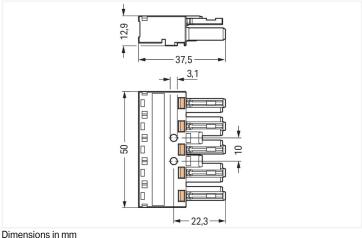
# Data Sheet | Item Number: 770-205 Socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black

https://www.wago.com/770-205







Female connector/socket WINSTA® MIDI rated current 25 A

The WINSTA® MIDI female connector/socket A coding allows installation of fine-stranded and solid conductors. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to various requirements in seconds. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector is protected 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!)). That results in the fact that users' fingers will never come into contact with electrified contact elements. 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 can be used for electrical currents up to 25 A. Thus the product is especially suitable for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in can be found in a variety of projects you can use for quick, easy, flexible, and secure installation.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It allows fast, secure and, above all, error-free installation of components and cables. Choose durability and quality – the WINSTA® MIDI pluggable installation connector with protection against mismating from WAGO makes the electrical installation of electrical components visibly easier.

- pluggable installation connectors with protection against mismating
- pre-assembled versions
- · with A coding for a large number of applications
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

Electrical data			
Ratings per IEC/EN		Ratings per UL 1977	
Ratings per	IEC/EN 60664-1	Note for the US market	Some versions may also be used for cur-
Nominal voltage (III/3)	400 V		rent interruption in accordance with the UL certificate in select applications with
Rated impulse voltage (III/3)	6 kV		currents below 16 A and voltages up to
Rated current	25 A		600 V. For further information, please contact your local sales office.
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Polluti-	Polluti- Rated voltage (UL 1977)	600 V
	on degree 3	Rated current UL 1977	23 A
		nates canoni de 1011	<b>20</b> 7.

https://www.wago.com/770-205



General

Note on contact resistance

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

nnection data				
onnection points	10		Connection 1	
Total number of potentials	5	5	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 mm <sup>2</sup> / 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 mm <sup>2</sup> / 16 AWG		
	Strip length	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	50 mm / 1.969 inches
Height	12.9 mm / 0.508 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
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!)

# Data Sheet | Item Number: 770-205 https://www.wago.com/770-205



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).

Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	black
Cover color	gray
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.3 MJ
Weight	15.7 g

Environmental requirements	
Processing temperature	-5 +40 °C
Continuous operating temperature	-35 +85 ℃
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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918252324
Customs tariff number	85366990990

# Approvals / Certificates

https://www.wago.com/770-205



#### 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
VDE VDE Prüf- und Zertifizie-	EN 61984	40002889

#### Declarations of conformity and manufacturer's declarations

Approval Standard Certificate Name EU-Declaration of Confor-

mity WAGO GmbH & Co. KG

# 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 770-205



#### Documentation

Bid Text			
770-205	19.02.2019	xml 2.93 KB	$\perp$
770-205	08.06.2015	doc 23.50 KB	$\downarrow$

#### CAD/CAE-Data

https://www.wago.com/770-205





2D/3D Models 770-205



CAE data **EPLAN Data Portal** 770-205 WSCAD Universe 770-205 ZUKEN Portal 770-205

#### 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 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.: 899-631/455-000

Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black

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 singlephase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black





Distribution box; Three-phase to singlephase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black

# Item No.: 899-631/100-000

Item No.: 899-681/147-000

Distribution box; Three-phase to singlephase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black

#### Item No.: 899-631/302-000

Distribution box; Three-phase to singlephase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black

#### 1.1.3 Distribution connector







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



3-way distribution connector; 5-pole; Cod.

#### Item No.: 770-640

Item No.: 770-609

A; 1 input; 3 outputs; black

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

# 1.1.4 Male connector/plug

Item No.: 770-815/011-000



# Item No.: 770-815

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



#### Item No.: 770-215

Plug; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



#### Item No.: 770-415

Plug; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black



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

black

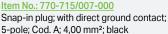
Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; black

# Item No.: 770-315

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



#### Item No.: 770-715 Snap-in plug; 5-pole; Cod. A; 4,00 mm<sup>2</sup>;



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#### 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



Locking lever; for flying leads; for manual



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

#### 1.2.3 Strain relief

Item No.: 770-101

operation; black

#### 1.2.3.1 Strain relief housing

Item No.: 770-505/021-000

11.5 ... 16.5 mm; 71 mm; black







Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white

1000



Item No.: 770-505/023-000 Strain relief housing; 5-pole; for 2 cables; 5.0... 9.0 mm; 55 mm; black

# Item No.: 770-515/023-000

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white



Strain relief housing; 5-pole; for 1 cable;

#### Item No.: 770-505

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

# Item No.: 770-515

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

https://www.wago.com/770-205



#### 1.3.2.1 Snap-in frame



 Item No.: 770-321
 Item No.: 770-341

 Snap-in frame; 5-pole; 0.5 ... 2.0 mm;
 Snap-in frame; 5-pole; 5-pole; 5-pole; 5-pole; 5-pole; 6-pole; 6-pole;

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; whi-



Item No.: 770-320

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black



Item No.: 770-340

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; whi-

#### 1.3.3 Marking

#### 1.3.3.1 Marker





£



<u>Item No.: 770-450/000-012</u> Marker card; Plastic; orange Item No.: 770-450/000-005 Marker card; Plastic; red

Item No.: 770-450/000-006 Marker card; Plastic; blue





Item No.: 770-450 Marker card; Plastic; white Item No.: 770-450/000-002 Marker card; Plastic; yellow

Item No.: 770-450/000-001

Marker card; Plastic; green

#### 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

#### 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.

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#### 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!