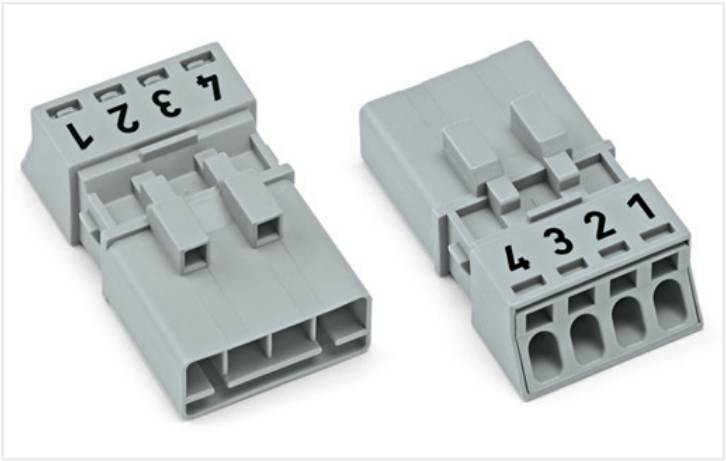
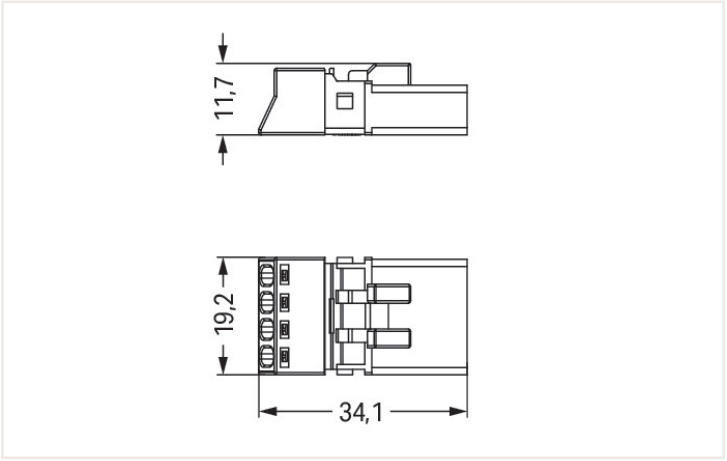
| : 890-254
Plug; 4-pole; 1,50 mm²; gray
https://www.wago.com/890-254



: gray



Dimensions in mm

Male connector/plug *WINSTA*® MINI 4-pole

For power and signal transmission: The *WINSTA*® MINI male connector/plug 4-pole. The pluggable installation connectors with spring pressure connection technology work entirely without screw connections. They allow flexible, error-free installation in a large number of possible uses. The coding options reduce installation errors, allowing fast, secure wiring of all components. B coding enables the *WINSTA*® MINI pluggable installation connectors to be used for control in applications in automation, robotics, and mechanical engineering. Especially if only limited space is available, our smallest pluggable connection system, *WINSTA*® MINI, conveniently displays its advantages. It is very compact, and, with Push-in CAGE CLAMP® spring pressure connection technology, it additionally saves time, since the connection is low-maintenance and can be performed without screw connections.

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

The WINSTA® Pluggable Connection System allows pluggable electrical installation. This saves time, lowers costs, and reduces the need for servicing. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with *WINSTA*® MINI pluggable installation connectors with protection against mismating from WAGO.

- effective protection against mismating
- easy tool-free operation, a wide range of coding options
- with B coding for controllers such as sun blinds and lighting fixtures
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

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

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	16 A
Note (rated current)	13 A for 3-pole load 10 A for 4-pole load
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 5 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	12 A

General

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket

Connection data

Total number of connection points	4
Total number of potentials	4

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	1.5 mm² / 16 AWG
Solid conductor	0.25 … 1.5 mm² / 22 … 16 AWG
Solid conductor; push-in termination	0.75 … 1.5 mm² / 20 … 16 AWG
Stranded conductor	0.25 … 1 mm² / 22 … 18 AWG
Fine-stranded conductor	0.25 … 1.5 mm² / 22 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 0.75 mm² / 22 … 20 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 … 0.75 mm² / 22 … 20 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.75 mm² / 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

Application	Control technology
Coding	B
Variable coding	No
Marking	4 3 2 1
Potential marking	4 3 2 1
Mating force of a plug-in connection	approx. 20 … 70 N (depending on pole number)
Retention force of a plug-in connection	Locked:
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 when mated with strain relief housing

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).

