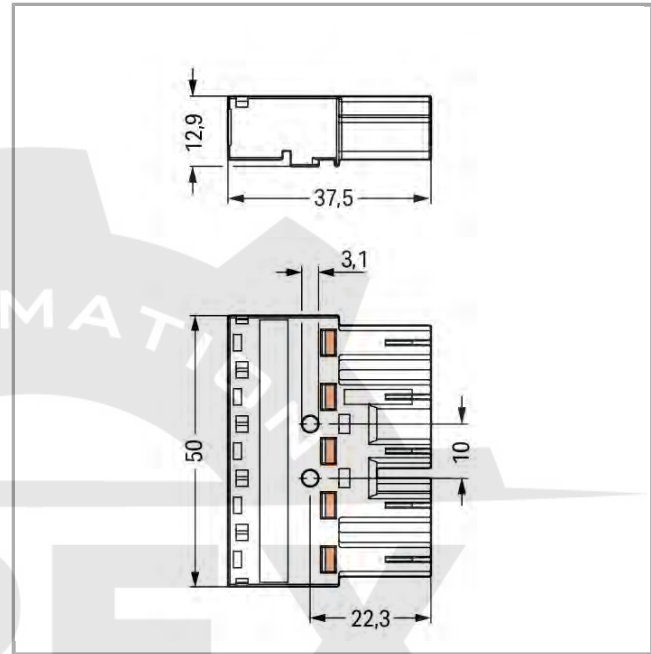
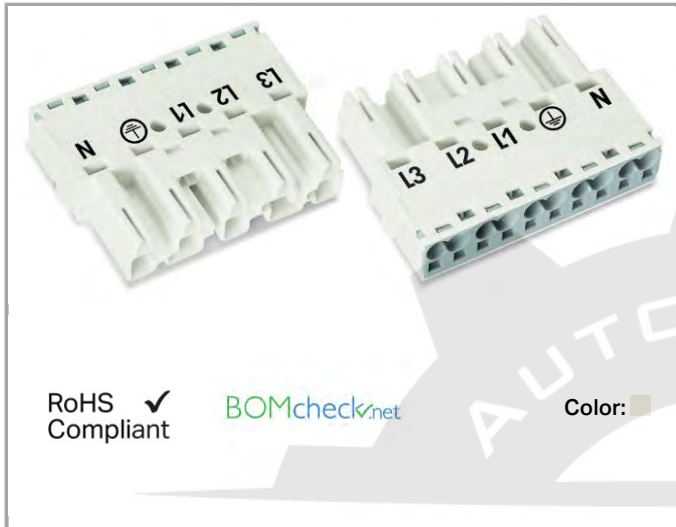




## Item description

- 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

## 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).

## 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 contact resistance

approx. 0.25 mΩ contact transition plug/socket

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

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 400 V |
| Rated impulse voltage (III / 3) | 6 kV  |
| Rated current                   | 25 A  |

**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 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   |
| Strip length                                                | 9 mm / 0.35 inch                   |
| Note (strip length)                                         | see also packaging or instructions |
| No. of poles                                                | 5                                  |
| Total number of connection points                           | 10                                 |
| Total number of potentials                                  | 5                                  |
| Ground function                                             | with preceding GND contact         |
| Conductor entry direction to mating direction               | 0°                                 |

**Geometrical Data**

|             |                      |
|-------------|----------------------|
| Pin spacing | 10 mm / 0.394 inch   |
| Width       | 50 mm / 1.969 inch   |
| Height      | 12.9 mm / 0.508 inch |
| Depth       | 37.5 mm / 1.476 inch |

## Mechanical data

|                                         |                                                                                                                                          |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Coding                                  | A                                                                                                                                        |
| Mating force of a plug-in connection    | approx. 20 ... 70 N (depending on pole number)                                                                                           |
| Retention force of a plug-in connection | When locked: > 80 N                                                                                                                      |
| Unmating force of a plug-in connection  | when unlocked: approx. 20 ... 70 N (depending on pole number)                                                                            |
| Number of mating cycles                 | 200, without resistive load<br><br>100, with resistive load $I_N = 25A$ , tested (4 mm <sup>2</sup> /AWG 12)                             |
| Marking                                 | N L1 L2 L3                                                                                                                               |
| Protection class                        | IP20                                                                                                                                     |
| Note on protection class                | Only in mated condition with strain relief housing (These compact connectors are not designed for use in open, easily accessible areas.) |
| Potential marking                       | N L1 L2 L3                                                                                                                               |

