

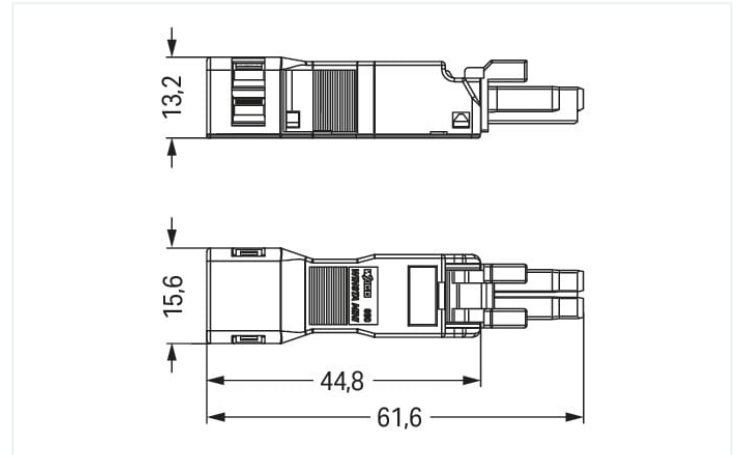
Data Sheet | Item Number: 890-102

Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black

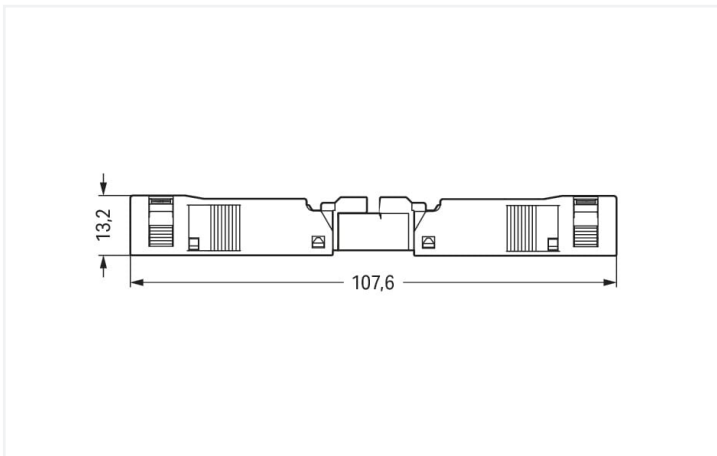
<https://www.wago.com/890-102>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

Female connector/socket WINSTA® MINI 2-pole



The WINSTA® MINI female connector/socket with protection against mismating allows installation of fine-stranded and solid conductors. WAGO pluggable installation connectors are used when specifications repeat or are distributed on a specific grid, for example for installing grid lighting or flush-mount lighting. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector is protected in accordance with protection type IP40. Users' hands and tools will never come into contact with live elements. Standard mains applications for almost any domain of use can be implemented with WINSTA® MINI pluggable installation connectors with A coding. Particularly where space is tight, our smallest pluggable connection system, WINSTA® MINI, consistently displays its advantageous properties. It is very compact, and, with Push-in CAGE CLAMP® spring pressure connection technology, it also saves time, since the installation is low-maintenance and requires no screw connections. A range up to 32 mm can be used for the strip length.

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Choose quality and durability – with strain relief hosting from WAGO makes the electrical installation of electrical components noticeably easier.

- effective protection against mismating
- consistent IP40 protection
- with A coding for use in many general mains applications
- custom-engineered solutions
- fast, secure installation

This item includes:

| | | | |
|-----------------------------------------------------------------------------------|---|---------------------------------------------------------------------------------------------|---|
|  | |  | |
| Item No.: 890-202 | 1 | Item No.: 890-502 | 1 |
| Socket; 2-pole; Cod. A; 1,50 mm ² ; black | | Strain relief housing; 2-pole; with locking clip; for 1 cable; 3.8 ... 8.2 mm; 30 mm; black | |

Electrical data

| Ratings per | | | | IEC/EN 60664-1 | | Approvals per | | UL 1977 | |
|----------------------|--|--|--|----------------|-----|---------------|--|---------------|-------|
| Overvoltage category | | | | III | III | II | | Rated voltage | 600 V |
| Pollution degree | | | | 3 | 2 | 2 | | Rated current | 14 A |
| Nominal voltage | | | | 250 V | - | - | | | |
| Rated surge voltage | | | | 4 kV | - | - | | | |
| Rated current | | | | 16 A | - | - | | | |

| General information | |
|----------------------------|---------------------------------------------------------------------------------------|
| Note on contact resistance | approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket |

Connection data

| | | | |
|----------------------------|---|------------------------------------------------------------|-----------------------------------------------|
| Connection points | 2 | Connection 1 | |
| Total number of potentials | 2 | Connection technology | Push-in CAGE CLAMP® |
| | | Actuation type | Operating tool Push-in |
| | | Nominal cross-section | 1.5 mm ² / 16 AWG |
| | | Solid conductor | 0.25 ... 1.5 mm ² / 22 ... 16 AWG |
| | | Solid conductor; push-in termination | 0.75 ... 1.5 mm ² / 20 ... 16 AWG |
| | | Stranded conductor | 0.25 ... 1 mm ² / 22 ... 18 AWG |
| | | Fine-stranded conductor | 0.25 ... 1.5 mm ² / 22 ... 16 AWG |
| | | Fine-stranded conductor; with insulated ferrule | 0.25 ... 0.75 mm ² / 22 ... 20 AWG |
| | | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 0.75 mm ² / 22 ... 20 AWG |
| | | Fine-stranded conductor; with ferrule; push-in termination | 0.75 mm ² / 20 AWG |
| | | Strip length | 9 mm / 0.35 inches |
| | | Pole number | 2 |
| | | Connectable sheathed cable diameter | 3.8 ... 8.2 mm |
| | | Conductor entry direction to mating direction | 0 ° |
| | | Strip length (outer insulation) | 32 mm |



