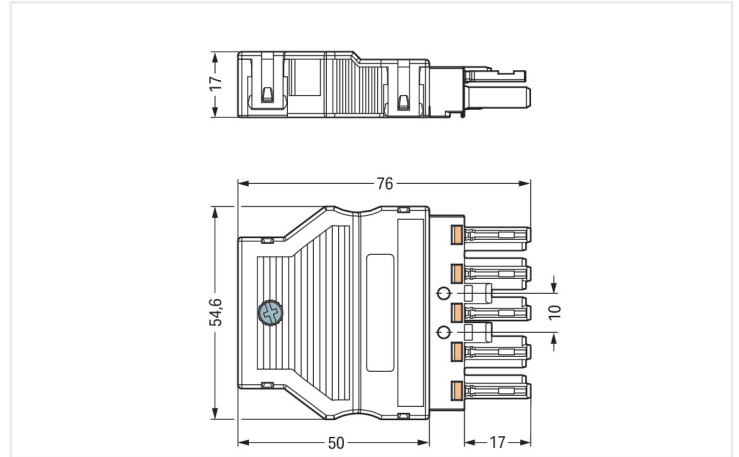


Data sheet | Item number: 770-105

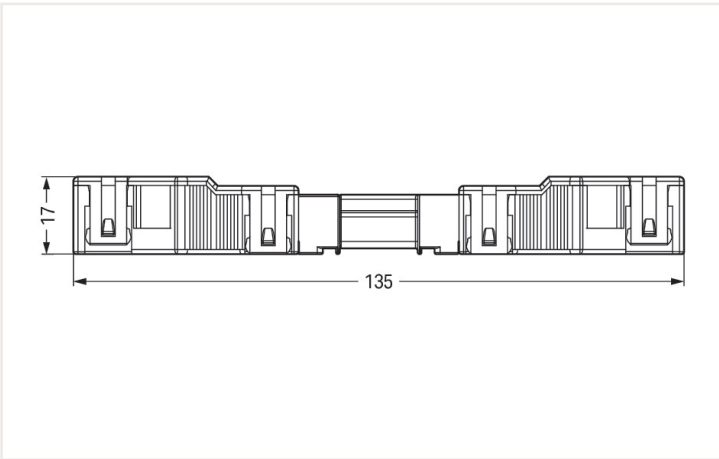
Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black



<https://www.wago.com/770-105>



Dimensions in mm



Dimensions in mm

Overall length when mated

Female connector/socket WINSTA® MIDI 5-pole

For power and signal transmission: The WINSTA® MIDI female connector/socket A coding. Our pluggable installation connectors with spring pressure connection technology function without screw connections. They allow resource-efficient, error-free installation in numerous applications. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. 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!)). 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 especially suitable for high power loads. Our WINSTA® MIDI product line achieves total flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers customization for meeting all installation requirements. The strip length is 55 mm.

WINSTA® MIDI solutions for your electrical installation – protected against mismatching and maintenance-free

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology tool! Plan your installation with WINSTA® MIDI pluggable installation connectors with marking from WAGO.

- effective protection against mismatching
- simple circuits
- with A coding for a great number of uses
- ready to install and use immediately
- fast, secure installation

Item includes



Item no.: 770-505

1

Item no.: 770-205

1

Strain relief housing; 5-pole; for 2 cables;
9.0 ... 13.0 mm; 55 mm; blackSocket; 5-pole; Cod. A; 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 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
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Connection data

Total number of connection points	10
Total number of potentials	5

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 uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 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

Physical data

Pin spacing	10 mm / 0.394 inches
Width	54.6 mm / 2.15 inches
Height	17 mm / 0.669 inches
Depth	75.9 mm / 2.988 inches

Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N ⊕ L1 L2 L3
Potential marking	N ⊕ L1 L2 L3
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)	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

Material data

Note (material data)	Information on material data 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
Fire load	0.619 MJ
Weight	29 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 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4044918252157
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 Zertifizierungsinstitut	EN 61984	40002889
VDE VDE Prüf- und Zertifizierungsinstitut	EN 61535	40029808

Ship Approvals



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	02/20050 (E6)

UL-Approvals



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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-105



Documentation

Bid Text

770-105	19.02.2019	xml 3.01 KB	
770-105	08.06.2015	doc 23.50 KB	
ausschreiben.de 770-105			

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 770-105	EPLAN Data Portal 770-105
	WSCAD Universe 770-105
	ZUKEN Portal 770-105

1 Compatible products

1.1 System counterpart

1.1.1 Cable assembly



Item no.: 771-9995/206-101
pre-assembled connecting cable; Eca; Plug/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.: 899-631/455-000
Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black



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.: 899-631/105-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 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



Item no.: 899-631/302-000
Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; 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.: 770-640

Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; black

1.1.4 Male connector/plug



Item no.: 770-815/011-000

Plug for PCBs; angled; 5-pole; Cod. A; black



Item no.: 770-815

Plug for PCBs; straight; 5-pole; Cod. A; black



Item no.: 770-215

Plug; 5-pole; 4,00 mm²; black



Item no.: 770-415

Plug; 5-pole; 4,00 mm²; black



Item no.: 770-115

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



Item no.: 770-315

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



Item no.: 770-715

Snap-in plug; 5-pole; Cod. A; 4,00 mm²; black



Item no.: 770-715/007-000

Snap-in plug; with direct ground contact; 5-pole; Cod. A; 4,00 mm²; black

1.2 Required accessories

1.2.1 Cover

1.2.1.1 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

1.2.2 Locking system

1.2.2.1 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.: 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

1.3.3.2 Wiring aid

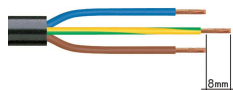


Item no.: 770-100

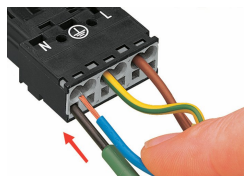
Wiring aid; 2- to 5-pole; Plastic; orange

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.

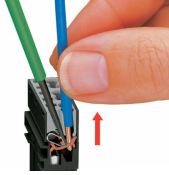


Insert the stripped solid conductor until it hits the backstop.



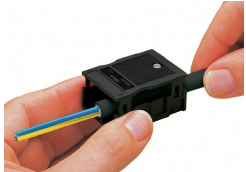
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

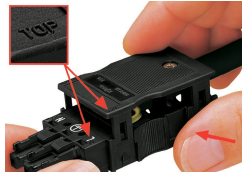


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

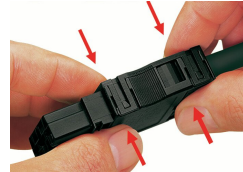
Installation



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).