

## Item description

### Male connector/plug **WINSTA®** MIDI with protection against mismatching

The **WINSTA®** MIDI male connector/plug I coding allows assembly of solid and fine-stranded conductors. Our pluggable installation connectors with spring pressure connection technology work without screw connections. They allow fast, efficient, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector is protected against ingress by solid objects 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!)). I coding in blue is used to label **WINSTA®** MIDI pluggable installation connectors, which are used primarily in automation of buildings for activating lighting. The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – as a result it is also suitable for high power loads. **WINSTA®** MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in can be found in a variety of projects you can use for quick, easy, secure, tailored installation.

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

**WINSTA®** is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It allows fast, secure and,

Subject to changes. Please also observe the further product documentation!



above all, error-free installation of components and cables. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with marking from WAGO.

- effective protection against mismatching
- for automation controllers
- for intelligent, easy lighting installation
- exact dimensions
- convenient installation and commissioning

## Data

### 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	25 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 16 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	23 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

Connection points	10
Total number of potentials	5
PE function	Preceding PE contact

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## 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 ferrule	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 direction	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

Application	DALI, Lighting Management
Coding	I
Variable coding	No
Marking	DA+ DA- L $\perp$ N
Potential marking	DA+ DA- L $\perp$ 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!)

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## Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All <i>WINSTA</i> ® 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	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	0.365 MJ
Weight	15.7 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

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## 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	DE
GTIN	4044918254816
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61535	71- 123228
	CCA DEKRA Certification B.V.	IEC 61535	NL -84761
	cULus Underwriters Laboratories Inc.	UL 1977	E45171
	cULus Underwriters Laboratories Inc.	UL 1059	E 45172
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 61535	40029808


## Declarations of conformity and manufacturer's declarations

Certificate




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Logo	Approval	Additional Approval Text	name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1868589- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	IEC 61984	LR22429487TA

## Counterpart

	Item no.770-1105 Socket; 5-pole; Cod. I; 4,00 mm <sup>2</sup> ; blue	<a href="http://www.wago.com/770-1105">www.wago.com/770-1105</a>
	Item no.770-1105/022-000 Socket; with strain relief housing; 5-pole; Cod. I; 4,00 mm <sup>2</sup> ; blue	<a href="http://www.wago.com/770-1105/022-000">www.wago.com/770-1105/022-000</a>
	Item no.770-1947 5-way distribution connector; 5-pole; Cod. I; 1 input; 5 outputs; blue	<a href="http://www.wago.com/770-1947">www.wago.com/770-1947</a>
	Item no.770-2105 Snap-in socket; 5-pole; Cod. I; 4,00 mm <sup>2</sup> ; blue	<a href="http://www.wago.com/770-2105">www.wago.com/770-2105</a>
	Item no.770-3105 Socket for PCBs; straight; 5-pole; Cod. I; blue	<a href="http://www.wago.com/770-3105">www.wago.com/770-3105</a>
	Item no.770-3105/011-000 Socket for PCBs; angled; 5-pole; Cod. I; blue	<a href="http://www.wago.com/770-3105/011-000">www.wago.com/770-3105/011-000</a>
	Item no.770-617 T-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; 2 locking levers; blue	<a href="http://www.wago.com/770-617">www.wago.com/770-617</a>

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**Item no. 770-618**

3-way distribution connector; 5-pole; Cod. I; 1 input; 3 outputs; blue

[www.wago.com/770-618](http://www.wago.com/770-618)**Item no. 770-620**

T-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; 3 locking levers; for flying leads; blue

[www.wago.com/770-620](http://www.wago.com/770-620)**Item no. 770-7105**

Linect® T-connector; 5-pole; Cod. I; 1 input; 2 outputs; blue

[www.wago.com/770-7105](http://www.wago.com/770-7105)**Item no. 770-992**

h-distribution connector; 5-pole; Cod. I; 1 input; 2 outputs; outputs on both sides; 2 locking levers; blue

[www.wago.com/770-992](http://www.wago.com/770-992)**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

[www.wago.com/770-993](http://www.wago.com/770-993)**Item no. 771-9985/006-101**

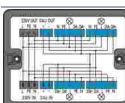
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. I; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; blue

[www.wago.com/771-9985/006-101](http://www.wago.com/771-9985/006-101)**Item no. 771-9985/106-101**

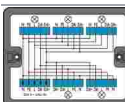
pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. I; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; blue

[www.wago.com/771-9985/106-101](http://www.wago.com/771-9985/106-101)**Item no. 772-272**

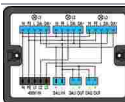
Tap-off module; for flat cable; 5 x 2.5 mm²; 5-pole; Cod. I; with cable connection on the output side; blue

[www.wago.com/772-272](http://www.wago.com/772-272)**Item no. 899-631/181-000**

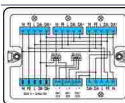
Distribution box; 230 V + DALI; 2 inputs; 6 outputs; Cod. A, I; MINI, MIDI; black

