

## 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
- Additional variable coding is possible
- 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

### Safety information 1:

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



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)         | 400 V                                                     |
| Rated impulse voltage (III / 3) | 6 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<br>Push-in                    |
| Nominal cross section                                           | 4 mm <sup>2</sup>                            |
| Solid conductor                                                 | 0,5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG    |
| Solid conductor, push-in termination                            | 1,5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG    |
| Stranded conductor                                              | 0,5 ... 2,5 mm <sup>2</sup> / 20 ... 14 AWG  |
| Fine-stranded conductor                                         | 0,5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG    |
| Fine-stranded conductor with ferrule with plastic collar        | 0,25 ... 1,5 mm <sup>2</sup> / 20 ... 16 AWG |
| Fine-stranded conductor with ferrule without plastic collar     | 0,25 ... 2,5 mm <sup>2</sup> / 20 ... 14 AWG |
| Fine-stranded conductor with ferrule, push-in termination, from | 1,5 mm <sup>2</sup> / 16 AWG                 |
| Strip length                                                    | 9 mm / 0.35 inch                             |
| Note (strip length)                                             | see also packaging or instructions           |
| No. of poles                                                    | 4                                            |
| Total number of connection points                               | 8                                            |
| Total number of potentials                                      | 4                                            |
| Conductor entry direction to mating direction                   | 0°                                           |

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

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## Geometrical Data

|             |                      |
|-------------|----------------------|
| Pin spacing | 10 mm / 0.394 inch   |
| Width       | 40 mm / 1.575 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<br>100, with resistive load $I_N = 25$ A, tested (4 mm <sup>2</sup> /AWG 12)                                   |
| Marking                                 | N 2/L 1/L'                                                                                                                                 |
| 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                       | N 2/L 1/L'                                                                                                                                 |

## Plug connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type          | for conductor       |
| Mismating protection               | Yes                 |
| Locking of plug-in connection      | locking lever       |
| Locking lever                      | retrofitable        |

## Material Data

|                          |                                          |
|--------------------------|------------------------------------------|
| Color                    | gray                                     |
| Insulating material      | Polyamide 66 (PA 66)                     |
| Clamping spring material | Chrome nickel spring steel (CrNi)        |
| Contact material         | Copper or copper alloy (surface-treated) |
| Fire load                | 0.252 MJ                                 |

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

|        |      |
|--------|------|
| Weight | 13 g |
|--------|------|

### Environmental Requirements


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

### Commercial data

|                    |               |
|--------------------|---------------|
| Packaging type     | BOX           |
| Country of origin  | DE            |
| GTIN               | 4050821492764 |
| Customs Tariff No. | 85366990990   |

### Approvals / Certificates

#### UL-Approvals

| Logo                                                                              | Approval                                | Additional Approval Text | Certificate name |
|-----------------------------------------------------------------------------------|-----------------------------------------|--------------------------|------------------|
|  | cURus<br>Underwriters Laboratories Inc. | UL 1977                  | E45171<br>Sec. 9 |

### Counterpart



Item no.770-744/060-000  
Snap-in socket; 4-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

[www.wago.com/770-744/060-000](http://www.wago.com/770-744/060-000)



Item no.770-244/060-000  
Socket; 4-pole; Cod. B; 4,00 mm<sup>2</sup>; gray

[www.wago.com/770-244/060-000](http://www.wago.com/770-244/060-000)



Item no.770-844/011-000/060-000  
Socket for PCBs; angled; 4-pole; Cod. B; gray

[www.wago.com/770-844/011-000/060-000](http://www.wago.com/770-844/011-000/060-000)




Item no.770-844/060-000  
Socket for PCBs; straight; 4-pole; Cod. B; gray

[www.wago.com/770-844/060-000](http://www.wago.com/770-844/060-000)


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

## Compatible products

### Locking lever

|                                                                                  |                                                                                          |                                                                |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | <b>Item no.: 770-101</b><br>Locking lever; for flying leads; for manual operation; black | <a href="http://www.wago.com/770-101">www.wago.com/770-101</a> |
|                                                                                  | <b>Item no.: 770-111</b><br>Locking lever; for flying leads; for tool operation; black   | <a href="http://www.wago.com/770-111">www.wago.com/770-111</a> |
|                                                                                  | <b>Item no.: 770-121</b><br>Locking lever; for flying leads; for manual operation; white | <a href="http://www.wago.com/770-121">www.wago.com/770-121</a> |
|                                                                                  | <b>Item no.: 770-131</b><br>Locking lever; for flying leads; for tool operation; white   | <a href="http://www.wago.com/770-131">www.wago.com/770-131</a> |

