

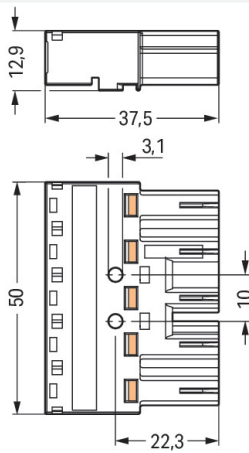
Data Sheet | Item Number: 770-1115

Plug; 5-pole; 4,00 mm²; blue

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



Color: ■ blue



Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

For power and signal transmission: The WINSTA® MIDI male connector/plug 5-pole. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to many different requirements in next to no time. 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!)). That results in the fact that users' fingers will never come into contact with energised elements. I coding in blue is used to mark WINSTA® MIDI pluggable installation connectors, which are used primarily in building automation for activating lighting. This pluggable installation connector is designed for a load of up to 25 A. As a result, it can also be used for high power loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is used in can be found in a variety of projects you can use for quick, easy and maximally flexible electrical installation.

WINSTA® MIDI solutions for your electrical installation – protected against mismating 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, even more reliable, and error-free. Use of this pre-assembled system decreases assembly times and errors during installation at the construction site. Choose quality and durability – with protection type IP20 from WAGO makes the electrical installation of electrical components substantially easier.

- protection against mismating eliminates errors
- pre-assembled versions
- with I coding for use in building automation (lighting control)
- ready to install and use immediately

- quick replacement of defective units during ongoing operation

Notes

General safety information	1. Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100). 2. Do not install while energized or under load. 3. Use only for its intended purpose. 4. Observe applicable national regulations, standards and directives. 5. Observe the technical specifications of the products. 6. Ensure correct polarity assignment. 7. Do not use damaged or contaminated components. 8. Observe conductor types, conductor cross-sections, strip lengths and cable diameters. 9. Insert conductors up to the stop. 10. Use only with locking lever and strain relief. 11. Use original accessories only. To be sold only with installation instructions!
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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	400 V	-	-				
Rated impulse withstand voltage	6 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	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 fer- rule	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 direc- tion	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		
Use		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!)

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 (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		0.272 MJ
Weight		15.8 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)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918254816
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121402
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 10.0	EC002560
ECCN	NO US CLASSIFICATION

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 Zertifikationsinstitut	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 Ship- ping	-	24-0095977-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 770-1115



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; white



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; 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 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

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 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



1.3.4 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



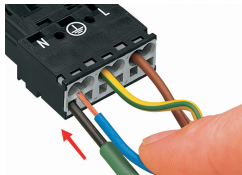
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

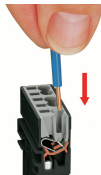
Conductor termination



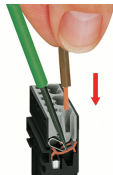
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

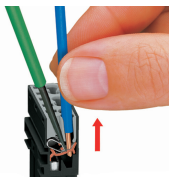


Insert the stripped solid conductor until it hits the backstop.



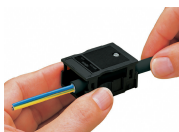
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

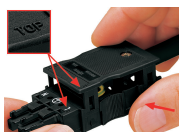


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

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!

Current addresses can be found at: www.wago.com