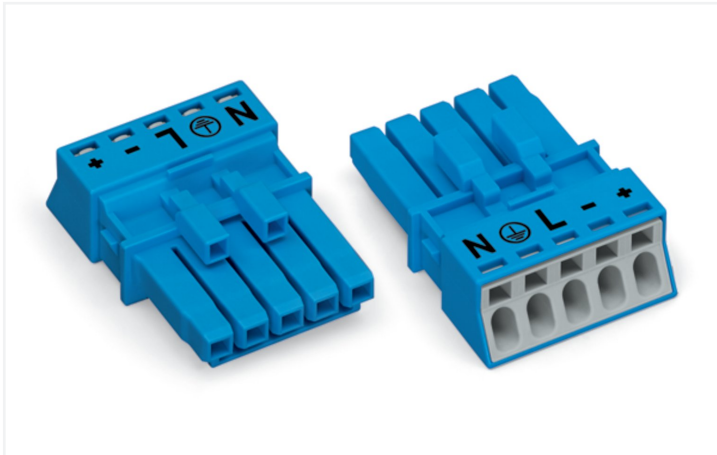


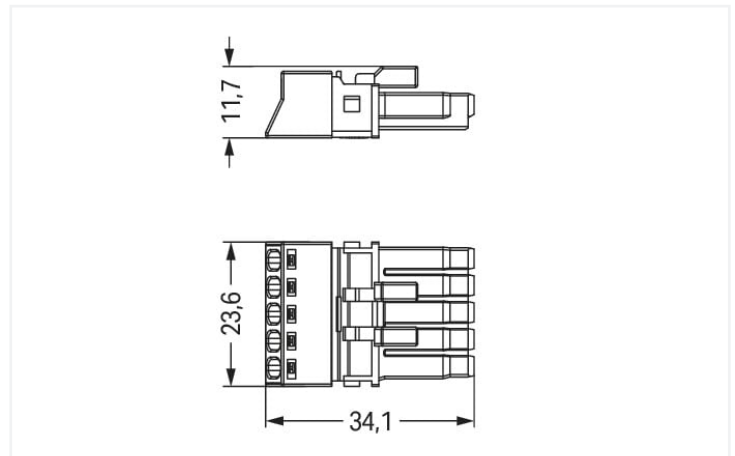
## Data Sheet | Item Number: 890-1105

Socket; 5-pole; Cod. I; 1,50 mm<sup>2</sup>; 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 I coding provides the foundation for installation of solid and fine-stranded conductors. Our pluggable installation connectors with spring pressure connection technology work completely without screw connections. They allow fast, efficient, error-free installation in numerous possible uses. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. I coding in blue is used to mark WINSTA® MINI pluggable installation connectors, which are used primarily in automation of buildings for activating lighting. Especially where space is tight, our smallest pluggable connection system, WINSTA® MINI, conveniently displays its advantageous properties. It saves space, and, with Push-in CAGE CLAMP® spring pressure connection technology, it also saves time, since the connection is low-maintenance and can be performed without screw connections.

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

The WINSTA® Pluggable Connection System is ideally tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, more reliable, and error-free. Use of this pre-assembled system reduces time spent on assembly and installation errors at the construction site. Choose quality and durability – with protection against mismatching from WAGO makes the installation of electrical components significantly easier.

- effective protection against mismatching
- consistent IP40 protection
- for lighting management
- flexible installation to save space
- 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                                              |  |                                                                                          |     |    |
| Rated voltage                                              |  | 600 V                                                                                    |     |    |
| Rated current                                              |  | 12 A                                                                                     |     |    |
| General information                                        |  |                                                                                          |     |    |
| Note on contact resistance                                 |  | approx. 1 mΩ of contact resistance<br>approx. 0.25 mΩ contact transition plug/<br>socket |     |    |
| Connection data                                            |  |                                                                                          |     |    |
| Clamping units                                             |  | 5                                                                                        |     |    |
| Total number of potentials                                 |  | 5                                                                                        |     |    |
| Connection 1                                               |  |                                                                                          |     |    |
| Connection technology                                      |  | Push-in CAGE CLAMP®                                                                      |     |    |
| Actuation type                                             |  | Operating tool<br>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                                                    |  | 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 <i>WINSTA</i> ® components are 100% protected against mismating when:<br>a.) plugging different numbers of poles<br>b.) plugging while rotated 180<br>c.) plugging while laterally staggered<br>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)               | <a href="#">Information on material specifications can be found here</a> |
| 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                          | 0.154 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 9.0              | EC002560      |
| ETIM 8.0              | EC002560      |
| PU (SPU)              | 50 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4055143548588 |
| Customs tariff number | 85366990990   |



