Data Sheet | Item Number: 831-3205/1020-050

Plug; with strain relief housing; 5-pole; Cod. A; 6,00 mm²; white
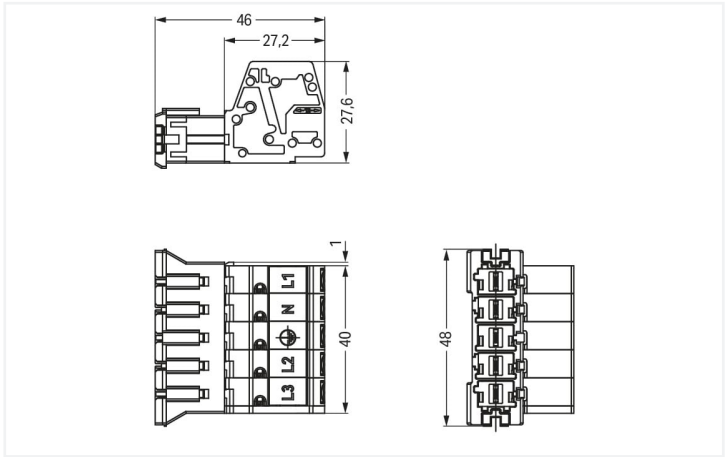
https://www.wago.com/831-3205/1020-050

Color: ▢ white

Dimensions in mm

Male connector/plug WINSTA® MAXI rated current 35 A

The WINSTA® MAXI male connector/plug A coding provides the foundation for installation of fine-stranded and solid conductors. WAGO pluggable installation connectors can be used when requirements repeat or are distributed on a specific pattern, for example for installing grid lighting or flush-mount lighting. The mechanical coding and color coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. The pluggable installation connector offers touch-proof protection with live components in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). The WINSTA® MAXI pluggable installation connector with A coding in black or white is usually used for general mains applications in power distribution. This pluggable installation connector is used for electrical currents up to 35 A. Thus the product is also suitable for high power loads. WINSTA® MAXI features a conductor cross-section up to 6 mm². That makes solutions from this product line especially suitable for applications that draw high power.

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

The WINSTA® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, even more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and errors during installation at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismating from WAGO.

- pluggable installation connectors with protection against mismating
- saves time, since no wiring is required at the construction site
- with A coding for a large number of uses
- custom-engineered solutions
- fast, secure installation

Electrical data

Ratings per	IEC/EN 60664-1			General information	
Overvoltage category	III	III	II	Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
Pollution degree	3	2	2		
Nominal voltage	400 V	-	-		
Rated surge voltage	6 kV	-	-		
Rated current	35 A	-	-		

Connection data

Clamping units	5		
Total number of potentials	5		

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	6 mm² / 8 AWG
Solid conductor	0.5 … 6 mm² / 20 … 8 AWG
Stranded conductor	0.5 … 4 mm² / 20 … 12 AWG
Fine-stranded conductor	0.5 … 6 mm² / 20 … 8 AWG
Fine-stranded conductor; with insulated ferrule	0.5 … 6 mm²
Fine-stranded conductor; with uninsulated ferrule	0.5 … 6 mm²
Strip length	13 mm / 0.51 inches
Pole number	5
Connectable sheathed cable diameter	13 … 18 mm
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	48 mm / 1.89 inches
Height	27.6 mm / 1.085 inches
Depth	46 mm / 1.811 inches

Mechanical data

Use	General mains applications
Coding	A
Variable coding	No
Marking	L1 N ⏚ L2 L3
Potential marking	L1 N ⏚ L2 L3
Mating force of a plug-in connection	approx. 30 … 70 N (depending on number of poles)
Retention force of a plug-in connection	Locked: > 80 N
Unmating force of a plug-in connection	Unlocked: approx. 30 … 70 N (depending on pole number)
Number of mating cycles	100, without resistive load
Protection type	IP20; When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

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
Strain relief	Strain relief housing

Material data

Note (material data)	Information on material specifications can be found here
Color	white
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	1.636 MJ
Connector color	white
Strain relief color	white
Printing color of strain relief	black
Weight	66.7 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)	5 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143500722
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

