

Data sheet | Item number: 890-255
Plug; 5-pole; Cod. B; 1,50 mm²; gray

www.wago.com/890-255



Color:

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

Male connector/plug *WINSTA*® MINI with protection type IP20

The *WINSTA*® MINI male connector/plug 5-pole allows installation of fine-stranded and solid conductors. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in no time flat. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. B coding enables the *WINSTA*® MINI pluggable installation connectors to be used for application control in the domains of automation, robotics, and mechanical engineering. Thanks to its particularly compact dimensions, our *WINSTA*® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is especially suitable in very restricted spaces, i.e., for installations when very little room is available.

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

WINSTA® is the pluggable connection system that is ideally tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Now you can also reduce installation costs without compromising quality and safety: with protection type IP20 eliminates the need for servicing and prevents unnecessary downtime.

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- protection against mismatching eliminates errors
- easy tool-free operation, a wide range of coding options
- for automation controllers
- custom-engineered solutions
- quick replacement of defective units during ongoing operation

Data

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

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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- and 5-pole load
Legend (ratings)	(III / 3) $\hat{=}$ Overvoltage category III / Pollution degree 3

Ratings per UL 1977

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 information

Note on contact resistance	approx. 1 m Ω of contact resistance approx. 0.25 m Ω contact transition plug/socket
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Connection data

Connection points	5
Total number of potentials	5

Connection 1

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	5

Subject to changes. Please also observe the further product documentation!



Conductor entry direction to mating direction	0°
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Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	23.6 mm / 0.929 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	5 4 3 2 1
Potential marking	5 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: > 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 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).

Subject to changes. Please also observe the further product documentation!



Material Data

Note (material data)

Information on material specifications 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
Contact plating	Tin
Fire load	0.141 MJ
Weight	5.6 g

Environmental requirements

Processing temperature	-5 ... +40 °C
Continuous operating temperature	-35 ... +85 °C
Note on continuous operating temperature	Insulating parts for temperatures \leq 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	PL
GTIN	4055143499736
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

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Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	EN 61984	NL-64351
	CB DEKRA Certification B.V.	EN 61984	71-112993
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	KEMA/KEUR DEKRA Certification B.V.	EN 60320	2148952.04

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
	LR Lloyds Register	EN 61535	08/20047 (E2)

Counterpart

Item no.890-245 Socket; 5-pole; Cod. B; 1,50 mm ² ; gray	www.wago.com/890-245
Item no.890-745 Snap-in socket; 5-pole; Cod. B; 1,50 mm ² ; gray	www.wago.com/890-745
Item no.891-8995/005-103 pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; 1 m; 1,00 mm ² ; gray	www.wago.com/891-8995/005-103
Item no.890-845/011-000 Socket for PCBs; angled; 5-pole; Cod. B; gray	www.wago.com/890-845/011-000
Item no.890-845 Socket for PCBs; straight; 5-pole; Cod. B; gray	www.wago.com/890-845
Item no.891-8995/105-103 pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. B; 1 m; 1,00 mm ² ; gray	www.wago.com/891-8995/105-103

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Required accessories

Locking levers

Locking system		
Item no.: 890-111	Locking lever; for flying leads; for tool operation; black	www.wago.com/890-111
Item no.: 890-101	Locking lever; for manual operation; black	www.wago.com/890-101
Item no.: 890-121	Locking lever; for manual operation; white	www.wago.com/890-121
Item no.: 890-131	Locking lever; for flying leads; for tool operation; white	www.wago.com/890-131

Strain relief

Strain relief housing		
Item no.: 890-505	Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; black	www.wago.com/890-505
Item no.: 890-515	Strain relief housing; 5-pole; with locking clip; for 1 cable; 6.5 ... 10.5 mm; 45 mm; white	www.wago.com/890-515

Optional accessories

Mounting

Mounting accessories		
Item no.: 890-310	Mounting carrier; 2- to 5-pole; for flying leads; black	www.wago.com/890-310
Item no.: 890-311	Mounting carrier; 2- to 5-pole; for flying leads; white	www.wago.com/890-311

Cover

Cover		
Item no.: 897-2003	Protective cap; Type2; for sockets and plugs; PVC; red	www.wago.com/897-2003

Tool

Operating tool		
Item no.: 210-719	Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719
Item no.: 890-385	Operating tool; 5-way; green	www.wago.com/890-385

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Downloads

Documentation

Bid Text

890-255 X81 - Datei	2019 年2月19日	xml 3.0 kB	Download
890-255 doc - Datei	2015 年6月8日	doc 24.1 kB	Download

CAD/CAE-Data

CAD data

2D/3D Models 890-255	URL	Download
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CAE data

ZUKEN Portal 890-255	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-255 Plug; 5-pole; Cod. B; 1,50 mm ² ; gray	URL	Download
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Installation Notes

Conductor termination

Subject to changes. Please also observe the further product documentation!



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.

Subject to changes. Please also observe the further product documentation!



To terminate fine-stranded conductors, open clamping units via operating tool (890-382) and insert stripped conductors until they hit backstop.

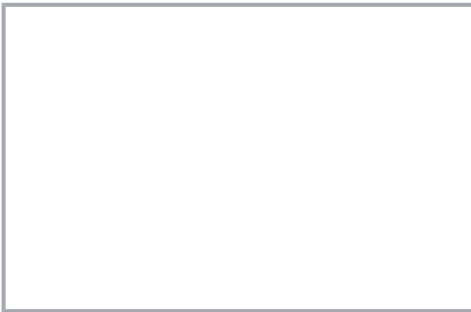
Terminate solid conductors by simply pushing them in.



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.



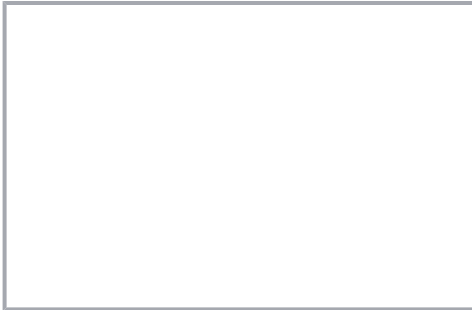
Latch the top of the strain relief housing.

Subject to changes. Please also observe the further product documentation!



The printed marking of the connector is clearly visible in the openings of the strain relief housing.

Mismatching 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.



Product family

Subject to changes. Please also observe the further product documentation!

Data sheet | Item number: 890-255

www.wago.com/890-255



WINSTA® MINI

[Show all products from the family](#)

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