

Dimensions in mm

Male connector/plug *WINSTA*® MINI I coding

Use effective pluggable connections instead of laborious screw connections: With the *WINSTA*® MINI male connector/plug rated current 16 A. Our pluggable installation connectors with spring pressure connection technology function completely without screw connections. They allow flexible, error-free installation in a large number of possible uses. The mechanical coding and color 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 identify *WINSTA*® MINI pluggable installation connectors, which are used above all in automation of buildings for controlling lighting. Thanks to its particularly compact dimensions, our *WINSTA*® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is very suitable in very tight spaces, i.e., for installations when very little room is available.

Lower costs through fast commissioning and elimination of service expenses – solutions from *WINSTA*® MINI

*WINSTA*® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation costs without compromising quality and safety: The *WINSTA*® MINI pluggable installation connector with protection against mismatching reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismatching
- compact design for conductors with a cross-section up to 1.5 mm<sup>2</sup>
- for lighting management
- ready for immediate use
- rapid, structured electrical installation

**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) Δ Overvoltage category III / Pollution degree 3

**Ratings per UL**

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
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## Connection data

Total number of connection points	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 mm <sup>2</sup> / 16 AWG
Solid conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Solid conductor; push-in termination	0.75 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Stranded conductor	0.25 ... 1 mm <sup>2</sup> / 22 ... 18 AWG
Fine-stranded conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm <sup>2</sup> / 22 ... 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.75 mm <sup>2</sup> / 22 ... 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm <sup>2</sup> / 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, Lichtmanagement
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:
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

## 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)	<a href="#">Information on material data can be found here</a>
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
Fire load	0.121 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 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	50 Stück
Packaging type	Box
Country of origin VKOrg Germany	PL
GTIN	4055143548601
Customs tariff number VKOrg Germany	85366990990

### Approvals and certificates

#### Country specific Approvals



Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 61535	71-11299
CCA DEKRA Certification B.V.	IEC 61535	NL-64352

#### Ship Approvals



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

UL-Approvals



Approval	Standard	Certificate name
cURus Underwriters Laboratories Inc.	UL 1977	E45171

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 890-1115 <a href="#">↓</a>

Documentation

Bid Text			
890-1115	19.02.2019	xml 2.93 KB	<a href="#">↓</a>
890-1115	08.06.2015	doc 23.50 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data
2D/3D Models 890-1115 <a href="#">↓</a>

CAE data
WSCAD Universe 890-1115 <a href="#">↓</a>
ZUKEN Portal 890-1115 <a href="#">↓</a>

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 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 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

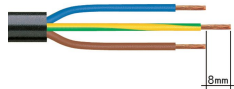


Item no.: 210-719

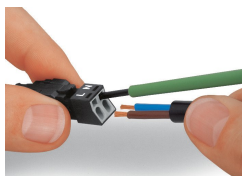
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

## Installation notes

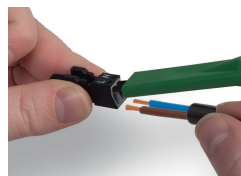
### Conductor termination



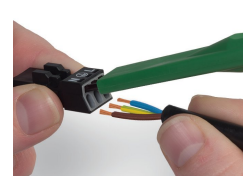
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

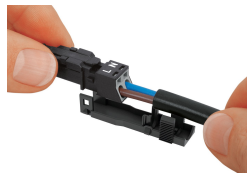


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop. Terminate solid conductors by simply pushing them in.



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



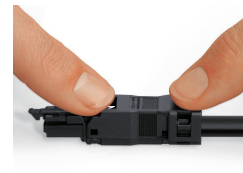
Latch the wired connector into the base of the strain relief housing.



Push down strain relief clamp by hand.



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

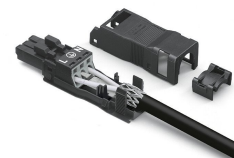


Latch the top of the strain relief housing.



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.