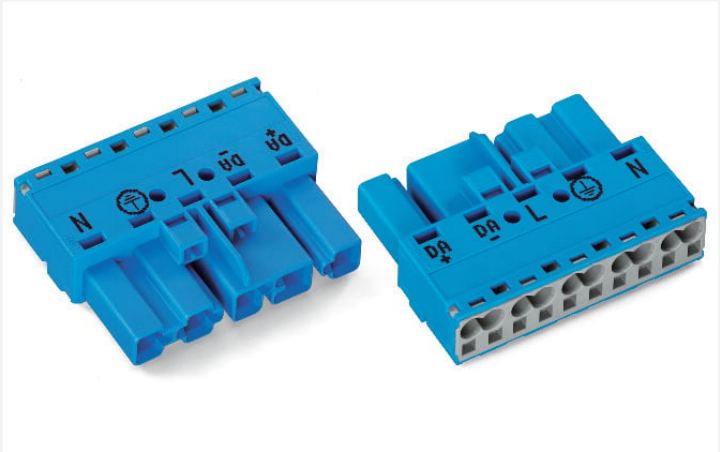
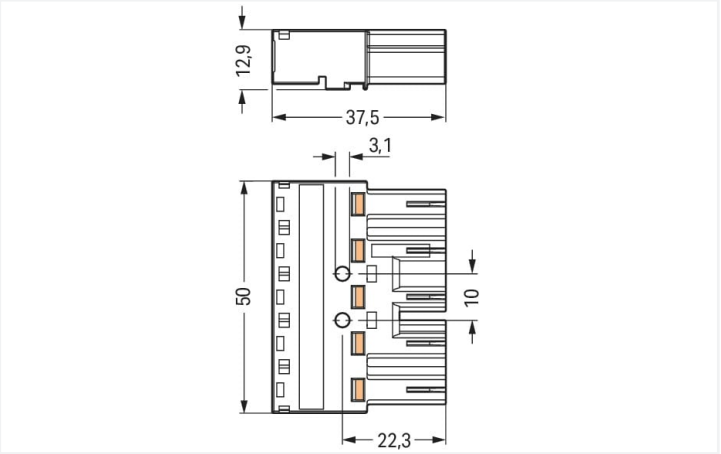
Data Sheet | Item Number: 770-1115

Plug; 5-pole; 4,00 mm²; blue

https://www.wago.com/770-1115



Color: blue



Dimensions in mm

Male connector/plug *WINSTA*® MIDI rated current 25 A

Use effective pluggable connections instead of laborious screw connections: With the *WINSTA*® MIDI male connector/plug 5-pole. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to a huge variety of requirements in next to no time. For greater protection in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. The pluggable installation connector is protected against ingress by solid objects 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!)). I coding in blue is used to identify *WINSTA*® MIDI pluggable installation connectors, which are used primarily in automation of buildings for controlling lighting. This pluggable installation connector can be employed for a load of up to 25 A. Therefore, it can also be used for high power loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Due to the built-in test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and costs.

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

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. 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 protection type IP20 from WAGO.

- protection against mismating eliminates errors
- simple circuits
- with I coding for lighting control (DALI standard)
- flexible installation to save space
- 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
PE function	Preceding PE contact

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	DA+ DA- L ⏚ N
Potential marking	DA+ DA- L ⏚ N
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)	Male connector/plug
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	0.393 MJ
Weight	15.7 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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918254816
Customs tariff number	85366990990

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
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 770-1115

Documentation

Bid Text

770-1115	19.02.2019	xml 2.93 KB
770-1115	08.06.2015	doc 23.50 KB
ausschreiben.de 770-1115		

CAD/CAE-Data

CAD data
2D/3D Models 770-1115

CAE data
EPLAN Data Portal 770-1115
WSCAD Universe 770-1115
ZUKEN Portal 770-1115

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 771-9985/106-101
pre-assembled connecting cable; Eca; Socket/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.: 899-631/181-000
Distribution box; 230 V + DALI; 2 inputs; 6 outputs; Cod. A, I; MINI, MIDI; black

Item No.: 899-631/455-000
Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black

Item No.: 899-681/147-000
Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, 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

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 Female connector/socket

Item No.: 770-2105
Snap-in socket; 5-pole; Cod. I; 4,00 mm²; blue

Item No.: 770-3105/011-000
Socket for PCBs; angled; 5-pole; Cod. I; blue

Item No.: 770-3105
Socket for PCBs; straight; 5-pole; Cod. I; blue

Item No.: 770-1105
Socket; 5-pole; Cod. I; 4,00 mm²; blue

Item No.: 770-1105/022-000
Socket; with strain relief housing; 5-pole; Cod. I; 4,00 mm²; blue

Continued on next page

1.1.5 Tap-off module

Item No.: 772-272
Tap-off module; for flat cable; 5 x 2.5 mm²; 5-pole; Cod. I; with cable connection on the output side; 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 Coding

1.3.1.1 Coding

Item No.: 770-401
Coding pin; for plugs; Plastic; gray

1.3.2 Cover

1.3.2.1 Cover

Item No.: 770-360
Lockout cap; for plugs; 5-pole; separable; yellow

Item No.: 897-2005
Protective cap; Type4; for sockets and plugs; PVC; red

1.3.3 Installation

1.3.3.1 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

1.3.4 Marking

1.3.4.1 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

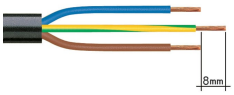
1.3.5 Tool

1.3.5.1 Operating tool

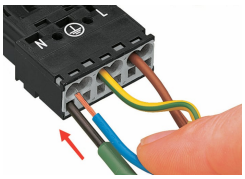
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

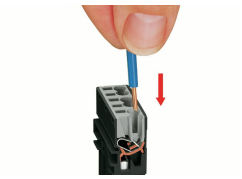
Conductor termination



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



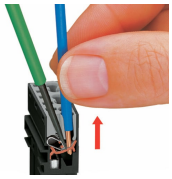
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.



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.

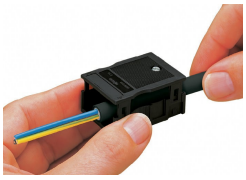
Conductor removal



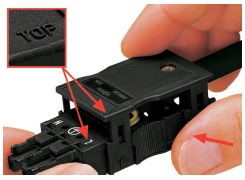
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Continued on next page

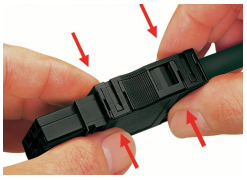
Installation



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).