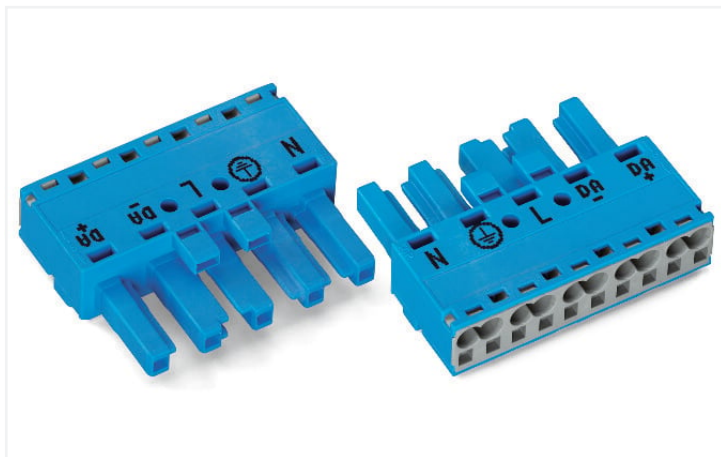


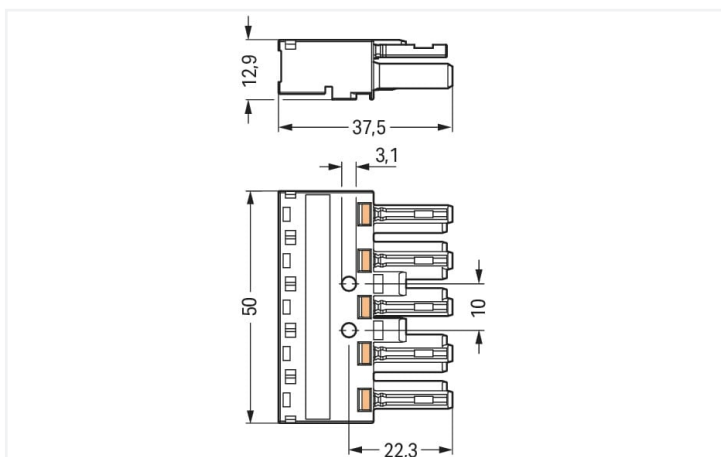
## Data Sheet | Item Number: 770-1105

Socket; 5-pole; Cod. I; 4,00 mm<sup>2</sup>; blue

<https://www.wago.com/770-1105>



Color: ■ blue



Dimensions in mm

Female connector/socket WINSTA® MIDI I coding

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI female connector/socket with protection type IP20. WAGO pluggable installation connectors are used when specifications repeat or are distributed on a specified pattern, for example for installing grid lighting or flush-mount lighting. 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 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. WINSTA® MIDI pluggable installation connectors with I coding in blue are above all suitable for lighting management, for example for the dimming of DALI lights. This pluggable installation connector is used for electrical currents up to 25 A. Thus the product is also suitable for high power loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Due to the integrated test slot, connections can be checked even when they are plugged in. This saves time, labor, and money.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures error-free installation of cables and components, quickly and reliably. Choose quality and durability – with marking from WAGO makes the electrical installation of electrical components substantially easier.

- effective protection against mismatching
- simple circuits
- for lighting management
- custom-engineered solutions
- convenient installation and commissioning

## 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 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	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	DALI, Lighting Management
Coding	I
Variable coding	No
Marking	N L DA- DA+
Potential marking	N L 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	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	0.355 MJ
Weight	15.4 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

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	4044918252706
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
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**

<b>Compliance Search</b>	
Environmental Product Compliance 770-1105	<a href="#">↓</a>

## Documentation

Bid Text			
770-1105	19.02.2019	xml 2.93 KB	<a href="#">↓</a>
770-1105	08.06.2015	doc 23.50 KB	<a href="#">↓</a>
ausschreiben.de 770-1105			<a href="#">↓</a>