## Plug connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type          | for conductors      |
| Mismating protection               | Yes                 |
| Locking of plug-in connection      | locking lever       |
| Locking lever                      | no                  |

## Material Data

|                             |                                         |
|-----------------------------|-----------------------------------------|
| Color                       | white                                   |
| Insulating material         | Polyamide 66 (PA 66)                    |
| Flammability class per UL94 | V0                                      |
| Clamping spring material    | Chrome nickel spring steel (CrNi)       |
| Contact material            | Copper or copper alloy, surface-treated |
| Fire load                   | 0.317 MJ                                |
| Weight                      | 16.326 g                                |

## Environmental Requirements

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

## Commercial data

|                    |               |
|--------------------|---------------|
| Product Group      | 20 (WINSTA)   |
| Country of origin  | DE            |
| GTIN               | 4044918254601 |
| Customs Tariff No. | 85366990990   |

## Approvals / Certificates

## Country specific Approvals

| Logo                                                                             | Approval                                     | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|----------------------------------------------|--------------------------|------------------|
|                                                                                  | CCA<br>DEKRA Certification B.V.              | IEC 61535                | NL-32105         |
|  | CCA<br>DEKRA Certification B.V.              | EN 61535                 | 2173495.02       |
|  | VDE<br>VDE Prüf- und Zertifizierungsinstitut | EN 61984                 | 40002889         |

## Ship Approvals

| Logo                                                                                | Approval                                         | Additional Approval Text | Certificate name         |
|-------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|--------------------------|
|   | ABS<br>American Bureau of Shipping               | -                        | 14-<br>HG1241528-<br>PDA |
|   | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE00001Z6               |
|   | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE00001Z6               |
|  | LR<br>Lloyds Register                            | IEC 61984                | 02/20050<br>(E6)         |

## UL-Approvals

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



## Compatible products

## Locking lever

|                                                                                   |                                                                                   |         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|
|   | <b>Item no.: 770-101</b><br>Locking lever; for flying leads; for manual operation | 770-101 |
|   | <b>Item no.: 770-111</b><br>Locking lever; for flying leads; for tool operation   | 770-111 |
|   | <b>Item no.: 770-121</b><br>Locking lever; for flying leads; for manual operation | 770-121 |
|  | <b>Item no.: 770-131</b><br>Locking lever; for flying leads; for tool operation   | 770-131 |

## Coding

|                                                                                    |                                                            |         |
|------------------------------------------------------------------------------------|------------------------------------------------------------|---------|
|  | <b>Item no.: 770-401</b><br>Coding pin; for plugs; Plastic | 770-401 |
|------------------------------------------------------------------------------------|------------------------------------------------------------|---------|

## Strain relief plate

|                                                                                    |                                                                                                         |                     |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------|
|  | <b>Item no.: 770-505</b><br>Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm         | 770-505             |
|  | <b>Item no.: 770-505/021-000</b><br>Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm | 770-505<br>/021-000 |
|  | <b>Item no.: 770-505/023-000</b><br>Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm  | 770-505<br>/023-000 |
|  | <b>Item no.: 770-515</b><br>Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm         | 770-515             |
|  | <b>Item no.: 770-515/021-000</b><br>Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm | 770-515<br>/021-000 |
|  | <b>Item no.: 770-515/023-000</b><br>Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm  | 770-515<br>/023-000 |

## protection



Item no.: 770-360  
Lockout cap; for plugs; 5-pole; separable

770-360

## Marking accessories



Item no.: 770-450  
Marker card; Plastic

770-450



Item no.: 770-450/000-001  
Marker card; Plastic

770-450

/000-001



Item no.: 770-450/000-002  
Marker card; Plastic

770-450

/000-002



Item no.: 770-450/000-005  
Marker card; Plastic

770-450

/000-005



Item no.: 770-450/000-006  
Marker card; Plastic

770-450

/000-006



Item no.: 770-450/000-012  
Marker card; Plastic

770-450

/000-012

## tools



Item no.: 210-720  
Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

210-720



Item no.: 770-100  
Wiring aid; for solid and stranded conductors

770-100

## Downloads

## Documentation

## Bid Text

770-235  
WINSTA MIDI 5-polig

Apr 4, 2012

doc  
24.1 kB

Download

## CAD/CAE - Smart Data

## CAD data

3D Download 770-235

URL

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Subject to changes.

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