### Marking accessories

|                                                                                    |                                                                 |                                                                                |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------|
|    | <b>Item no.: 770-450</b><br>Marker card; Plastic; white         | <a href="http://www.wago.com/770-450">www.wago.com/770-450</a>                 |
|  | <b>Item no.: 770-450/000-001</b><br>Marker card; Plastic; white | <a href="http://www.wago.com/770-450/000-001">www.wago.com/770-450/000-001</a> |
|  | <b>Item no.: 770-450/000-002</b><br>Marker card; Plastic; white | <a href="http://www.wago.com/770-450/000-002">www.wago.com/770-450/000-002</a> |
|                                                                                    | <b>Item no.: 770-450/000-005</b><br>Marker card; Plastic; white | <a href="http://www.wago.com/770-450/000-005">www.wago.com/770-450/000-005</a> |
|  | <b>Item no.: 770-450/000-006</b><br>Marker card; Plastic; white | <a href="http://www.wago.com/770-450/000-006">www.wago.com/770-450/000-006</a> |
|  | <b>Item no.: 770-450/000-012</b><br>Marker card; Plastic; white | <a href="http://www.wago.com/770-450/000-012">www.wago.com/770-450/000-012</a> |

### protection

|  |                                                                               |                                                                |
|--|-------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | <b>Item no.: 770-360</b><br>Lockout cap; for plugs; 5-pole; separable; yellow | <a href="http://www.wago.com/770-360">www.wago.com/770-360</a> |
|--|-------------------------------------------------------------------------------|----------------------------------------------------------------|

### tools

|  |                                                                                                   |                                                                |
|--|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | <b>Item no.: 210-719</b><br>Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft | <a href="http://www.wago.com/210-719">www.wago.com/210-719</a> |
|--|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------|

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

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### Strain relief plate

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Item no.: 770-504

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

[www.wago.com/770-504](http://www.wago.com/770-504)



Item no.: 770-504/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

[www.wago.com/770-504/023-000](http://www.wago.com/770-504/023-000)



Item no.: 770-514

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

[www.wago.com/770-514](http://www.wago.com/770-514)



Item no.: 770-514/023-000

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

[www.wago.com/770-514/023-000](http://www.wago.com/770-514/023-000)

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## Downloads

### CAD/CAE-Data

#### CAD data

2D/3D Models 770-254/060-000

[URL](#)

[Download](#)

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#### CAE data

WSCAD Universe 770-254/060-000

[URL](#)

[Download](#)

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## Installation Notes

### Conductor termination

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

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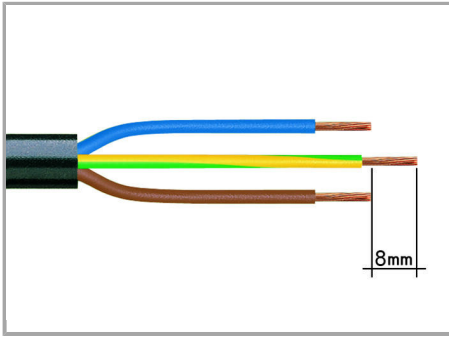
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Do you have any questions about our products?

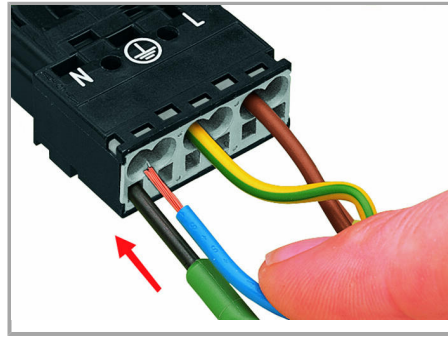
We are always happy to take your call at +49 (571) 887-44222.



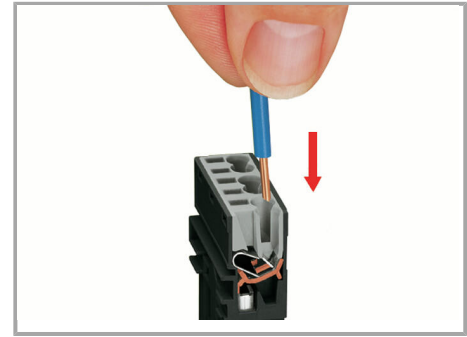
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)

2. Strip length = 9 mm

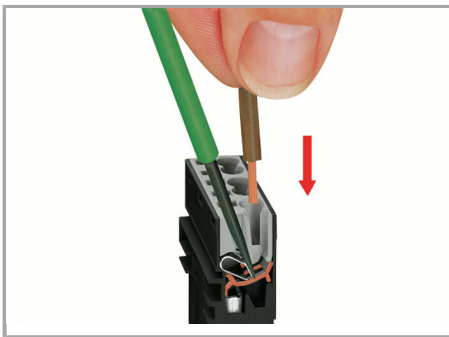
3. Extended ground conductor = 8 mm



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.