## CAD/CAE-Data

CAD data	
2D/3D Models 770-1105	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 770-1105	<a href="#">↓</a>
WSCAD Universe 770-1105	<a href="#">↓</a>
ZUKEN Portal 770-1105	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Cable assembly



**Item No.: 771-9985/206-101**  
pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. I; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue

**Item No.: 771-9985/006-101**  
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. I; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue

#### 1.1.2 Distribution box



**Item No.: 899-681/146-000**  
Distribution box; 230 V + DALI; 1 input; 7 outputs; Cod. I; MINI, MIDI; white

**Item No.: 899-631/313-000**  
Distribution box; DALI; 1 input; 5 outputs; Cod. I; MIDI; black

#### 1.1.3 Distribution connector



**Item No.: 770-618**  
3-way distribution connector; 5-pole; Cod. I; 1 input; 3 outputs; blue

**Item No.: 770-1947**  
5-way distribution connector; 5-pole; Cod. I; 1 input; 5 outputs; blue

**Item No.: 770-992**  
h-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; outputs on both sides; 2 locking levers; blue

**Item No.: 770-993**  
h-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; blue



**Item No.: 770-7105**  
Linect® T-connector; 5-pole; Cod. I; 1 input; 2 outputs; blue

**Item No.: 770-617**  
T-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; 2 locking levers; blue

**Item No.: 770-620**  
T-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; 3 locking levers; for flying leads; blue

### 1.1.4 Male connector/plug



**Item No.: 770-3115/011-000**  
Plug for PCBs; angled; 5-pole; Cod. I; blue



**Item No.: 770-3115**  
Plug for PCBs; straight; 5-pole; Cod. I; blue



**Item No.: 770-1115**  
Plug; 5-pole; 4,00 mm<sup>2</sup>; blue



**Item No.: 770-1115/022-000**  
Plug; with strain relief housing; 5-pole; Cod. I; 4,00 mm<sup>2</sup>; blue



**Item No.: 770-2115**  
Snap-in plug; 5-pole; Cod. I; 4,00 mm<sup>2</sup>; blue



**Item No.: 770-2115/007-000**  
Snap-in plug; with direct ground contact; 5-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.: 770-505/021-000**  
Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black



**Item No.: 770-515/021-000**  
Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white



**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



**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.: 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.: 897-2005**  
Protective cap; Type4; for sockets and plugs; PVC; red

### 1.3.2 Installation

#### 1.3.2.1 Mounting accessories



**Item No.: 770-321**  
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black



**Item No.: 770-341**  
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white



**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; white

### 1.3.3 Marking

#### 1.3.3.1 Marker



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



**Item No.: 770-450/000-001**  
Marker card; Plastic; green



**Item No.: 770-450/000-012**  
Marker card; Plastic; orange



**Item No.: 770-450/000-005**  
Marker card; Plastic; red



**Item No.: 770-450**  
Marker card; Plastic; white



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

### 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

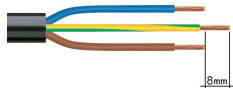
#### 1.3.4.2 Wiring aid



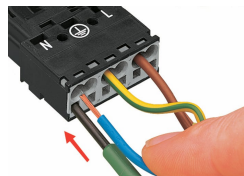
**Item No.: 770-100**  
Wiring aid; 2- to 5-pole; Plastic; orange

## Installation Notes

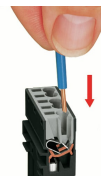
### Conductor termination



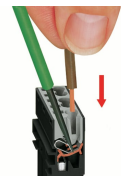
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

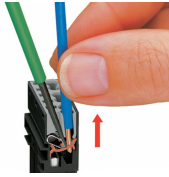


Insert the stripped solid conductor until it hits the backstop.



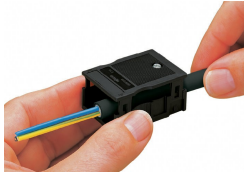
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

### Conductor removal

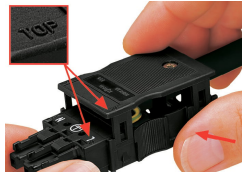


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

### 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).