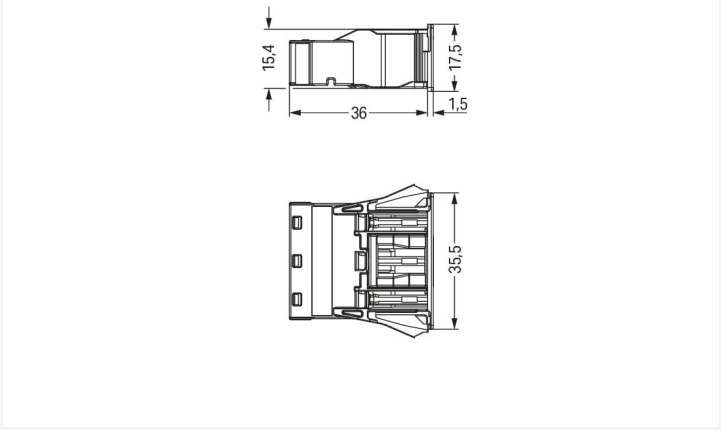
Data Sheet | Item Number: 770-703

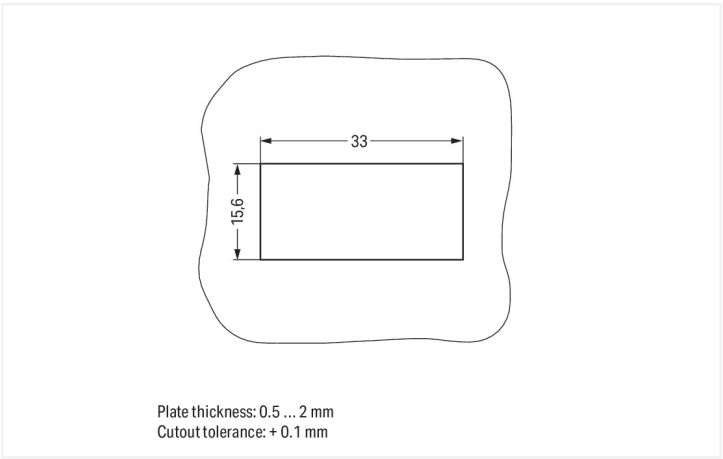
Snap-in socket; 3-pole; Cod. A; 4,00 mm²; black

https://www.wago.com/770-703

Color: black



Dimensions in mm



Dimensions in mm

Female connector/socket *WINSTA*® MIDI with protection type IP20

The *WINSTA*® MIDI female connector/socket rated current 25 A supports fast, reliable installation. WAGO pluggable installation connectors are useful when requirements repeat or are planned on a specified pattern, for example for installing grid lighting or flush-mount lighting. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. The pluggable installation connector is protected against ingress by solid objects in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). The *WINSTA*® MIDI pluggable installation connector with A coding in black or white is usually used for general mains applications in power distribution. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy, secure, tailored installation.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation costs without compromising safety and quality: The *WINSTA*® MIDI pluggable installation connector with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismating eliminates errors
- pre-assembled versions
- with A coding for a great number of applications
- exact dimensions
- quick replacement of defective units during ongoing operation

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL 1977

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

Connection data

Connection points	6
Total number of potentials	3
Number of test slots	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
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	3
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	10 mm / 0.394 inches
Width	35.5 mm / 1.398 inches
Height	17.5 mm / 0.689 inches
Depth	37.5 mm / 1.417 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
Housing sheet thickness	0.5 … 2 mm / 0.02 … 0.079 inches
Mounting type	Snap-in flange
Protection type	IP20; When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

Continued on next page

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	Yes
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).

Material Data

Note (material data)	Information on material specifications can be found here
Color	black
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	0.237 MJ
Weight	11.9 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	27-44-06-02
eCl@ss 9.0	27-44-06-02
ETIM 8.0	EC002566
ETIM 7.0	EC002566
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918252560
Customs tariff number	85366990990

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

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	02/20050 (E6)

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-703

Documentation

Bid Text

770-703	19.02.2019	xml 2.89 KB
770-703	08.06.2015	doc 23.00 KB

CAD/CAE-Data

CAD data

2D/3D Models 770-703

CAE data

EPLAN Data Portal 770-703

WSCAD Universe 770-703

ZUKEN Portal 770-703

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 771-9993/206-101
pre-assembled connecting cable; Eca; Plug/open-ended; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; black

Item No.: 771-9993/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. A; H05VV-F 3G 1.5 mm²; 1 m; 1,50 mm²; black

1.1.2 Male connector/plug

Item No.: 770-213
Plug; 3-pole; Cod. A; 4,00 mm²; black

Item No.: 770-113
Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; black

Item No.: 770-213/035-000
Plug; with strain relief housing; 3-pole; Cod. A; 4,00 mm²; black

1.2 Optional 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

Item No.: 770-643
Lockout cap; 3-pole; for cutouts; Plastic; black

Item No.: 770-693
Lockout cap; 3-pole; for cutouts; Plastic; white

1.2.2 Tool

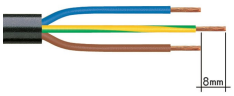
1.2.2.1 Operating tool

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

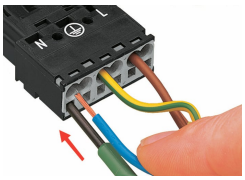
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

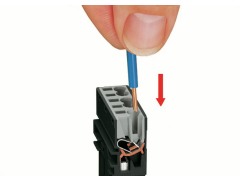
Conductor termination



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



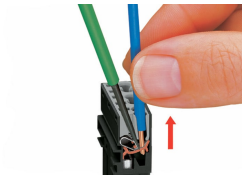
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.



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.

Conductor removal



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

Seal unused cutout with lockout cap.