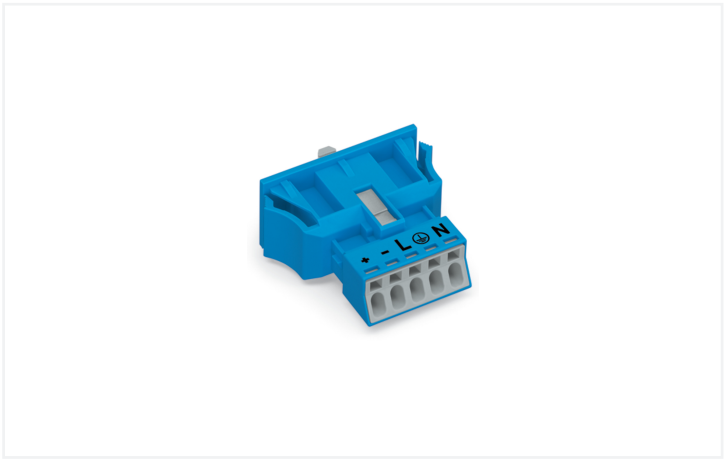
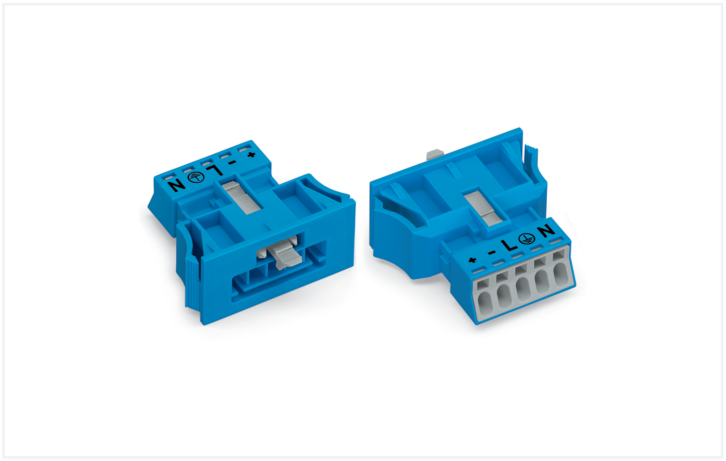
Data Sheet | Item Number: 890-2115

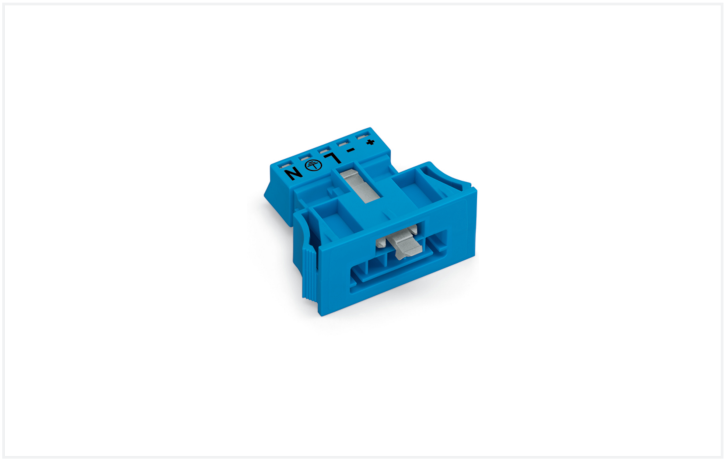
Snap-in plug; 5-pole; Cod. I; 1,50 mm²; blue

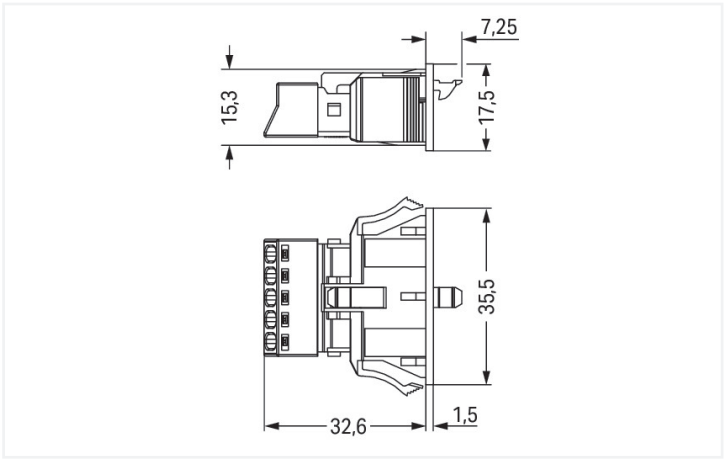
https://www.wago.com/890-2115



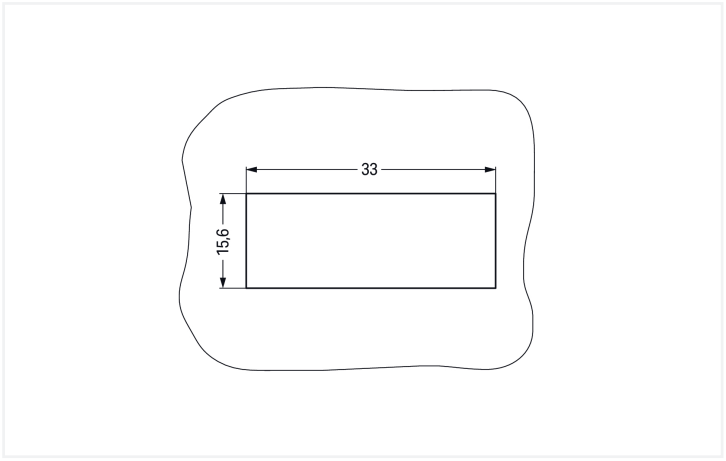


Color: blue





Dimensions in mm



Dimensions in mm
Plate thickness: 0.5 … 2 mmCutout tolerance: + 0.1 mm Please note!

