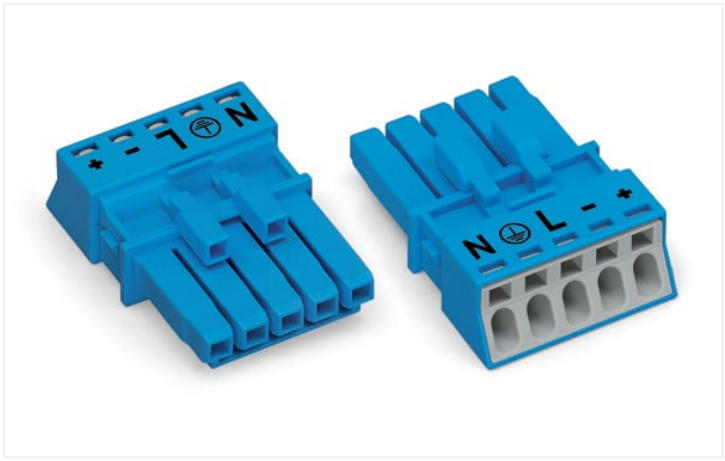
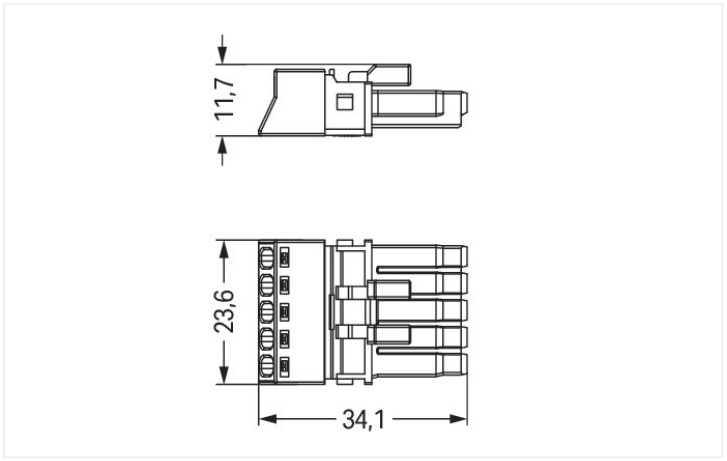
Data Sheet | Item Number: 890-1105

Socket; 5-pole; Cod. I; 1,50 mm²; blue

https://www.wago.com/890-1105



Color: blue



Dimensions in mm

Female connector/socket *WINSTA*® MINI rated current 16 A

The *WINSTA*® MINI female connector/socket rated current 16 A allows installation of fine-stranded and solid conductors. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow resource-efficient, error-free installation in a large number of possible uses. The coding options reduce installation errors, allowing fast, secure wiring of all components. *WINSTA*® MINI pluggable installation connectors with I coding in blue are particularly suitable for lighting management, for instance for the dimming function of DALI lights. *WINSTA*® MINI is our response to the trend toward miniaturisation. Our smallest pluggable connection system is primarily suited for lights, for example, since as a result of LED technology; due to complex systems, these offer significantly less space for the connection technology.

WINSTA® MINI solutions for your electrical installation – protected against mismating and maintenance-free

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Choose quality and durability – the *WINSTA*® MINI pluggable installation connector with marking from WAGO makes the installation of electrical components significantly easier.

- effective protection against mismating
- consistent IP40 protection
- with I coding for use in the automation of buildings (lighting control)
- custom-engineered solutions
- 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	16 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 5 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	12 A

General

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

Connection data

Connection points	5
Total number of potentials	5

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

Application	DALI, Lighting Management
Coding	I
Variable coding	No
Marking	N ⏚ L - +
Potential marking	N ⏚ L - +
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 with strain relief housing

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).

Continued on next page

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	0.154 MJ
Weight	6 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	PL
GTIN	4055143548588
Customs tariff number	85366990990

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	-	-

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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 890-1105

Documentation

Bid Text

890-1105	19.02.2019	xml 2.93 KB
890-1105	08.06.2015	doc 23.00 KB

CAD/CAE-Data

CAD data

2D/3D Models 890-1105

CAE data

WSCAD Universe 890-1105

ZUKEN Portal 890-1105

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 891-8985/206-101
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.: 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 Male connector/plug

Item No.: 890-3115/011-000
Plug for PCBs; angled; 5-pole; Cod. I; blue

Item No.: 890-3115
Plug for PCBs; straight; 5-pole; Cod. I; blue

Item No.: 890-1115
Plug; 5-pole; Cod. I; 1,50 mm²; blue

Item No.: 890-2115
Snap-in plug; 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.: 890-526
Shield connecting plate; 5-pole; for sockets

1.3.4 Tool

1.3.4.1 Operating tool

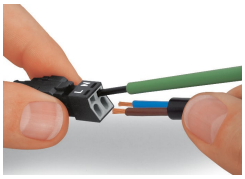
Item No.: 890-385
Operating tool; 5-way; green

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

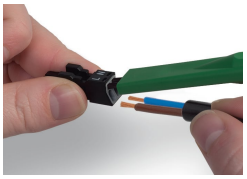
Installation Notes

Conductor termination

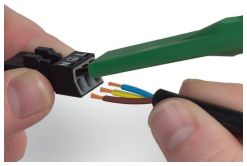
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

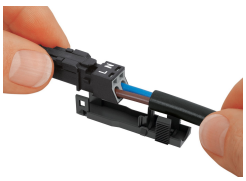


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.
Terminate solid conductors by simply pushing them in.



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.

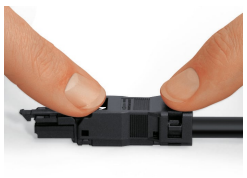
Installation



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.

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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.