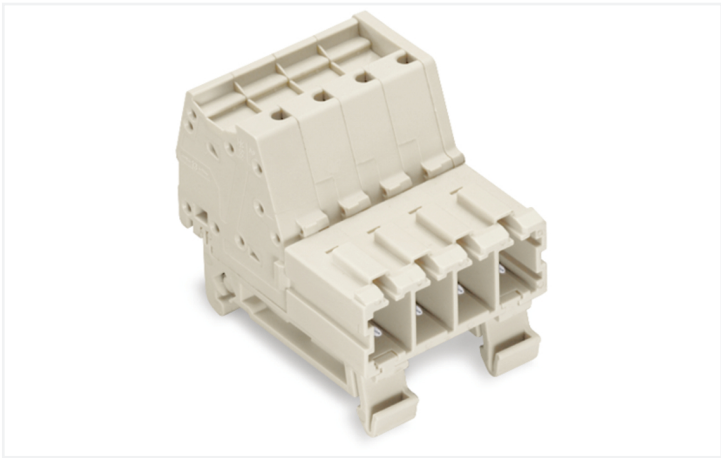


Data Sheet | Item Number: 831-3209/007-000

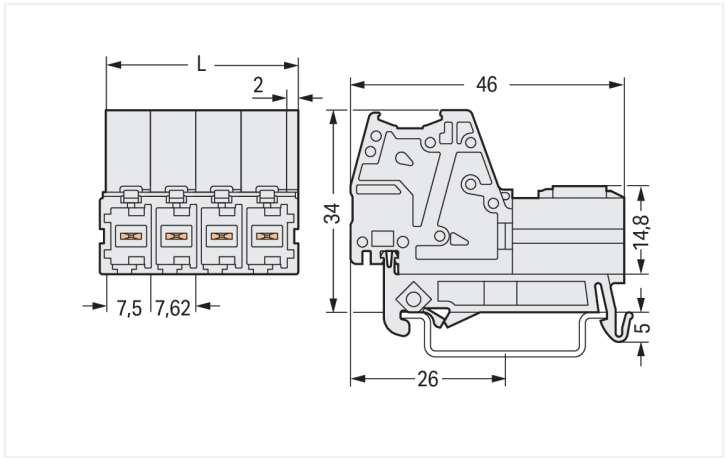
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismatching; DIN-35 rail mounting; 10,00 mm²; light gray

<https://www.wago.com/831-3209/007-000>

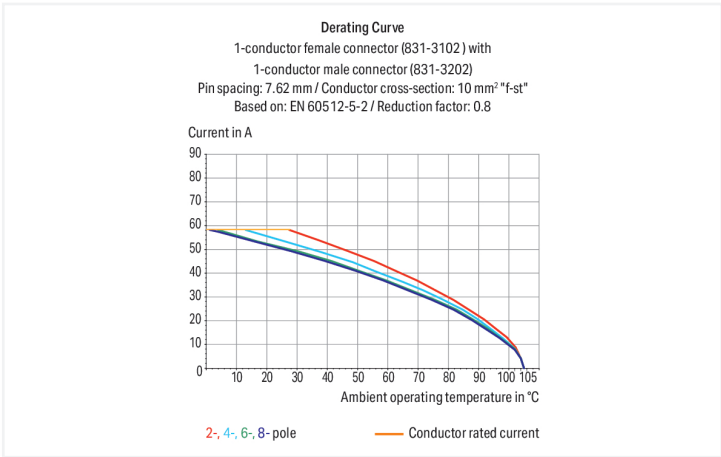


Color: ■ light gray

Similar to illustration



Dimensions in mm
 $L = (\text{pole no.} - 1) \times \text{pin spacing} + 9.5 \text{ mm}$



