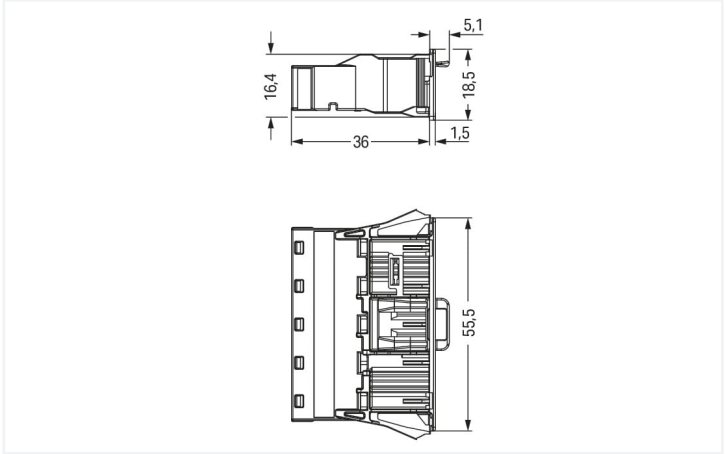
Data Sheet | Item Number: 770-715

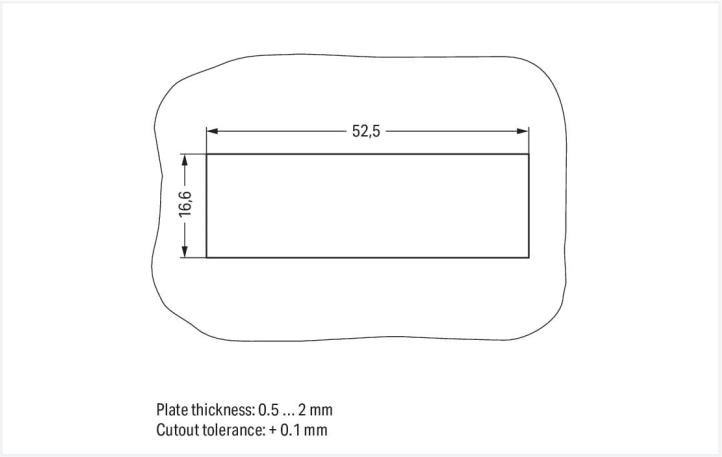
Snap-in plug; 5-pole; Cod. A; 4,00 mm²; black

https://www.wago.com/770-715

Color: black



Dimensions in mm



Dimensions in mm

Male connector/plug *WINSTA*® MIDI with protection type IP20

The *WINSTA*® MIDI male connector/plug with protection type IP20 is the pluggable solution for your use in control cabinets, for lighting connections or on PCBs. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in next to no time. 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: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). That results in the fact that users' fingers will never come into contact with electrified elements. 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 employed for a current load of up to 25 A. As a result, it can also be used for high power loads. Our *WINSTA*® MIDI product line allows total flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers customization and flexibility for meeting an enormous variety of installation requirements.

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

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

- pluggable installation connectors with protection against mismating
- for automation controllers
- suitable for any application
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

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 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	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
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	10 mm / 0.394 inches
Width	55.5 mm / 2.185 inches
Height	18.5 mm / 0.728 inches
Depth	41.1 mm / 1.417 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: > 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)	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	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	0.402 MJ
Weight	19.3 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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143375870
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	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-715

Documentation

Bid Text

770-715	08.06.2015	doc 23.00 KB
770-715	19.02.2019	xml 2.89 KB

CAD/CAE-Data

CAD data

2D/3D Models 770-715

CAE data

EPLAN Data Portal 770-715

WSCAD Universe 770-715

ZUKEN Portal 770-715

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 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 Female connector/socket

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

1.2 Optional Accessories

1.2.1 Cover

1.2.1.1 Cover

Item No.: 770-645
Lockout cap; 5-pole; for cutouts; Plastic; black

Item No.: 770-695
Lockout cap; 5-pole; for cutouts; Plastic; white

Item No.: 770-360
Lockout cap; for plugs; 5-pole; separable; yellow

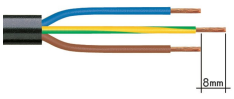
1.2.2 Tool

1.2.2.1 Operating tool

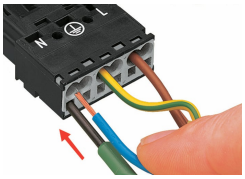
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

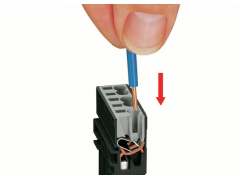
Conductor termination



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



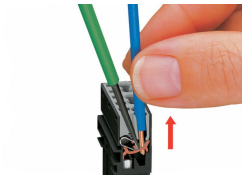
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.



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.

Seal unused cutout with lockout cap.