

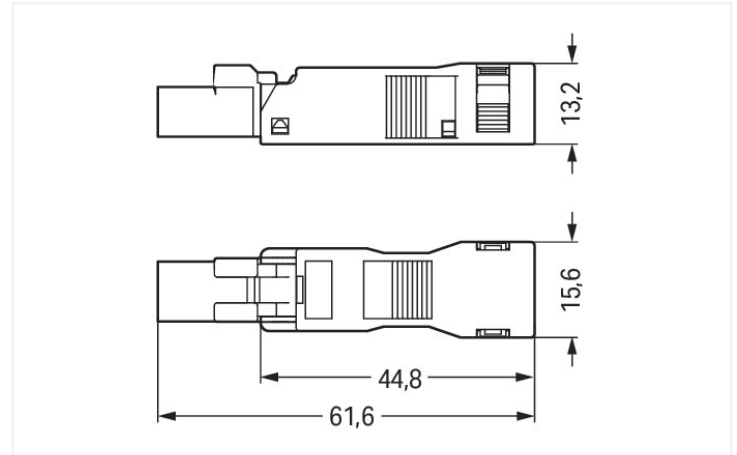
Data Sheet | Item Number: 890-112

Plug; with strain relief housing; 2-pole; 1,50 mm²; black

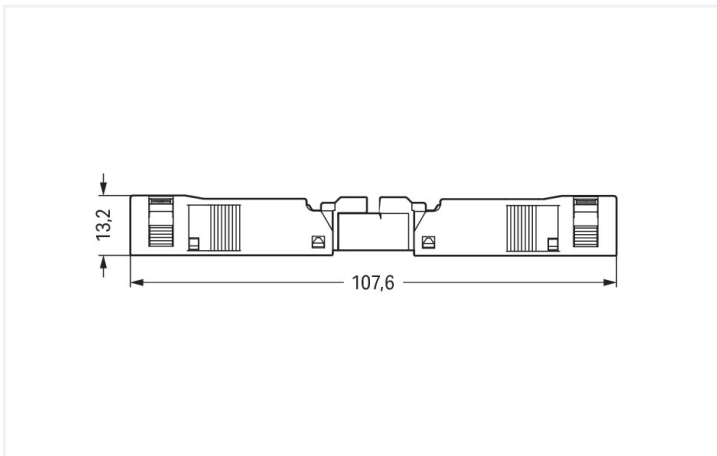
<https://www.wago.com/890-112>



Color: ■ black



Dimensions in mm



Dimensions in mm

Overall length when mated

Male connector/plug **WINSTA®** MINI rated current 16 A

For power and signal transmission: The **WINSTA®** MINI male connector/plug with protection type IP40. WAGO pluggable installation connectors are used when specifications repeat or are planned 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 against ingress by solid granular objects with a diameter below 1 mm in accordance with protection type IP40. Standard mains applications for almost any domain of use can be implemented with **WINSTA®** MINI pluggable installation connectors with A coding. **WINSTA®** MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is primarily suited for lights, for example, since due to LED technology, these offer less and less space for the connection technology. A range up to 32 mm can be used for the strip length.

Lower costs through fast commissioning and elimination of service expenses – solutions from **WINSTA®** MINI

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation expenses without compromising safety and quality: with marking eliminates the need for servicing and prevents unnecessary downtime.

- protection against mismatching eliminates errors
- compact design for conductors with a cross-section up to 1.5 mm²
- for any mains application
- ready for immediate use
- quick replacement of defective units during ongoing operation



This item includes:



| | | | |
|--|---|---|---|
| Item No.: 890-212 | 1 | Item No.: 890-502 | 1 |
| Plug; 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

| | | | |
|----------------------------|---|--|---|
| Clamping units | 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

| | |
|---|--|
| Use | General mains applications |
| Coding | A |
| Variable coding | No |
| Marking | N L |
| Potential marking | N L |
| 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) | Male connector/plug |
| 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 (main housing) | 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 | 0.194 MJ |
| Connector color | black |
| Strain relief color | black |
| Weight | 5.5 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) |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4045454232894 |
| Customs tariff number | 85366990990 |




| Product classification | |
|------------------------|----------------------|
| UNSPSC | 39121402 |
| eCl@ss 10.0 | 27-44-06-05 |
| eCl@ss 9.0 | 27-44-06-05 |
| ETIM 9.0 | EC002560 |
| ETIM 8.0 | EC002560 |
| ECCN | NO US CLASSIFICATION |

| 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 | | | | | | | | | |
| | | <table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table> | Approval | Standard | Certificate Name | EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - | UK-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
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| 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 890-112

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| Documentation | | | | |
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| 890-112 | 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.: 891-8992/105-101](#)
pre-assembled connecting cable; Eca; Socket/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 Female connector/socket



Item No.: 890-702
Snap-in socket; 2-pole; Cod. A; 1,50 mm²; black



Item No.: 890-802/011-000
Socket for PCBs; angled; 2-pole; Cod. A; black



Item No.: 890-802
Socket for PCBs; straight; 2-pole; Cod. A; black



Item No.: 890-202
Socket; 2-pole; Cod. A; 1,50 mm²; black



Item No.: 890-102
Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black



Item No.: 890-202/342-000
Socket; with strain relief housing; 2-pole; Cod. A; 1,50 mm²; black

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system



Item No.: 890-111
Locking lever; for flying leads; for tool operation; black



Item No.: 890-131
Locking lever; for flying leads; for tool operation; white



Item No.: 890-101
Locking lever; for manual operation; black



Item No.: 890-121
Locking lever; for manual operation; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



Item No.: 897-2001
Protective cap; Type1; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 890-310
Mounting carrier; 2- to 5-pole; for flying leads; black



Item No.: 890-311
Mounting carrier; 2- to 5-pole; for flying leads; white

1.3.3 Tool

1.3.3.1 Operating tool



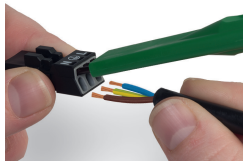
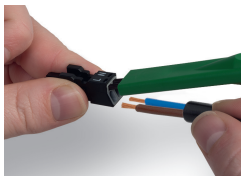
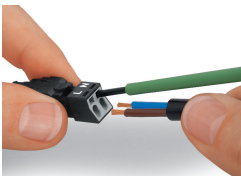
Item No.: 890-382
Operating tool; 2-way; green



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

Conductor termination



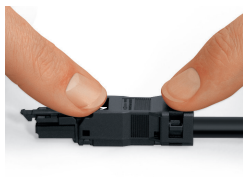
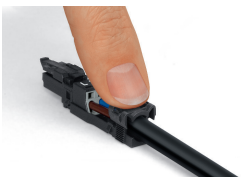
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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.