Male connector/plug *WINSTA*® MINI with protection against mismating

The *WINSTA*® MINI male connector/plug with protection type IP20 is the pluggable solution for your use in control cabinets, on PCBs or for lighting connections. On PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections ac-

cording to an enormous variety of requirements in no time flat. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. Controlled lighting, as used in the DALI standard, for instance, is the main application of *WINSTA*® MINI pluggable installation connectors with I coding. Due to its particularly small dimensions, our *WINSTA*® MINI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology is specifically 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 allows error-free installation of cables and components, quickly and reliably. Now you can also lower installation costs without compromising quality and safety: with locking lever reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismating
- consistent IP40 protection
- with I coding for use in the automation of buildings (lighting control)
- ready for immediate use
- convenient installation and commissioning

Notes

General safety information	**NOTICE: Observe installation and safety instructions!** • Nur von Elektrofachkraft oder einer für die Tätigkeit elektrisch unterwiesenen Person (EUP nach DIN VDE 0105-100) anzuwenden! • Nicht unter Spannung/Last installieren! • Nur für bestimmungsgemäßen Gebrauch einsetzen! • Nationale Vorschriften/Normen/Richtlinien beachten! • Technische Daten der Produkte beachten! • Auf die richtige Polbelegung achten! • Keine beschädigten/verschmutzten Komponenten verwenden! • Leiterarten, -querschnitte, Abisolierlängen und Leitungsdurchmesser beachten! • Leiter bis zum Anschlag einführen! • Nur mit Verriegelungsklinke und Zugentlastung verwenden! • Originalzubehör verwenden! **To be sold only with installation instructions!**
Note	The snap-in connectors must be relieved of tensile and transverse forces. A surface finish can influence the edge radius of the cutouts. This may affect the snap-in socket fit, so ensure an adequate fit before use. In addition, the punched edge should be on the inside for punched cutouts. The wings of the snap-in connectors must not be mechanically stressed for a long period before use (e.g., due to a pre-locking position).

Electrical data

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

Approvals per	UL 1977
Rated voltage	600 V
Rated current	12 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	5
Total number of potentials	5
PE function	Preceding PE contact

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	5
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	4.4 mm / 0.173 inches
Width	35.5 mm / 1.398 inches
Height	17.5 mm / 0.689 inches
Depth	39.85 mm / 1.569 inches

Mechanical data

Use	DALI, Lighting Management
Coding	I
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
Housing sheet thickness	0.5 … 2 mm / 0.02 … 0.079 inches
Mounting type	Snap-in flange
Protection type	IP20; IP40 when mated
Suitable for through-panel applications	Yes

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	Yes
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	blue
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	0.193 MJ
Weight	8 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 (50) pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454885311
Customs tariff number	85366990990

Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-06-02
eCl@ss 9.0	27-44-06-02
ETIM 9.0	EC002566
ETIM 10.0	EC002566
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

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

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
ABS American Bureau of Shipping	Steel Vessel Rules	24-0095973-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	EN 61535	08/20047 (E2)
PRS Polski Rejestr Statków	-	TE/1096/880590/23

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 890-2115

Documentation

Bid Text

890-2115	19.02.2019	xml 2.89 KB
890-2115	08.06.2015	doc 23.00 KB

CAD/CAE-Data

CAD data

2D/3D Models 890-2115

CAE data

EPLAN Data Portal 890-2115

WSCAD Universe 890-2115

ZUKEN Portal 890-2115

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 891-8985/106-101
pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. I; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; blue

Item No.: 891-8985/006-101
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. I; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; blue

1.1.2 Female connector/socket

Item No.: 890-1105
Socket; 5-pole; Cod. I; 1,50 mm²; blue

1.2 Optional Accessories

1.2.1 Cover

1.2.1.1 Cover

Item No.: 770-643
Lockout cap; 3-pole; for cutouts; Plastic; black

Item No.: 770-693
Lockout cap; 3-pole; for cutouts; Plastic; white

1.2.2 Tool

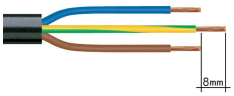
1.2.2.1 Operating tool

Item No.: 890-385
Operating tool; 5-way; green

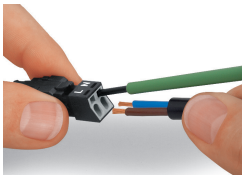
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

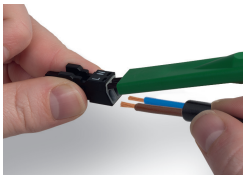
Conductor termination



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.