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

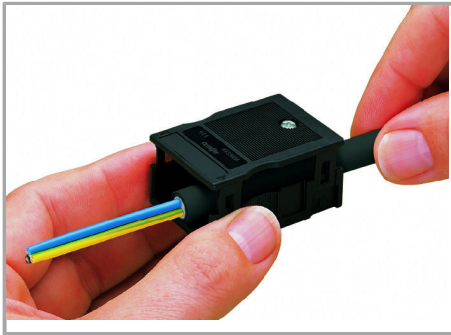
#### Conductor removal

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

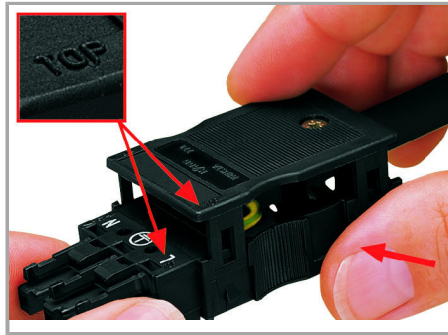


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

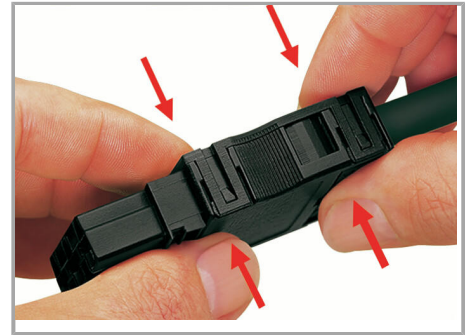
### Installation



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



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

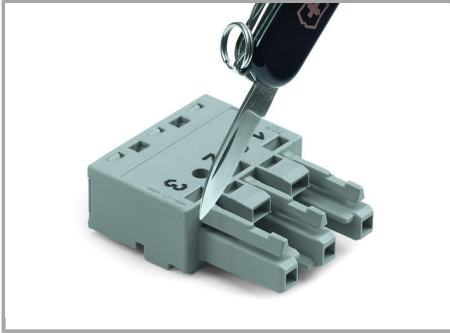


Tighten strain relief screw via screwdriver (2.5 mm blade width).

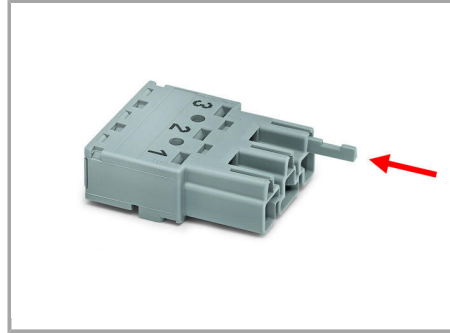
Subject to changes. Please also observe the further product documentation!



### Coding

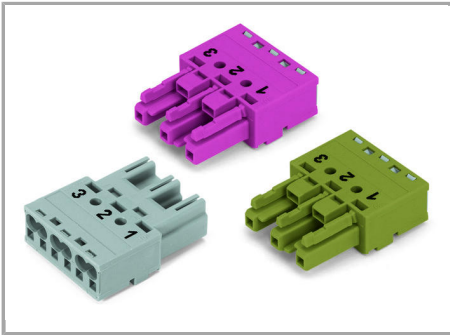


Simply cut off the coding pin from the socket.

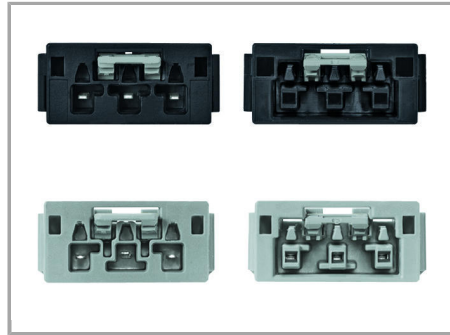


Insert coding pin into plug (break first) until it engages.

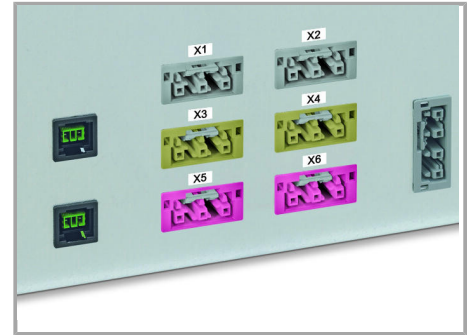
### Mismatching protection



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

*WINSTA*® MIDI special

[Show all products from the family](#)

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

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