[www.wago.com/899-631/181-000](http://www.wago.com/899-631/181-000)**Item no. 899-631/313-000**

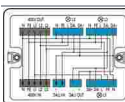
Distribution box; DALI; 1 input; 5 outputs; Cod. I; MIDI; black

[www.wago.com/899-631/313-000](http://www.wago.com/899-631/313-000)**Item no. 899-631/455-000**

Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; black

[www.wago.com/899-631/455-000](http://www.wago.com/899-631/455-000)**Item no. 899-681/146-000**

Distribution box; 230 V + DALI; 1 input; 7 outputs; Cod. I; MINI, MIDI; white

[www.wago.com/899-681/146-000](http://www.wago.com/899-681/146-000)**Item no. 899-681/147-000**

Distribution box; 400 V + DALI; 2 inputs; 5 outputs; Cod. A, I; MINI, MIDI; white

[www.wago.com/899-681/147-000](http://www.wago.com/899-681/147-000)

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## Required accessories

### Strain relief

#### 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

[www.wago.com/770-505/021-000](http://www.wago.com/770-505/021-000)



**Item no.: 770-505/023-000**

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

[www.wago.com/770-505/023-000](http://www.wago.com/770-505/023-000)



**Item no.: 770-505**

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

[www.wago.com/770-505](http://www.wago.com/770-505)



**Item no.: 770-515**

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

[www.wago.com/770-515](http://www.wago.com/770-515)



**Item no.: 770-515/023-000**

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

[www.wago.com/770-515/023-000](http://www.wago.com/770-515/023-000)



**Item no.: 770-515/021-000**

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white

[www.wago.com/770-515/021-000](http://www.wago.com/770-515/021-000)

### Locking levers

#### Locking system



**Item no.: 770-121**

Locking lever; for flying leads; for manual operation; white

[www.wago.com/770-121](http://www.wago.com/770-121)



**Item no.: 770-131**

Locking lever; for flying leads; for tool operation; white

[www.wago.com/770-131](http://www.wago.com/770-131)



**Item no.: 770-101**

Locking lever; for flying leads; for manual operation; black

[www.wago.com/770-101](http://www.wago.com/770-101)



**Item no.: 770-111**

Locking lever; for flying leads; for tool operation; black

[www.wago.com/770-111](http://www.wago.com/770-111)

## Optional accessories

### Tool

#### Operating tool

Subject to changes. Please also observe the further product documentation!



**Item no.: 210-719**

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

[www.wago.com/210-719](http://www.wago.com/210-719)**Cover**

Cover

**Item no.: 770-360**

Lockout cap; for plugs; 5-pole; separable; yellow

[www.wago.com/770-360](http://www.wago.com/770-360)**Item no.: 897-2005**

Protective cap; Type4; for sockets and plugs; PVC; red

[www.wago.com/897-2005](http://www.wago.com/897-2005)**Marking accessories**

Marker

**Item no.: 770-450/000-002**

Marker card; Plastic; yellow

[www.wago.com/770-450/000-002](http://www.wago.com/770-450/000-002)**Item no.: 770-450/000-001**

Marker card; Plastic; green

[www.wago.com/770-450/000-001](http://www.wago.com/770-450/000-001)**Item no.: 770-450/000-005**

Marker card; Plastic; red

[www.wago.com/770-450/000-005](http://www.wago.com/770-450/000-005)**Item no.: 770-450**

Marker card; Plastic; white

[www.wago.com/770-450](http://www.wago.com/770-450)**Item no.: 770-450/000-006**

Marker card; Plastic; blue

[www.wago.com/770-450/000-006](http://www.wago.com/770-450/000-006)**Item no.: 770-450/000-012**

Marker card; Plastic; orange

[www.wago.com/770-450/000-012](http://www.wago.com/770-450/000-012)**Mounting**

Mounting accessories

**Item no.: 770-320**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black

[www.wago.com/770-320](http://www.wago.com/770-320)**Item no.: 770-321**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black

[www.wago.com/770-321](http://www.wago.com/770-321)**Item no.: 770-340**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

[www.wago.com/770-340](http://www.wago.com/770-340)

Subject to changes. Please also observe the further product documentation!

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**Item no.: 770-341**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white

[www.wago.com/770-341](http://www.wago.com/770-341)**Coding**

Coding

**Item no.: 770-401**

Coding pin; for plugs; Plastic; gray

[www.wago.com/770-401](http://www.wago.com/770-401)**Downloads****Documentation****Bid Text**

770-1115	2019 Feb 19	xml	Download
X81 - Datei		3.0 kB	
770-1115	2015 Jun 8	doc	Download
doc - Datei		24.1 kB	
ausschreiben.de 770-1115		URL	Download

**CAD/CAE-Data****CAE data**

WSCAD Universe 770-1115	URL	Download
ZUKEN Portal 770-1115	URL	Download
EPLAN Data Portal 770-1115	URL	Download

**CAD data**

2D/3D Models 770-1115	URL	Download
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**Asset Administration Shell**

