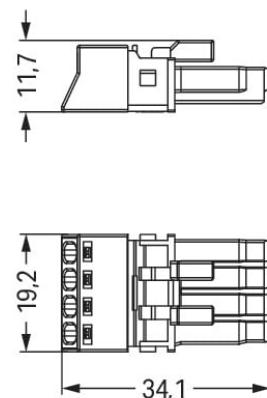


Color: ■ gray

Dimensions in mm



Female connector/socket W/INSTA® MINI rated current 16 A

The W/INSTA® MINI female connector/socket B coding allows installation of solid and fine-stranded conductors. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to a huge variety of requirements in seconds. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismatching. B coding enables the W/INSTA® MINI pluggable installation connectors to be used for control in applications in automation, mechanical engineering and robotics. W/INSTA® MINI follows the trend towards miniaturisation. Our smallest pluggable connection system is very good for lights, for instance, since as a result of LED technology; due to complex systems, these offer significantly less space for the connection technology.

Lower costs through fast commissioning and elimination of service expenses – solutions from W/INSTA® MINI

The W/INSTA® Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers costs. Choose durability and quality – with protection against mismatching from WAGO makes the installation of electrical components visibly easier.

- effective protection against mismatching
- compact design for conductors with a cross-section up to 1.5 mm²
- for automation controllers
- custom-engineered solutions
- rapid, structured electrical installation

Notes

Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

| Ratings per IEC/EN 60664-1 | | |
|----------------------------|-------|-----|
| Overvoltage category | III | III |
| Pollution degree | 3 | 2 |
| Nominal voltage | 400 V | - |
| Rated surge voltage | 6 kV | - |
| Rated current | 16 A | - |

| Ratings per IEC/EN – Notes | | |
|----------------------------|----------------------|----------------------|
| Rated current (note) | 13 A for 3-pole load | 10 A for 4-pole load |

| Approvals per | UL 1977 | General information |
|---------------|---------|--|
| Rated voltage | 600 V | Note on contact resistance approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket |
| Rated current | 12 A | |

| Connection data | | Connection 1 |
|----------------------------|---|--|
| Clamping units | 4 | Connection technology Push-in CAGE CLAMP® |
| Total number of potentials | 4 | 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 4 |
| | | Conductor entry direction to mating direction 0 ° |

| Physical data | |
|---------------|------------------------|
| Pin spacing | 4.4 mm / 0.173 inches |
| Width | 19.2 mm / 0.756 inches |
| Height | 11.7 mm / 0.461 inches |
| Depth | 34.1 mm / 1.343 inches |

| Mechanical data | |
|---|--|
| Use | Control technology |
| Coding | B |
| Variable coding | No |
| Marking | 2L ⊕ 1L L |
| Potential marking | 2L ⊕ 1L 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 | IP20; IP40 with strain relief housing |

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). |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| 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 | 0.109 MJ |
| Weight | 4.9 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

| | |
|-----------------------|---------------|
| eCl@ss 10.0 | 27-44-06-05 |
| eCl@ss 9.0 | 27-44-06-05 |
| ETIM 9.0 | EC002560 |
| ETIM 8.0 | EC002560 |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4055143523523 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|--------------------------------|-----------|------------------|
| CB DEKRA Certification B.V. | IEC 61984 | NL-64351 |
| CB DEKRA Certification B.V. | EN 61984 | 71-112993 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Approvals for marine applications



| Approval | Standard | Certificate Name |
|-----------------------|----------|------------------|
| LR Lloyds Register | EN 61535 | 08/20047 (E2) |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance
890-244/064-000

Documentation

Bid Text

| | | | |
|-----------------|------------|-----------------|---|
| 890-244/064-000 | 19.02.2019 | xml 2.96 KB |  |
| 890-244/064-000 | 08.06.2015 | doc 23.50 KB |  |

CAD/CAE-Data

CAD data

| | |
|---------------------------------|---|
| 2D/3D Models 890-244/064-000 |  |
|---------------------------------|---|

CAE data

ZUKEN Portal
890-244/064-000

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



[Item No.: 890-254/064-000](#)

Plug; 4-pole; 1,50 mm²; gray

[Item No.: 890-754/064-000](#)

Snap-in plug; 4-pole; Cod. B; 1,50 mm²; gray

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

1.2.2 Strain relief

1.2.2.1 Strain relief housing



[Item No.: 890-504](#)

Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black



[Item No.: 890-514](#)

Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 Cover



[Item No.: 897-2003](#)

Protective cap; Type2; 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.: 890-384](#)

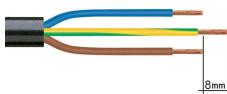
Operating tool; 4-way; green

[Item No.: 210-719](#)

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

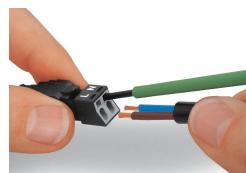
Conductor termination



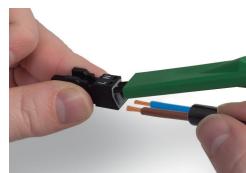
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)

2. Strip length = 9 mm

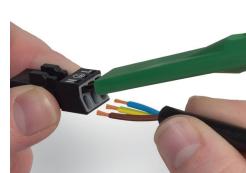
3. Extended ground conductor = 8 mm



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.

Mismating 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.



Important note:
Different colors and/or pole markings are used for circuit identification.
Only connectors of the same color and same pole marking must be plugged together.