KEMA KEUR UR

Approval	Standard	Certificate Name
KEMA/KEUR DEKRA Certification B.V.	EN 61535	71-123230
UR Underwriters Laboratories Inc.	UL 1059	E45172

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	-	-

WAGO

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 831-3205/1020-050	↓

Documentation

Bid Text

831-3205/1020-050	19.02.2019	xml 3.01 KB	↓
831-3205/1020-050	06.12.2016	doc 24.00 KB	↓

CAD/CAE-Data

CAD data		**CAE data**	
2D/3D Models 831-3205/1020-050	↓	ZUKEN Portal 831-3205/1020-050	↓

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

Item No.: 831-3105/1019-050
Socket; with strain relief housing; 5-pole;
Cod. A; 6,00 mm²; white

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding

Item No.: 831-500
Coding pin carrier with six coding pins;
orange

1.2.2 Ferrule

1.2.2.1 Ferrule

Item No.: 216-284
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

Item No.: 216-286
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

Item No.: 216-287
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

Item No.: 216-288
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

1.2.3 Marking

1.2.3.1 Marker

Item No.: 2009-145/000-006
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item No.: 2009-145/000-007
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item No.: 2009-145/000-023
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-145/000-012
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 2009-145/000-005
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

Item No.: 2009-145/000-024
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item No.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 2009-145/000-002
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

Item No.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

Item No.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

Item No.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

Item No.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

Item No.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

Item No.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

Item No.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

Item No.: 793-5501/000-006
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item No.: 793-5501/000-007
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item No.: 793-5501/000-023
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 793-5501/000-017
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item No.: 793-5501/000-012
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 793-5501/000-005
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

Item No.: 793-5501/000-024
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 793-5501/000-002
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

Item No.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type; blue

Item No.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type; gray

Item No.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type; green

Item No.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; light green

Item No.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; orange

Item No.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type; red

Item No.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type; violet

Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

Item No.: 793-501/000-002
WMB marking card; as card; not stretchable; plain; snap-on type; yellow

Item No.: 2009-115/000-006
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item No.: 2009-115/000-007
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

WAGO

1.2.3.1 Marker

Item No.: 2009-115/000-023
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-115/000-017
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item No.: 2009-115/000-012
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 2009-115/000-024
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 2009-115/000-002
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.3.2 Marking strip

Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.4 Mounting adapter

1.2.4.1 Mounting accessories

Item No.: 831-137
Mounting adapter; for DIN-35 rail/panel mounting; 3 parts; Pin spacing 7.62 mm; light gray

1.2.5 Strain relief

1.2.5.1 Strain relief plate

Item No.: 831-505
Strain relief plate; for female and male connectors; 30 mm wide; 1 part; Pin spacing 7.62 mm; light gray

1.2.6 Test and measurement

1.2.6.1 Testing accessories

Item No.: 210-136
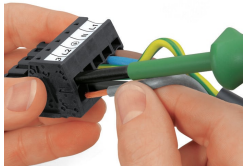Test plug; 2 mm Ø; with 500 mm cable; red

1.2.7 Tool

1.2.7.1 Operating tool

Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a
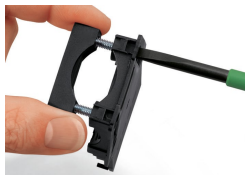partially insulated shaft; multicoloured

Installation Notes

Conductor termination

The following lengths are recommended:

1. Strip length, outer insulation = 80 mm

2. Strip length = 13 mm

3. Extended ground conductor = 10 mm

To terminate fine-stranded conductors,
open the clamping unit via screwdriver
(5.5 mm blade width) and insert a stripped
conductor until it hits the backstop.

Installation

Unscrew base of strain relief housing.

Snap wired connector onto the base.

Tighten strain relief using a screwdriver.

Wired connector fitted in base of strain
relief housing

Latch the top of the strain relief housing.

Marking

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

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

Current addresses can be found at:: www.wago.com