

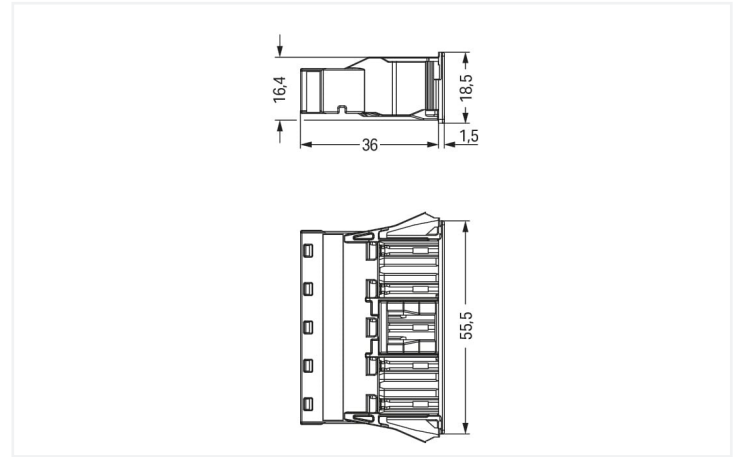
Data Sheet | Item Number: 770-705

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

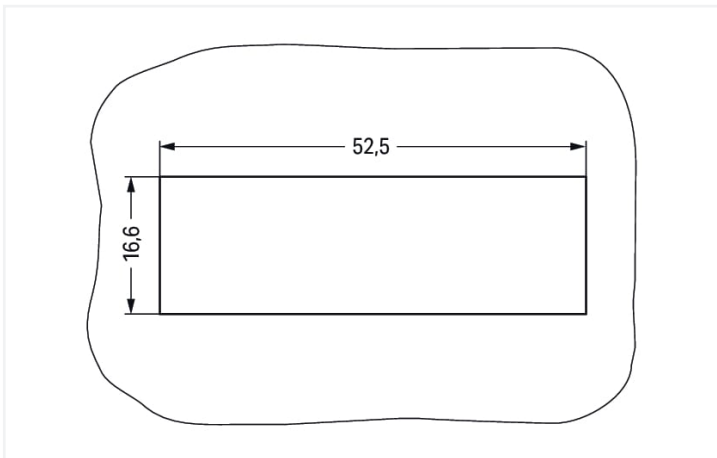
<https://www.wago.com/770-705>



Color: ■ black



Dimensions in mm



Dimensions in mm

Plate thickness: 0.5 ... 2 mm

Cutout tolerance: + 0.1 mm

Please note!

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

The *WINSTA*® MIDI female connector/socket A coding is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to various requirements in no time flat. 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 is protected in accordance with protection type IP20 (When mated: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). This means that users' fingers will never come into contact with live contact elements. Thanks to the color coding and mechanical A coding of *WINSTA*® MIDI pluggable installation connectors, you can clearly distinguish different circuits. The rated current and voltage are important criteria for selecting a pluggable installation connector: They tell us about the product's domains of use. This product has a current rating of 25 A – as a result it is suitable for powerful loads. The *WINSTA*® MIDI product line achieves maximum flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers customization for meeting an enormous variety of installation requirements.

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

The *WINSTA*® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Choose quality and durability – with protection against mismating from WAGO makes the electrical installation of electrical components substantially easier.

- pluggable installation connectors with protection against mismating
- pre-assembled versions
- with A coding for use in many general mains applications
- flexible installation to save space
- rapid, structured electrical installation



Notes	
Note	The snap-in connectors must be relieved of tensile and transverse forces. A surface finish can influence the edge radius of the cutouts. This may affect the snap-in socket fit, so ensure an adequate fit before use. In addition, the punched edge should be on the inside for punched cutouts. The wings of the snap-in connectors must not be mechanically stressed for a long period before use (e.g., due to a pre-locking position).

Electrical data				
Ratings per		IEC/EN 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage	400 V	-	-	-
Rated surge voltage	6 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	10	
Total number of potentials	5	

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	37.5 mm / 1.476 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: > 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!)	

Plug-in connection		
Contact type (pluggable connector)	Female connector/socket	
Connector (connection type)	for conductor	
Mismating protection	Yes	
Note on mismating protection	All <i>WINSTA</i> ® 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	0.349 MJ	
Weight	20 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	4055143594110	
Customs tariff number	85366990990	

Environmental Product Compliance		
RoHS Compliance Status	Compliant, No Exemption	

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  			Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	IEC 61535	NL -84761			
cURus Underwriters Laboratories Inc.	UL 1977	E45171			
cURus Underwriters Laboratories Inc.	UL 1059	E 45172			

Approvals for marine applications

  		
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	LR22429487TA



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-705

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Documentation				
Bid Text				
770-705	08.06.2015	doc	23.00 KB	Download icon
770-705	19.02.2019	xml	2.89 KB	Download icon

CAD/CAE-Data

CAD data

2D/3D Models 770-705

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CAE data

EPLAN Data Portal 770-705

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WSCAD Universe 770-705

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ZUKEN Portal 770-705

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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 Male connector/plug

[Item No.: 770-215](#)
Plug; 5-pole; Cod. A; 4,00 mm²; black

[Item No.: 770-415](#)
Plug; 5-pole; Cod. A; 4,00 mm²; black

[Item No.: 770-115](#)
Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black

[Item No.: 770-315](#)
Plug; 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.: 770-201
Lockout cap; 12-pole, separable; for sockets; Plastic; black



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



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



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

1.2.2 Tool

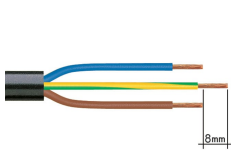
1.2.2.1 Operating tool



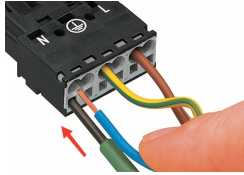
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.

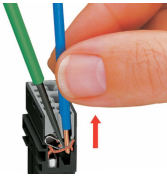


Insert the stripped solid conductor until it hits the backstop.



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.