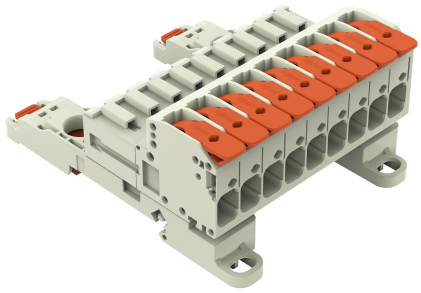
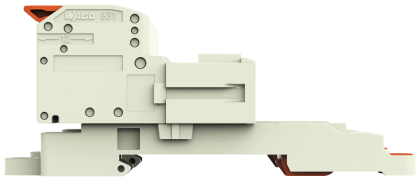
Data Sheet | Item Number: 831-1209/306-000

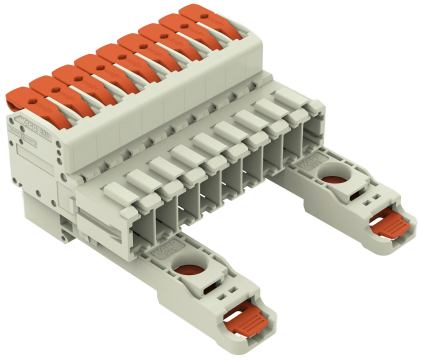
1-conductor male connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismating; DIN-35 rail/panel mounting; 10,00 mm²; light gray

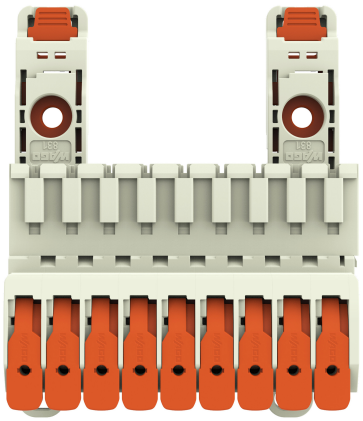
https://www.wago.com/831-1209/306-000

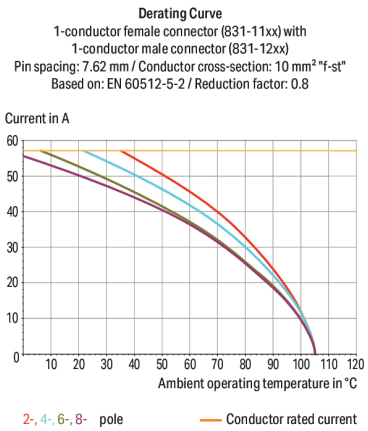


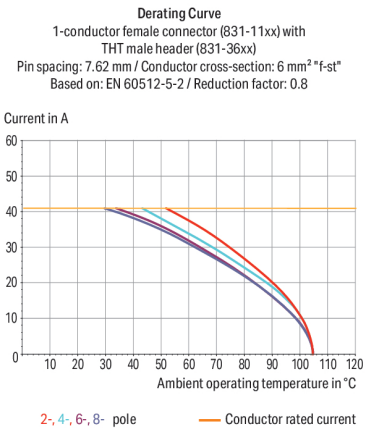


Color: light gray









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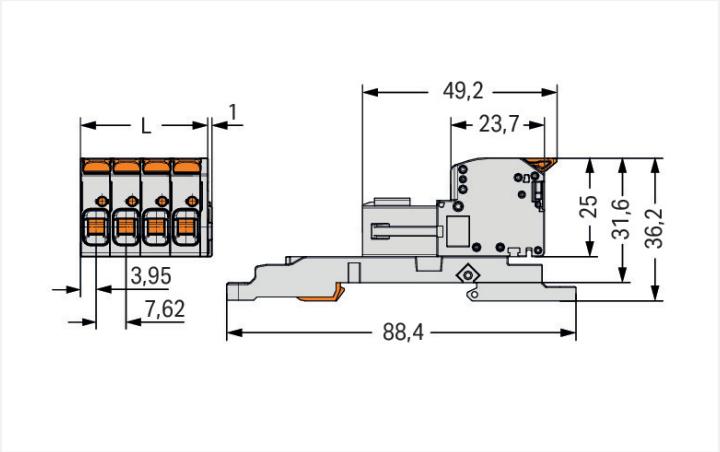

Dimensions in mm
L = (pole no. x pin spacing) + 1.9 mm

Male connector, 831 Series, Push-in CAGE CLAMP®

Our male connector (item number 831-1209/306-000) is designed for seamless electrical installations. Ensure that the strip lengths are between 11 and 13 mm when connecting conductors to this male connector. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this product is highly versatile. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The dimensions are (71.5 x 36.2 x 88.4) mm (width x height x depth). Depending on the type of conductor, this male connector is ideal for conductor cross sections ranging from 0.5 mm² to 10 mm².

The contact surface is coated with tin.

Notes

Safety Information	The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load.When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.
Variants:	Other colors 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	II
Pollution degree	3	2	2
Nominal voltage	800 V	1000 V	1000 V
Rated impulse withstand voltage	8 kV	8 kV	8 kV
Rated current	41 A	41 A	41 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	-	600 V	600 V
Rated current	-	35 A	5 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	-	600 V	600 V
Rated current	-	37 A	5 A

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Connection Data

Clamping units	9
Total number of potentials	9
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Lever
Solid conductor	0.5 … 10 mm² / 20 … 8 AWG
Fine-stranded conductor	0.5 … 10 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	11 … 13 mm / 0.43 … 0.51 inches
Pole number	9
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	71.5 mm / 2.8 inches
Height	36.2 mm
Depth	88.4 mm / 3.480 inches

Mechanical data

Variable coding	Yes
Mounting type	DIN-35 rail Panel mounting
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes

Material data

Note (material data)	Information on material specifications can be found here
Color	light 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	Electrolytic copper (E_{Cu})
Contact Plating	Tin
Fire load	1.666 MJ
Actuator color	orange
Weight	68.3 g

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Environmental requirements

Limit temperature range	-60 … +105 °C
Processing temperature	-35 … +60 °C

Environmental Testing

Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data

PU (SPU)	6 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966115666
Customs tariff number	85366930000

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Product Classification

UNSPSC	39121409
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
831-1209/306-000

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models
831-1209/306-000

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

Item No.: 831-1109
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismating; 10,00 mm²; light gray

Item No.: 831-1109/037-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray

Item No.: 831-1109/038-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule

Item No.: 216-262
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

Item No.: 216-263
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

Item No.: 216-264
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.: 216-284
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.: 216-266
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.: 216-286
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.: 216-267
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.: 216-287
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.: 216-208
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

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

Item No.: 216-108
Ferrule; Sleeve for 6 mm² / AWG 10; uninsulated; electro-tin plated; silver-colored

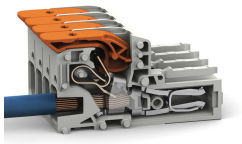
1.2.2 Strain relief

1.2.2.1 Strain relief plate

Item No.: 831-506
Strain relief plate; for female and male connectors; 51 mm wide; 1 part; Pin spacing 7.62 mm; light gray

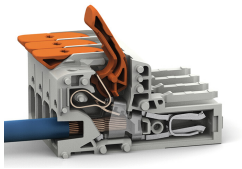
Installation Notes

Conductor termination



Insert solid conductors via push-in termination.

Conductor removal



Insert fine-stranded conductors – and remove all conductors – via operating tool.