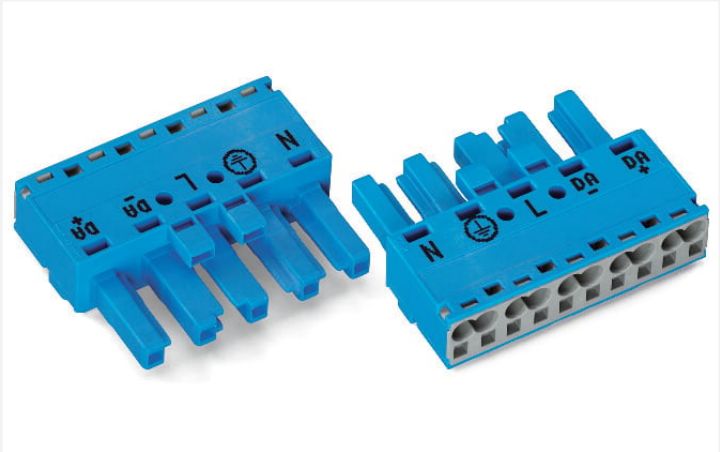
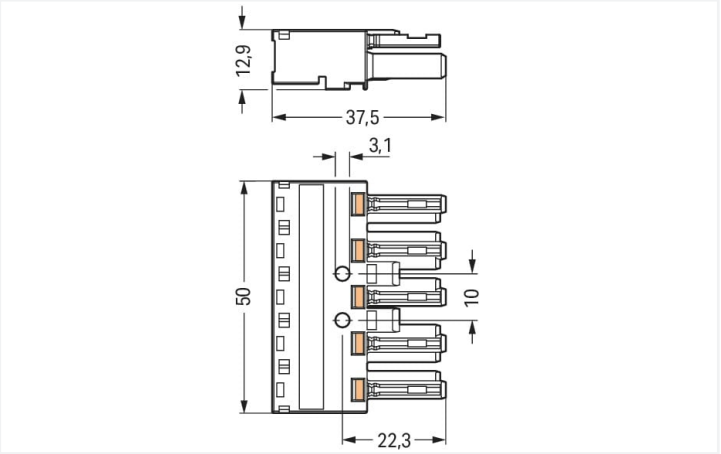
Data Sheet | Item Number: 770-1105

Socket; 5-pole; Cod. I; 4,00 mm²; blue

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



Color: blue



Dimensions in mm

Female connector/socket *WINSTA*® MIDI 5-pole

The *WINSTA*® MIDI female connector/socket I coding is the pluggable solution for your use 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 establish connections according to an enormous variety of requirements in seconds. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector offers touch-proof protection with live components 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!)). Regulated lighting, as used with the DALI standard, for instance, is the main use of *WINSTA*® MIDI pluggable installation connectors with I coding. The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – so it is 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, secure, tailored installation.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with *WINSTA*® MIDI pluggable installation connectors with marking from WAGO.

- pluggable installation connectors with protection against mismating
- simple circuits
- with I coding for use in building automation (lighting control)
- exact dimensions
- quick replacement of defective units during ongoing operation

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL 1977

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

General

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	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!)

Continued on next page

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)	Information on material specifications can be found here
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	0.392 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

Approvals / Certificates

Continued on next page

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 Zertifizierungsinstitut	EN 61535	40029808

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

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-1105

Documentation

Bid Text

770-1105	19.02.2019	xml 2.93 KB
770-1105	08.06.2015	doc 23.50 KB
ausschreiben.de 770-1105		

CAD/CAE-Data

CAD data
2D/3D Models 770-1105

CAE data
EPLAN Data Portal 770-1105
WSCAD Universe 770-1105
ZUKEN Portal 770-1105

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 mm²; 1 m; 1,50 mm²; blue

Item No.: 771-9985/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. I; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; 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

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

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 mm²; blue

Item No.: 770-1115/022-000
Plug; with strain relief housing; 5-pole; Cod. I; 4,00 mm²; blue

Item No.: 770-2115
Snap-in plug; 5-pole; Cod. I; 4,00 mm²; blue

Item No.: 770-2115/007-000
Snap-in plug; with direct ground contact; 5-pole; Cod. I; 4,00 mm²; blue

1.2 Required Accessories

1.2.1 Locking system

Continued on next page

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 Snap-in frame

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

Continued on next page

1.3.4.1 Operating tool

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

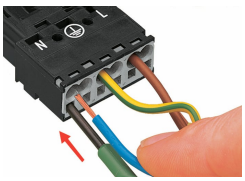
1.3.4.2 Wiring aid

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

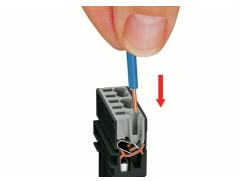
Installation Notes

Conductor termination

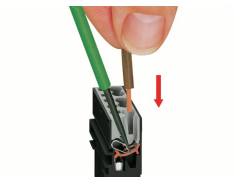
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

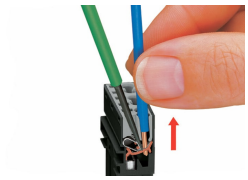


Insert the stripped solid conductor until it hits the backstop.



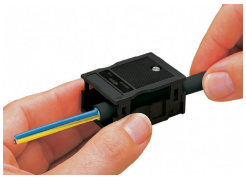
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

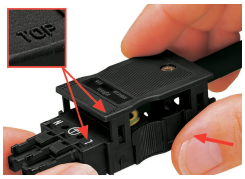


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

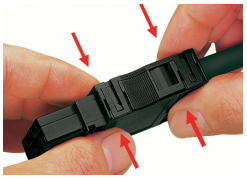
Installation



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).