

## Item description

- Protected against mismatching and maintenance-free
- Push-in CAGE CLAMP® spring pressure connection technology allows solid conductors to be simply pushed into a unit
- Two-wire connection per pole for loops or bridges
- Components can be clearly printed on and color-coded to meet custom requirements

### Note:

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).

### Note on mismatching protection:

All WINSTA® components are 100% protected against mismatching when:

- a.) plugging different numbers of poles
- b.) plugging while rotated 180
- c.) plugging while laterally staggered
- d.) plugging one pole

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

**Safety information 1:**

Application note for the U.S. market (USR): 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.

**Data****Electrical data**

Note on Contact Resistance

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

**Ratings per IEC/EN 60664-1**

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	250 V
Rated impulse voltage (III / 3)	4 kV
Rated current	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

**Approvals per UL 1977**

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	23 A

**Connection data**

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross section	4 mm²
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 ferrule with plastic collar	0,25 ... 1,5 mm² / 20 ... 16 AWG
Fine-stranded conductor with ferrule without plastic collar	0,25 ... 2,5 mm² / 20 ... 14 AWG
Fine-stranded conductor with ferrule, push-in termination, from	1,5 mm² / 16 AWG
Strip length	9 mm / 0.35 inch
Note (strip length)	see also packaging or instructions
No. of poles	2
Total number of connection points	4
Total number of potentials	2

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

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Conductor entry direction to mating direction

0°

## Geometrical Data

Pin spacing	10 mm / 0.394 inch
Width	20 mm / 0.787 inch
Height	12,9 mm / 0.508 inch
Depth	37,5 mm / 1.476 inch

## Mechanical data

Coding	B
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 100, with resistive load $I_N = 25$ A, tested (4 mm <sup>2</sup> /AWG 12)
Marking	1 2
Protection class	IP20
Note on protection class	In mated condition with strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas.)
Potential marking	1 2

## Plug connection

Contact type (pluggable connector)	Female connector/socket
Connector connection type	for conductor
Mismating protection	Yes
Locking of plug-in connection	locking lever
Locking lever	retrofittable

## Material Data

Color	pink
Insulating material	Polyamide 66 (PA 66)
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper or copper alloy (surface-treated)

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Fire load	0.114 MJ
Weight	6.6 g

## Environmental Requirements


Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on Continuous Service Temperature	Insulating parts for temperatures $\leq 105$ °C

## Commercial data




Product Group	20 (WINSTA)
Packaging type	BOX
Country of origin	DE
GTIN	4050821541905
Customs Tariff No.	85366990990

## Approvals / Certificates

### Country specific Approvals


Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61984	NL-32104
	CCA DEKRA Certification B.V.	EN 61984	2173495.01

### Ship Approvals

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	02/20050 (E6)

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## UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>cURus</b> Underwriters Laboratories Inc.	UL 1977	E45171 Sec. 9

## Counterpart

**Item no.770-1603**

T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; pink

[www.wago.com/770-1603](http://www.wago.com/770-1603)**Item no.770-1610**

h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; pink

[www.wago.com/770-1610](http://www.wago.com/770-1610)**Item no.770-1653**

h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; pink

[www.wago.com/770-1653](http://www.wago.com/770-1653)**Item no.770-1703**

T-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; pink

[www.wago.com/770-1703](http://www.wago.com/770-1703)**Item no.770-1706**

3-way distribution connector; 2-pole; Cod. B; 1 input; 3 outputs; pink

[www.wago.com/770-1706](http://www.wago.com/770-1706)**Item no.770-1660**

h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; pink

[www.wago.com/770-1660](http://www.wago.com/770-1660)**Item no.770-1753**

h-distribution connector; 2-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; pink

[www.wago.com/770-1753](http://www.wago.com/770-1753)

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**Item no. 770-292**Plug; 2-pole; Cod. B; 4,00 mm<sup>2</sup>; pink[www.wago.com/770-292](http://www.wago.com/770-292)**Item no. 771-8992/005-107**pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. B; Control cable 2 x 1.0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; pink[www.wago.com/771-8992/005-107](http://www.wago.com/771-8992/005-107)**Item no. 771-8992/205-107**pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. B; Control cable 2 x 1.0 mm<sup>2</sup>; 1 m; 1,00 mm<sup>2</sup>; pink[www.wago.com/771-8992/205-107](http://www.wago.com/771-8992/205-107)