| Physical data | |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pin spacing | 4.4 mm / 0.173 inches |
| Width | 15.6 mm / 0.614 inches |
| Height | 13.2 mm / 0.52 inches |
| Depth | 61.6 mm / 2.425 inches |
| Mechanical data | |
| Application | General mains applications |
| Coding | A |
| 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: > 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 | IP40 |
| Plug-in connection | |
| Contact type (pluggable connector) | Female connector/socket |
| 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). |
| Strain relief | Strain relief housing |
| Material data | |
| Note (material data) | Information on material specifications can be found here |
| Color | black |
| 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 | 0.216 MJ |
| Connector color | black |
| Strain relief color | black |
| 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 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4045454231729 |
| Customs tariff number | 85366990990 |

| Environmental Product Compliance | |
|----------------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |

Approvals / Certificates

| General approvals | | Declarations of conformity and manufacturer's declarations |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------|
|   | | |
| Approval | Standard | Certificate Name |
| CCA DEKRA Certification B.V. | EN 61535 | 71-123231 |
| CCA DEKRA Certification B.V. | IEC 61535 | NL-85020 |
| cURus Underwriters Laboratories Inc. | UL 1977 | E45171 |
| | | EU-Declaration of Confor- mity WAGO GmbH & Co. KG |
| | | UK-Declaration of Confor- mity WAGO GmbH & Co. KG |

Approvals for marine applications

|    | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|
| 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) |



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-102

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Documentation

| Bid Text | | | |
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| 890-102 | 08.06.2015 | doc 23.00 KB | Download icon |
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1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



[Item No.: 891-8992/205-101](#)
pre-assembled connecting cable; Eca; Plug/open-ended; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; black

[Item No.: 891-8992/005-101](#)
pre-assembled interconnecting cable; Eca; Socket/plug; 2-pole; Cod. A; H05VV-F 2 x 1.0 mm²; 1 m; 1,00 mm²; black

1.1.2 Distribution connector

[Item No.: 890-1634](#)
h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black

[Item No.: 890-1636](#)
h-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black

[Item No.: 890-1606](#)
T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black

[Item No.: 890-1615](#)
T-distribution connector; 2-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

1.1.3 Male connector/plug

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| | | | |
| <div><div>Item No.: 890-812/011-000</div><div>Plug for PCBs; angled; 2-pole; Cod. A; black</div></div> | <div><div>Item No.: 890-812</div><div>Plug for PCBs; straight; 2-pole; Cod. A; black</div></div> | <div><div>Item No.: 890-212</div><div>Plug; 2-pole; Cod. A; 1,50 mm²; black</div></div> | <div><div>Item No.: 890-112</div><div>Plug; with strain relief housing; 2-pole; 1,50 mm²; black</div></div> |
| | | | |
| <div><div>Item No.: 890-212/342-000</div><div>Plug; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black</div></div> | <div><div>Item No.: 890-712</div><div>Snap-in plug; 2-pole; Cod. A; 1,50 mm²; black</div></div> | | |

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system

| | | | |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| | | | |
| <div><div>Item No.: 890-111</div><div>Locking lever; for flying leads; for tool operation; black</div></div> | <div><div>Item No.: 890-131</div><div>Locking lever; for flying leads; for tool operation; white</div></div> | <div><div>Item No.: 890-101</div><div>Locking lever; for manual operation; black</div></div> | <div><div>Item No.: 890-121</div><div>Locking lever; for manual operation; white</div></div> |

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover

| |
|-----------------------------------------------------------------------------------------------------------|
| |
| <div><div>Item No.: 897-2001</div><div>Protective cap; Type1; for sockets and plugs; PVC; red</div></div> |

1.3.2 Installation

1.3.2.1 Mounting accessories

| | |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| | |
| <div><div>Item No.: 890-310</div><div>Mounting carrier; 2- to 5-pole; for flying leads; black</div></div> | <div><div>Item No.: 890-311</div><div>Mounting carrier; 2- to 5-pole; for flying leads; white</div></div> |

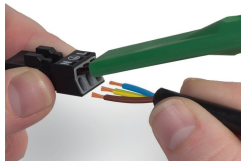
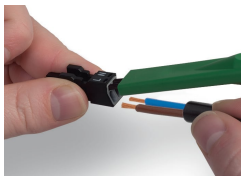
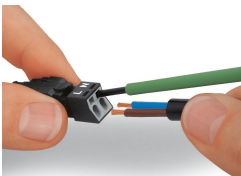
1.3.3 Tool

1.3.3.1 Operating tool

| | |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| | |
| <div><div>Item No.: 890-382</div><div>Operating tool; 2-way; green</div></div> | <div><div>Item No.: 210-719</div><div>Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft</div></div> |

Installation Notes

Conductor termination



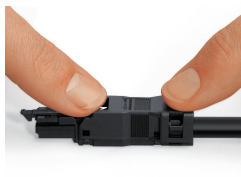
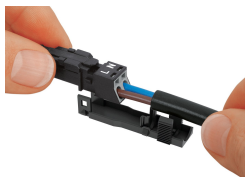
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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.