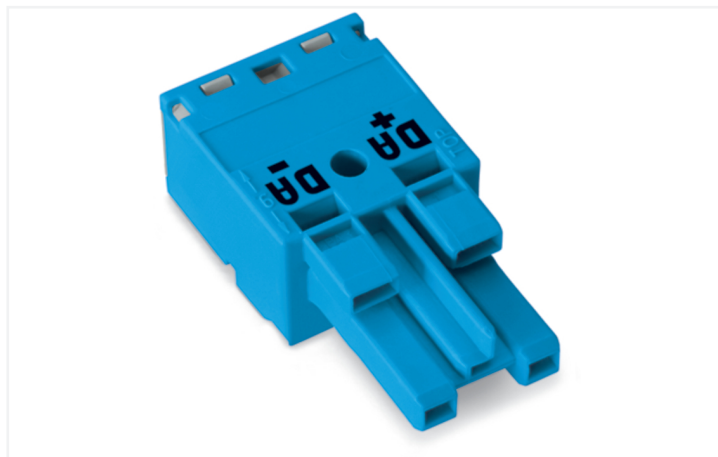
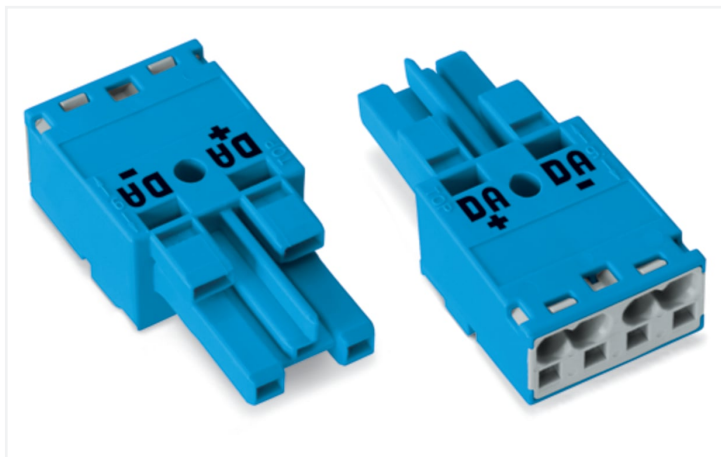


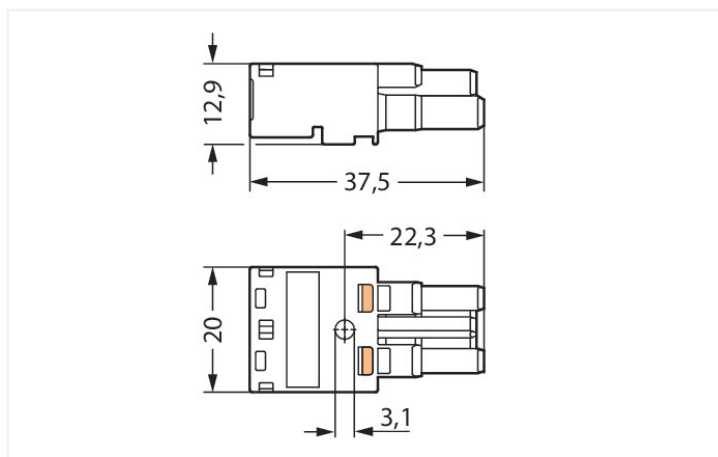
## Data Sheet | Item Number: 770-1102

Socket; 2-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

<https://www.wago.com/770-1102>



Color: ■ blue



Dimensions in mm

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

For signal and power transmission: The *WINSTA*® MIDI female connector/socket I coding. WAGO pluggable installation connectors are useful when criteria repeat or are distributed on a specified grid, for example for installing grid lighting or flush-mount lighting. For greater security in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. 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!)). This means that users' fingers will never come into contact with electrified contact elements. I coding in blue is used to identify *WINSTA*® MIDI pluggable installation connectors, which are used primarily in automation of buildings for activating lighting. This pluggable installation connector can be used for a voltage load of up to 25 A. Therefore, it can also be used for high power loads. *WINSTA*® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in a broad range of individual products you can use for quick, easy, flexible, and secure installation.

*WINSTA*® MIDI solutions for your electrical installation – protected against mismatching and maintenance-free

The *WINSTA*® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently faster, more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and errors during installation at the construction site. Now you can also lower installation costs without compromising safety and quality: with protection against mismatching reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- pre-assembled versions
- with I coding for use in building automation (lighting control)
- custom-engineered solutions
- convenient installation and commissioning

## Electrical data

Ratings per	IEC/EN 60664-1			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	-	-		

## General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket
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## Connection data

Clamping units	4	<b>Connection 1</b>	
Total number of potentials	2	Connection technology	Push-in CAGE CLAMP®
		Actuation type	Operating tool Push-in
		Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
		Solid conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
		Solid conductor; push-in termination	1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG
		Stranded conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
		Fine-stranded conductor	0.5 ... 4 mm <sup>2</sup> / 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 mm <sup>2</sup> / 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
		Pole number	2
		Conductor entry direction to mating direction	0°

## 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

## Mechanical data

Use	DALI, Lighting Management
Coding	I
Variable coding	No
Marking	DA+ DA-
Potential marking	DA+ DA-
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!)

### 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="#">Information on material specifications can be found here</a>
Color	blue
Cover color	gray
Material group	I
Insulation material (main housing)	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	0.113 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 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821028154
Customs tariff number	85366990990

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals** **Declarations of conformity and manufacturer's declarations**



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
VDE VDE Prüf- und Zertifizierungsinstitut	EN 61535	40029808

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

**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 770-1102

## Documentation

### Bid Text

770-1102	19.02.2019	xml 2.93 KB	<a href="#">↓</a>
770-1102	08.06.2015	doc 23.50 KB	<a href="#">↓</a>

## CAD/CAE-Data

### CAD data

2D/3D Models 770-1102	<a href="#">↓</a>
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### CAE data

EPLAN Data Portal 770-1102	<a href="#">↓</a>
WSCAD Universe 770-1102	<a href="#">↓</a>
ZUKEN Portal 770-1102	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Cable assembly



**Item No.: 771-8982/206-101**  
pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. I; H05VV-F 2 x 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue



**Item No.: 771-8982/006-101**  
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. I; H05VV-F 2 x 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue

#### 1.1.2 Distribution connector



**Item No.: 770-7102**  
Linect® T-connector; 2-pole; Cod. I; 1 input; 2 outputs; white

#### 1.1.3 Male connector/plug



**Item No.: 770-1112**  
Plug; 2-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

## 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



**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

### 1.2.2 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; black



**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

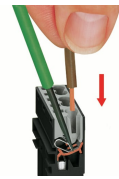
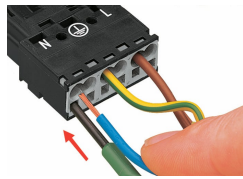


**Item No.: 210-719**

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

## Installation Notes

### Conductor termination



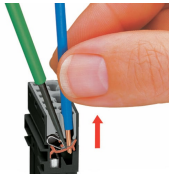
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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.

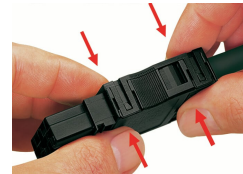
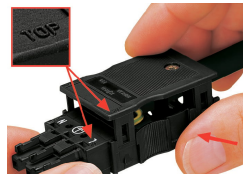
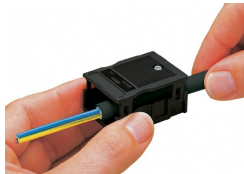
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

### Conductor removal



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

### 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).