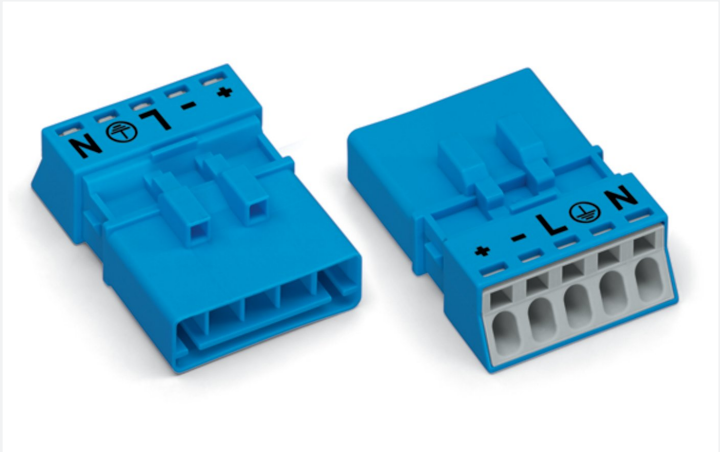
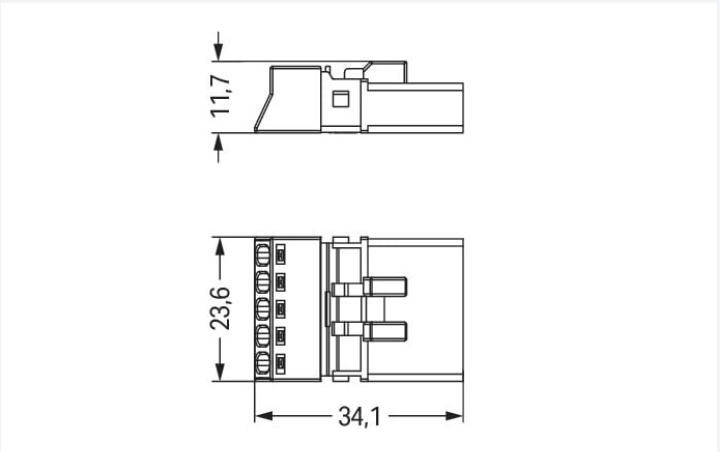
Data Sheet | Item Number: 890-1115

Plug; 5-pole; Cod. I; 1,50 mm²; blue

https://www.wago.com/890-1115



Color: blue



Dimensions in mm

Male connector/plug *WINSTA*® MINI I coding

The *WINSTA*® MINI male connector/plug I coding is the pluggable solution for your application in control cabinets, on PCBs or for lighting connections. WAGO pluggable installation connectors are useful when requirements repeat or are planned on a defined grid, for example for installing grid lighting or flush-mount lighting. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. Controlled lighting, as used in the DALI standard, for instance, is the main application of *WINSTA*® MINI pluggable installation connectors with I coding. *WINSTA*® MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is very good for lights, for instance, since due to LED technology, these offer significantly less space for the connection technology.

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 significantly reduces the need for servicing and lowers costs. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismating from WAGO.

- pluggable installation connectors with protection against mismating
- easy tool-free operation, a wide range of coding options
- with I coding for controlling light (DALI standard)
- 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	16 A	-	-

Approvals per	UL 1977
Rated voltage	600 V
Rated current	12 A

General information

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

Connection data

Clamping units	5
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	1.5 mm² / 16 AWG
Solid conductor	0.25 … 1.5 mm² / 22 … 16 AWG
Solid conductor; push-in termination	0.75 … 1.5 mm² / 20 … 16 AWG
Stranded conductor	0.25 … 1 mm² / 22 … 18 AWG
Fine-stranded conductor	0.25 … 1.5 mm² / 22 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 0.75 mm² / 22 … 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 … 0.75 mm² / 22 … 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm² / 20 AWG
Strip length	9 mm / 0.35 inches
Pole number	5
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	23.6 mm / 0.929 inches
Height	11.7 mm / 0.461 inches
Depth	34.1 mm / 1.343 inches

Mechanical data

Use	DALI, Lighting Management
Coding	I
Variable coding	No
Marking	+ - L ⏚ N
Potential marking	+ - 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; IP40 when mated with strain relief housing