Material data

Note (material data)	Information on material data can be found here
Color	gray
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
Fire load	0.099 MJ
Weight	4.6 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 Stück
Packaging type	Box
Country of origin VKOrg Germany	PL
GTIN	4055143523660
Customs tariff number VKOrg Germany	85366990990

Approvals and certificates

Country specific Approvals

CB DEKRA Certification B.V.	IEC 61984	NL-64351
CB DEKRA Certification B.V.	EN 61984	71-112993
KEMA/KEUR DEKRA Certification B.V.	EN 60320	2148952.04

UL-Approvals

cURus Underwriters Laboratories Inc.	UL 1977	E45171

Ship Approvals

DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	08/20047 (E2)

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-254

Documentation

Bid Text

890-254	19.02.2019	xml 2.96 KB
890-254	08.06.2015	doc 23.50 KB

CAD/CAE-Data

CAD data

2D/3D Models 890-254

CAE data

WSCAD Universe 890-254

ZUKEN Portal 890-254

1 Compatible products

1.1 System counterpart

1.1.1 Cable assembly

: 891-8994/105-103
pre-assembled connecting cable; Eca; Socket/open-ended; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; gray

: 891-8994/005-103
pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. B; Control cable 4 x 1.0 mm²; 1 m; 1,00 mm²; gray

1.1.2 Distribution connector

: 890-1734
3-way distribution connector; 4-pole; Cod. B; 1 input; 3 outputs; gray

: 890-1681
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray

: 890-1781
h-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray

: 890-1631
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

: 890-1731
T-distribution connector; 4-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

1.1.3 Female connector/socket

: 890-744
Snap-in socket; 4-pole; Cod. B; 1,50 mm²; gray

: 890-844/011-000
Socket for PCBs; angled; 4-pole; Cod. B; gray

: 890-844
Socket for PCBs; straight; 4-pole; Cod. B; gray

: 890-244
Socket; 4-pole; Cod. B; 1,50 mm²; gray

1.2 Required accessories

1.2.1 Locking system

1.2.1.1 Locking system

: 890-111
Locking lever; for flying leads; for tool operation; black

: 890-131
Locking lever; for flying leads; for tool operation; white

: 890-101
Locking lever; for manual operation; black

: 890-121
Locking lever; for manual operation; white

1.2.2 Strain relief

1.2.2.1 Strain relief housing

: 890-504
Strain relief housing; 4-pole; with locking clip; for 1 cable; 6.5 … 10.5 mm; 45 mm; black

: 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

: 897-2003
Protective cap; Type2; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories

: 890-310
Mounting carrier; 2- to 5-pole; for flying leads; black

: 890-311
Mounting carrier; 2- to 5-pole; for flying leads; white

1.3.3 Tool

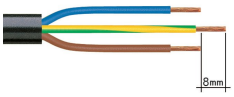
1.3.3.1 Operating tool

: 890-384
Operating tool; 4-way; green

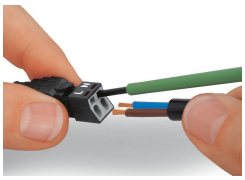
: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation notes

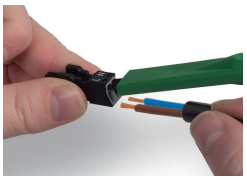
Conductor termination



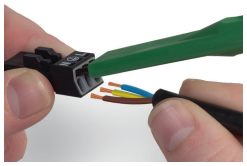
1. Strip length, outer insulation = 30 mm (2-pole), 37 mm (3-pole), 45 mm (4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

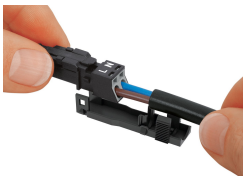


To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.
Terminate solid conductors by simply pushing them in.



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.

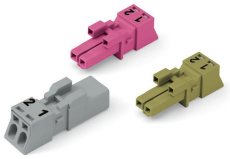
Push down strain relief clamp with 2.5 mm screwdriver alternately on both sides.

Latch the top of the strain relief housing.

Installation

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.

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.

B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.