## Compatible products

### Locking lever

**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)**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)

### tools

**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)**Item no.: 770-382**

Operating tool; 2-way; green

[www.wago.com/770-382](http://www.wago.com/770-382)

### Strain relief plate

**Item no.: 770-502/041-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; black

[www.wago.com/770-502/041-000](http://www.wago.com/770-502/041-000)**Item no.: 770-502/042-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; black

[www.wago.com/770-502/042-000](http://www.wago.com/770-502/042-000)**Item no.: 770-512/041-000**

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; white

[www.wago.com/770-512/041-000](http://www.wago.com/770-512/041-000)

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Item no.: 770-512/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; white

[www.wago.com/770-512/042-000](http://www.wago.com/770-512/042-000)

#### protection



Item no.: 770-201

Lockout cap; 12-pole, separable; 12-pole; for sockets; black

[www.wago.com/770-201](http://www.wago.com/770-201)

Item no.: 770-221

Lockout cap; for socket; 12-pole; separable; white

[www.wago.com/770-221](http://www.wago.com/770-221)

#### General accessories



Item no.: 770-317

Snap-in frame; 2-pole; 0.5 ... 2.0 mm; black

[www.wago.com/770-317](http://www.wago.com/770-317)



Item no.: 770-337

Snap-in frame; 2-pole; 0.5 ... 2.0 mm; black

[www.wago.com/770-337](http://www.wago.com/770-337)

## Downloads

### CAD/CAE-Data

#### CAD data

	URL	Download
2D/3D Models 770-282		

#### CAE data

EPLAN Data Portal 770-282	URL	Download
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WSCAD Universe 770-282	URL	Download
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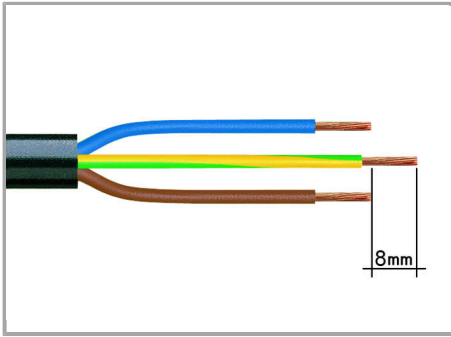
## Installation Notes

### Conductor termination

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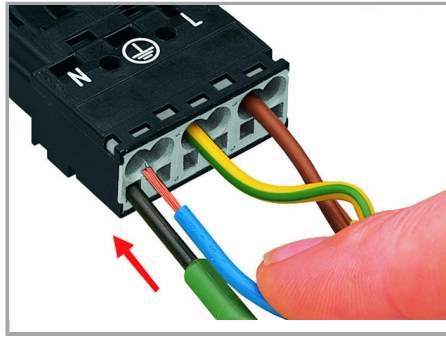
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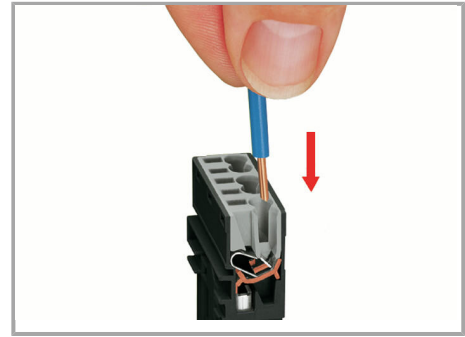
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)

2. Strip length = 9 mm

3. Extended ground conductor = 8 mm



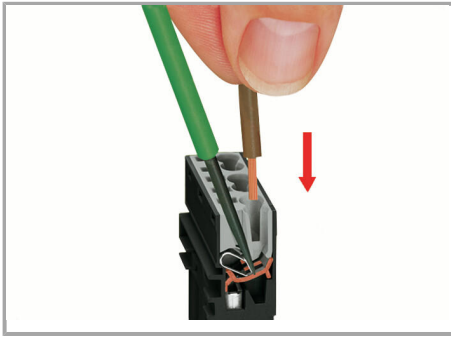
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert stripped conductor until it hits backstop.



Insert stripped solid conductor until it hits backstop.

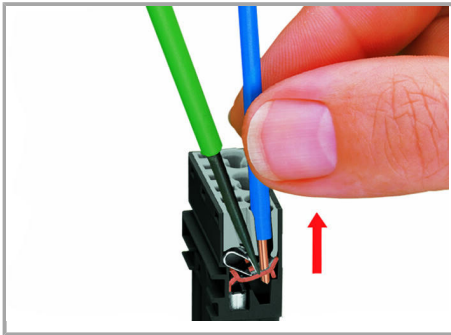
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To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert stripped conductor until it hits backstop.