| Environmental Product Compliance |                        |
|----------------------------------|------------------------|
| RoHS Compliance Status           | Compliant,No Exemption |

Approvals / Certificates

| General approvals                                                                                                                                                  |           |                  | Declarations of conformity and manufacturer's declarations |          |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------|------------------------------------------------------------|----------|------------------|
|   |           |                  |                                                            |          |                  |
| Approval                                                                                                                                                           | Standard  | Certificate Name | Approval                                                   | Standard | Certificate Name |
| CCA<br>DEKRA Certification B.V.                                                                                                                                    | EN 61535  | 71-123231        | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| CCA<br>DEKRA Certification B.V.                                                                                                                                    | IEC 61535 | NL-85020         | UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| cURus<br>Underwriters Laboratories<br>Inc.                                                                                                                         | UL 1977   | E45171           |                                                            |          |                  |

Approvals for marine applications

|    |                    |                  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|--|--|--|
| Approval                                                                                                                                                                                                                                             | Standard           | Certificate Name |  |  |  |
| ABS<br>American Bureau of Ship-<br>ping                                                                                                                                                                                                              | Steel Vessel Rules | 19-HG1869855-PDA |  |  |  |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd                                                                                                                                                                                                | -                  | TAE00001Z6       |  |  |  |
| LR<br>Lloyds Register                                                                                                                                                                                                                                | EN 61535           | 08/20047 (E2)    |  |  |  |

| Downloads                                    |                                                                                     |
|----------------------------------------------|-------------------------------------------------------------------------------------|
| Environmental Product Compliance             |                                                                                     |
| Compliance Search                            |                                                                                     |
| Environmental Product<br>Compliance 890-1105 |  |

| Documentation |            |                 |                                                                                     |
|---------------|------------|-----------------|-------------------------------------------------------------------------------------|
| Bid Text      |            |                 |                                                                                     |
| 890-1105      | 19.02.2019 | xml<br>2.93 KB  |  |
| 890-1105      | 08.06.2015 | doc<br>23.00 KB |  |

CAD/CAE-Data

| CAD data                                                                                                   | CAE data                                                                                                       |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 2D/3D Models<br>890-1105  | WSCAD Universe<br>890-1105  |
|                                                                                                            | ZUKEN Portal<br>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 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; blue



**Item No.: 891-8985/006-101**  
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. I; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; 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 mm<sup>2</sup>; blue



**Item No.: 890-2115**  
Snap-in plug; 5-pole; Cod. I; 1,50 mm<sup>2</sup>; 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

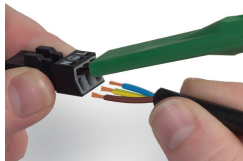
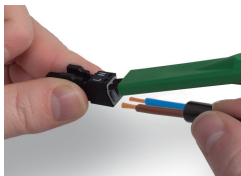
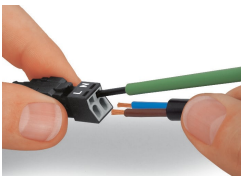


**Item No.: 890-385**  
Operating tool; 5-way; green

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

Installation Notes

Conductor termination



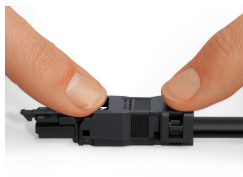
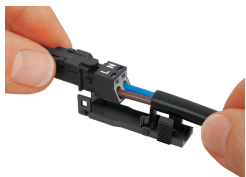
- 1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm

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.



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.