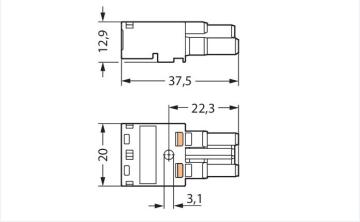
# Data Sheet | Item Number: 770-202 Socket; 2-pole; Cod. A; 4,00 mm<sup>2</sup>; black

https://www.wago.com/770-202







Dimensions in mm

Female connector/socket WINSTA® MIDI 2-pole

The WINSTA® MIDI female connector/socket A coding supports rapid, correct installation. WAGO pluggable installation connectors can be used when criteria repeat or are distributed on a defined 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 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 elements. The WINSTA® MIDI pluggable installation connector with A coding in white or black is usually used for general mains applications in power distribution. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They provide information about possible domains of use and applications. This product has a current rating of 25 A – therefore it is also suitable for high power loads. Our WINSTA® MIDI product line allows maximum flexibility for the installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it achieves error-free, time-saving installation and offers customization for meeting various installation requirements.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the strict requirements of building installation. It makes electrical installation pluggable, and therefore faster, even more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and errors during installation at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with marking from WAGO.

- · pluggable installation connectors with protection against mismating
- simple circuits
- · with A coding for a great number of uses
- · exact dimensions
- quick replacement of defective units during ongoing operation

Electrical data					
Ratings per	IEC	C/EN 60664	l-1	Approvals per	UL 1977
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	250 V	-	-		
Rated surge voltage	4 kV	-	-		
Rated current	25 A	-	-		

https://www.wago.com/770-202



#### **General information**

Note on contact resistance

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

onnection data			
Connection points	4	Connection 1	
Total number of potentials	2	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 mm <sup>2</sup> / 16 AWG
		Strip length	9 mm / 0.35 inches

Physical data	
Pin spacing	10 mm / 0.394 inches
Width	20 mm / 0.787 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Pole number

rection

Conductor entry direction to mating di-

2

0°

Mechanical data	
Application	General mains applications
Coding	A
Variable coding	No
Marking	LN
Potential marking	LN
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: 770-202 https://www.wago.com/770-202



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)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
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	0.127 MJ
Weight	6.6 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)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821028109
Customs tariff number	85366990990

https://www.wago.com/770-202



#### **Environmental Product Compliance**

RoHS Compliance Status

#### 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
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

# Declarations of conformity and manufacturer's declarations

Compliant, No Exemption

Approval Standard Certificate Name

EU-Declaration of Conformity

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 770-202



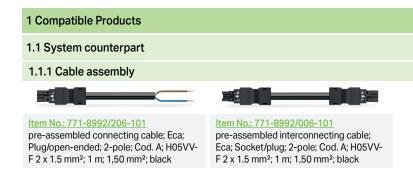
#### Documentation

Bid Text			
770-202	19.02.2019	xml 2.93 KB	$\underline{\downarrow}$
770-202	08.06.2015	doc 23.50 KB	$\overline{\downarrow}$

https://www.wago.com/770-202



# CAD/CAE-Data CAD data CAE data 2D/3D Models 770-202 **EPLAN Data Portal** 770-202 WSCAD Universe 770-202 ZUKEN Portal 770-202



#### 1.1.2 Distribution connector

Item No.: 770-1634 h-distribution connector; 2-pole; Cod. A; 1

input; 2 outputs; outputs on one side; 2

Item No.: 770-1636

h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black

Item No.: 770-1606

T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black Item No.: 770-1615

T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

#### 1.1.3 Male connector/plug



Item No.: 770-212

locking levers; black

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

Item No.: 770-112/041-000

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

#### 1.2 Required Accessories

#### 1.2.1 Locking system

#### 1.2.1.1 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

Locking lever; for flying leads; for tool operation; black

Item No.: 770-111

Item No.: 770-131

Locking lever; for flying leads; for tool operation; white

https://www.wago.com/770-202



#### 1.2.2 Strain relief

#### 1.2.2.1 Strain relief housing









Item No.: 770-502/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; black

Item No.: 770-512/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; white

Item No.: 770-502/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm;

Item No.: 770-512/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; white

#### 1.3 Optional Accessories

### 1.3.1 Cover

#### 1.3.1.1 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.: 897-2003

Protective cap; Type2; for sockets and plugs; PVC; red

#### 1.3.2 Installation

#### 1.3.2.1 Mounting accessories







Item No.: 897-2100

Mounting plate; for Snap-in; Plastic; for detectors and sensors; Ø 200 mm; red

Item No.: 770-317

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

Item No.: 770-337

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; white

#### 1.3.3 Tool

#### 1.3.3.1 Operating tool





Item No.: 770-382

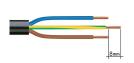
Operating tool; 2-way; green

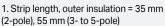
Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

#### **Installation Notes**

#### Conductor termination





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.

https://www.wago.com/770-202



#### 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!