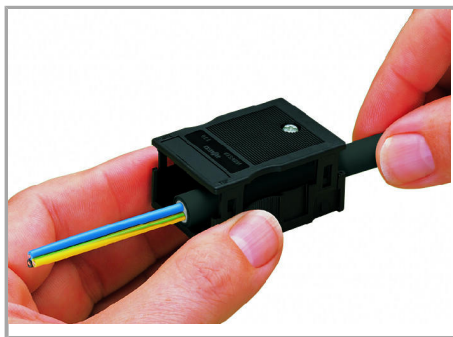
#### Conductor removal



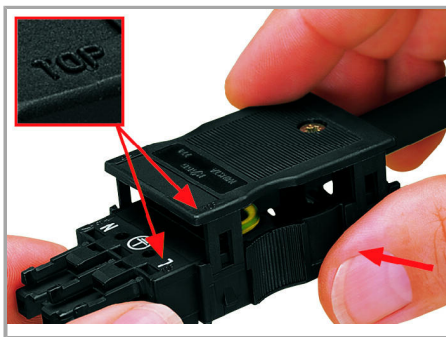
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

#### Installation

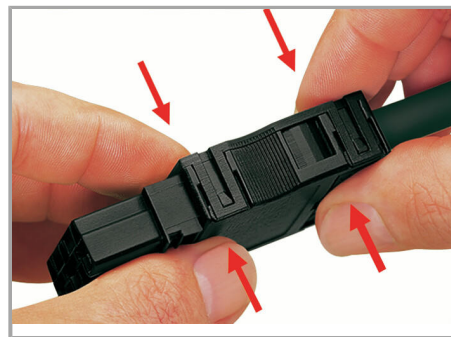
Subject to changes. Please also observe the further product documentation!



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 on the plug /socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.

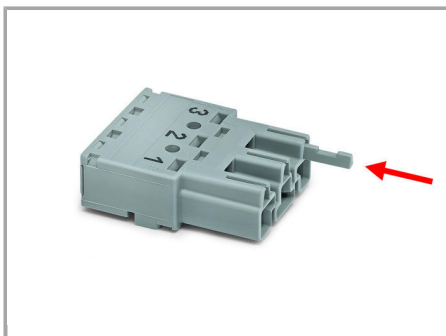


Tighten strain relief screw via screwdriver (2.5 mm blade width).

### Coding



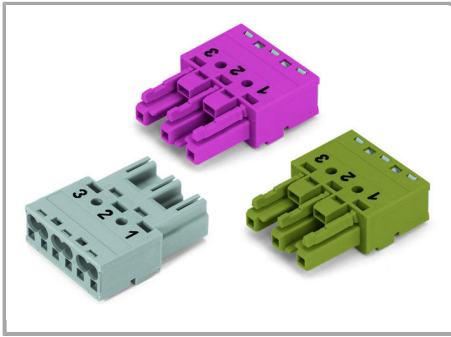
Simply cut off the coding pin from the socket.



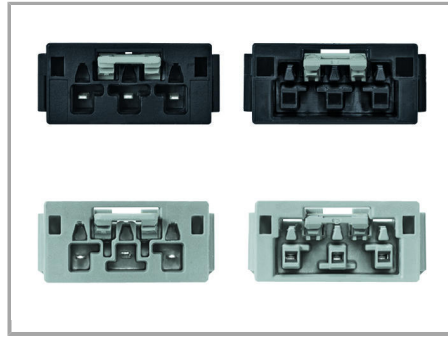
Insert coding pin into plug (break first) until it engages.

### Mismatching protection

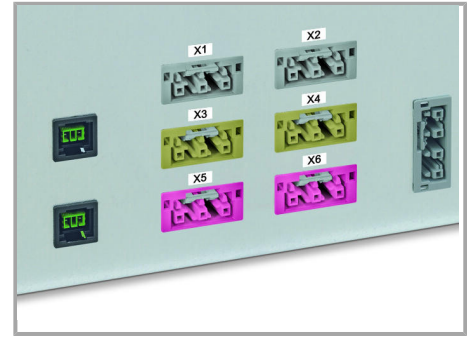
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B-coded connectors with different colors can be plugged together.



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.



Easy circuit identification via different marking and colors

**Important note:**

Different colors and/or pole marking are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.

**Product family**

**<i>WINSTA</i>® MIDI special**

[Show all products from the family](#)

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