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 (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	0.16 MJ
Weight	5.7 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 9.0	EC002560
ETIM 8.0	EC002560
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143548601
Customs tariff number	85366990990

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Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123231
CCA DEKRA Certification B.V.	IEC 61535	NL-85020
cURus Underwriters Laboratories Inc.	UL 1977	E45171

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	Steel Vessel Rules	19-HG1869855-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	08/20047 (E2)

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-1115			

Documentation

Bid Text

890-1115	19.02.2019	xml 2.93 KB	
890-1115	08.06.2015	doc 23.50 KB	

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CAD/CAE-Data

CAD data	CAE data
2D/3D Models 890-1115	WSCAD Universe 890-1115
	ZUKEN Portal 890-1115

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 891-8985/106-101
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.: 891-8985/006-101
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 connector

Item No.: 890-982
h-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; outputs on one side; 2 locking levers; blue

Item No.: 890-983
h-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; blue

Item No.: 890-617
T-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; 2 locking levers; blue

Item No.: 890-620
T-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; 3 locking levers; for flying leads; blue

1.1.3 Female connector/socket

Item No.: 890-2105
Snap-in socket; 5-pole; Cod. I; 1,50 mm²; blue

Item No.: 890-2105/006-000
Snap-in socket; without locking lever; 5-pole; Cod. I; 1,50 mm²; blue

Item No.: 890-3105/011-000
Socket for PCBs; angled; 5-pole; Cod. I; blue

Item No.: 890-3105
Socket for PCBs; straight; 5-pole; Cod. I; blue

Item No.: 890-1105
Socket; 5-pole; Cod. I; 1,50 mm²; blue

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system

Item No.: 890-111
Locking lever; for flying leads; for tool operation; black

Item No.: 890-131
Locking lever; for flying leads; for tool operation; white

Item No.: 890-101
Locking lever; for manual operation; black

Item No.: 890-121
Locking lever; for manual operation; white

1.2.2 Strain relief

1.2.2.1 Strain relief housing

Item No.: 890-505
Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 … 10.5 mm; 45 mm; black

Item No.: 890-515
Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 … 10.5 mm; 45 mm; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover

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.: 890-310
Mounting carrier; 2- to 5-pole; for flying leads; black

Item No.: 890-311
Mounting carrier; 2- to 5-pole; for flying leads; white

1.3.3 Shield termination

1.3.3.1 Shield termination

Item No.: 890-527
Shield connecting plate; 5-pole; for plugs

1.3.4 Tool

1.3.4.1 Operating tool

Item No.: 890-385
Operating tool; 5-way; green

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

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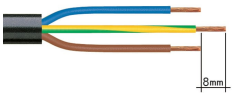
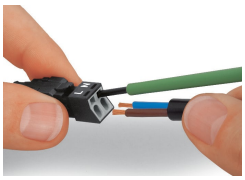
Installation Notes

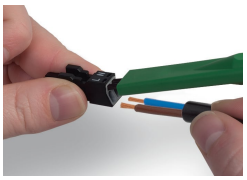
Conductor termination



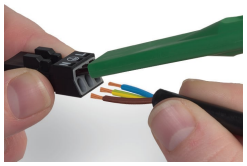
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.
Terminate solid conductors by simply pushing them in.

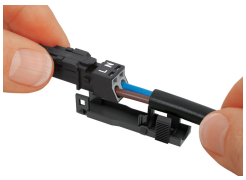


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.
Terminate solid conductors by simply pushing them in.



To terminate fine-stranded conductors, open clamping units via operating tool (890-383) and insert stripped conductors until they hit backstop.
Terminate solid conductors by simply pushing them in.

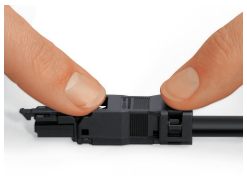
Installation



Latch the wired connector into the base of the strain relief housing.

Push down strain relief clamp by hand.

Push down strain relief clamp with 2.5 mm screwdriver alternately on both sides.



Latch the top of the strain relief housing.

The printed marking of the connector is clearly visible in the openings of the strain relief housing.

Shield termination

Connector with shield termination

Apply the shield to the sheathed cable.

Strip length, outer insulation = 30 mm
Shield length = 8 mm

Push the shield connecting plate into the connector until fully inserted.

First insert the wired connector into strain relief housing, then snap clamp and cover.