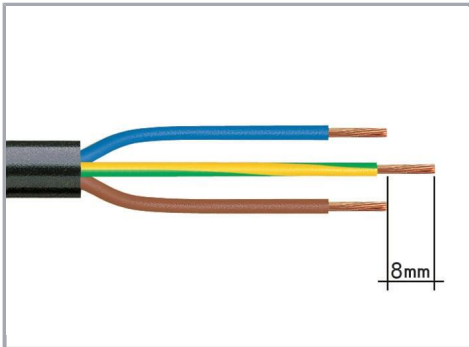
Asset Administration Shell 770-1115	URL	Download
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**Environmental Product Compliance****Compliance Search**

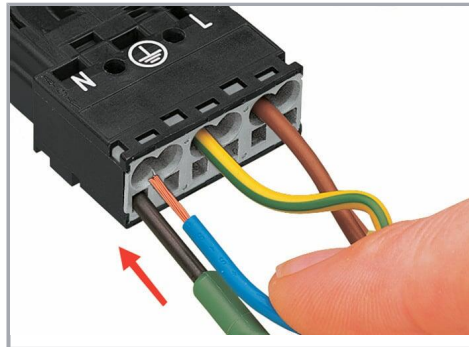
Subject to changes. Please also observe the further product documentation!

## Installation Notes

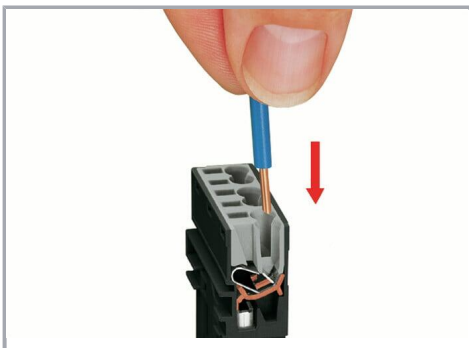
### Conductor termination



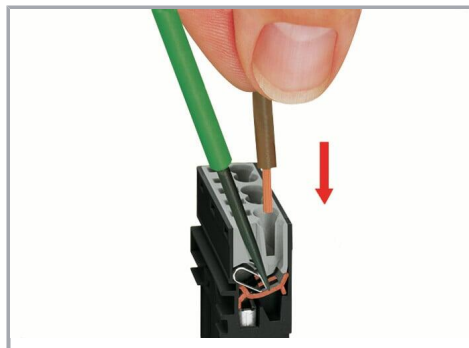
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.



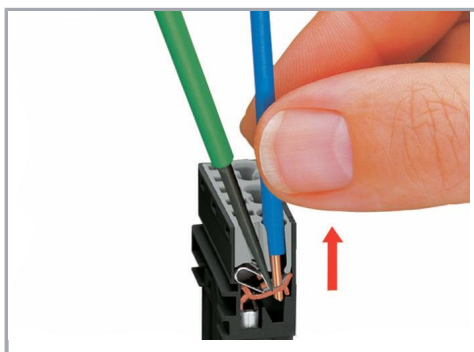
Insert the stripped solid conductor until it hits the backstop.



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.

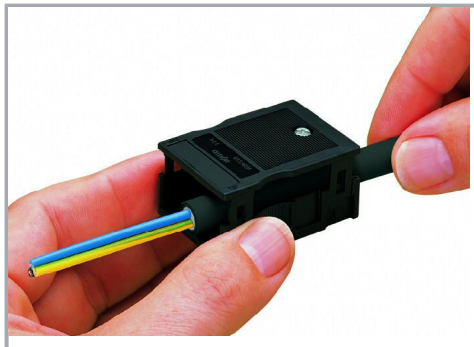
### Conductor removal

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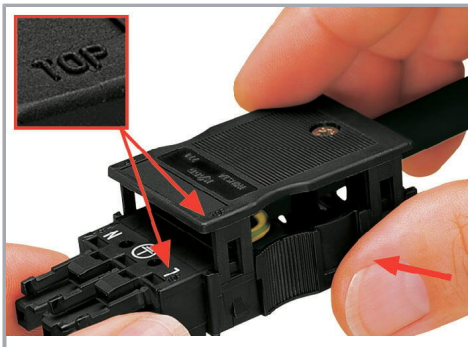


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

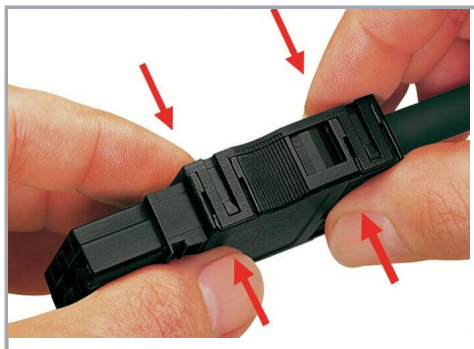
### Installation



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).

### Product family

Subject to changes. Please also observe the further product documentation!

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**WINSTA® MIDI**

Show all products from the family

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