Stiftleiste Serie 831 mit Push-in CAGE CLAMP®

Bei dieser Stiftleiste mit der Artikelnummer 831-3209/007-000 ist eine ordentliche Elektroinstallation der Schwerpunkt. Mit unseren Leiterplatten-Steckverbindern bekommen Sie ein universelles Steckverbindersystem, das vielseitig Verwendung finden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Bei dieser Stiftleiste ist für den Leiteranschluss eine Abisolierlänge im Bereich von 13 bis 15 mm erforderlich. Dieses Produkt basiert auf der Push-in CAGE CLAMP®-Technologie. Push-in CAGE CLAMP® ist der wartungsfreie Universalanschluss für alle Leiterarten mit dem Zusatznutzen des direkten Steckens: Push-in. Starre Leiter sowie feindrähtige Leiter mit Aderendhülse können ohne Werkzeug direkt gesteckt werden. Eine Vorbehandlung der Leiter, z. B. durch das Aufcrimpen von Aderendhülsen, ist nicht erforderlich. Die Abmessungen betragen in Breite x Höhe x Tiefe (70,46 x 39 x 46) mm. In Abhängigkeit von der Leiterart ist die Stiftleiste gemacht für Leiterquerschnitte von 0,5 mm² bis 10 mm². Die Kontaktoberfläche ist aus Zinn. Diese Stiftleiste/Stecker wird durch ein Betätigungswerkzeug betätigt. Das MCS – "Multi Connection System" von WAGO umfasst insgesamt 7 Familien in den Rastermaßen 2,5 mm bis 10,16 mm und bietet mit dem Leiterquerschnittsbereich von 0,08 bis 25 mm² ein großes Portfolio an Einsatzmöglichkeiten.

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 pole numbers 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				Approvals per UL 1059			
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	-	600 V	-
Nominal voltage	800 V	1000 V	1000 V	Rated current	-	42 A	-
Rated surge 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	-
Rated current	-	41 A	-

Connection data

Clamping units	9	Connection 1	
Total number of potentials	9	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	Actuation direction 1	Operation parallel to conductor entry
		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	13 ... 15 mm / 0.51 ... 0.59 inches
		Pole number	9
		Conductor entry direction to mating direction	0°

Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	70.46 mm / 2.774 inches
Height	39 mm
Depth	46 mm / 1.811 inches

Mechanical data

Variable coding	Yes
Mounting type	DIN-35 rail
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	0.881 MJ
Weight	61.3 g

Environmental requirements	
Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed



Commercial data	
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 8.0	EC001284
PU (SPU)	12 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821536321
Customs tariff number	85366930000

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-61360/M1	Railway WAGO GmbH & Co. KG	-	Railway Ready
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-116057			
UR Underwriters Laboratories Inc.	UL 1059	E45172			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 831-3209/007-000	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	



CAD/CAE-Data	
CAD data 2D/3D Models 831-3209/007-000 ↓	CAE data ZUKEN Portal 831-3209/007-000 ↓

1 Compatible Products
1.1 System counterpart
1.1.1 Female connector/socket



Item No.: 831-3109
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mis-mating; 10,00 mm²; light gray

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



1.2.3.1 Marker

 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
 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.: 2009-110/762-852 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white	 Item No.: 2009-110/762-853 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white	 Item No.: 2009-110/762-854 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white	 Item No.: 2009-110/762-855 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white
 Item No.: 2009-110/762-856 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white	 Item No.: 2009-110/762-857 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white	 Item No.: 2009-110/762-858 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white	 Item No.: 2009-110/762-859 Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white



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.: 831-506
Strain relief plate; for female and male
connectors; 51 mm wide; 1 part; Pin spa-
cing 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

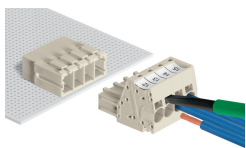
1.2.7.1 Operating tool



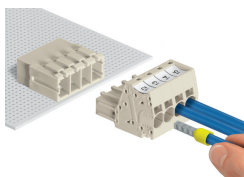
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a
partially insulated shaft; multicoloured

Installation Notes

Conductor termination

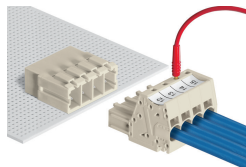


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



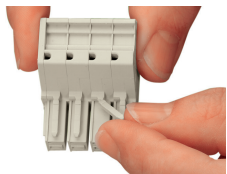
Solid and ferruled conductors are terminated by simply pushing them into unit.

Testing

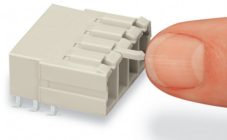


Testing with 2 mm Ø test plug.

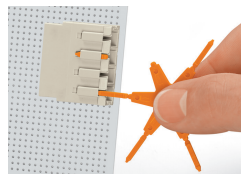
Coding



Break or cut off coding pin from female connector.



Insert coding pin into male header (break first) until it engages.



Coding a THT male header by inserting a coding pin.

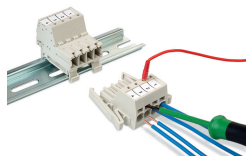
Marking



Direct marking of female and male connectors



MCS MAXI male and female connectors can also be marked via Mini-WSB or WMB markers.



Male connector mounted on a DIN-35 rail via integrated mounting adapter