

Data Sheet | Item Number: 831-3203/133-000

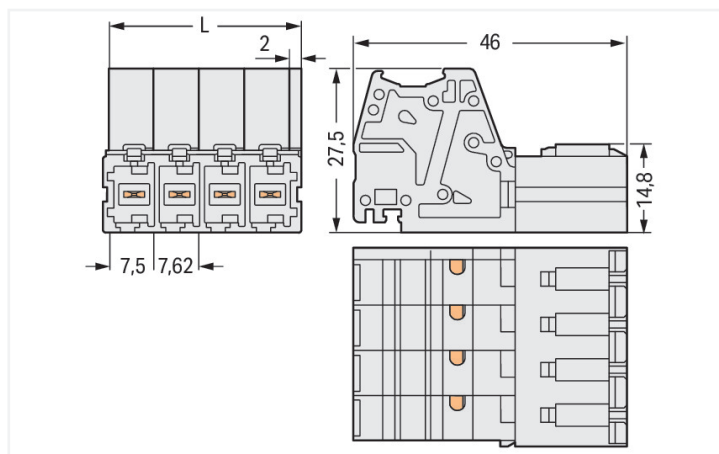
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Strain relief plate; 10,00 mm²; light gray

<https://www.wago.com/831-3203/133-000>



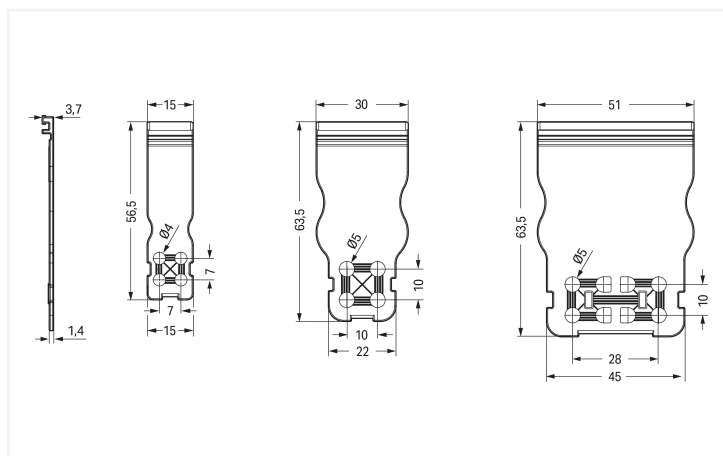
Color: ■ light gray

Similar to illustration



Dimensions in mm

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

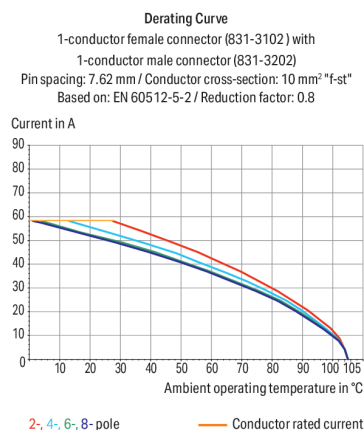


Dimensions in mm

The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

Stiftleiste Serie 831, lichtgrau

Die Stiftleiste hat die Artikelnummer 831-3203/133-000 und schafft eine saubere ordentliche Elektroinstallation. Unsere Leiterplatten-Steckverbinder geben Ihnen die größtmögliche Flexibilität bei unterschiedlichen Montagearten. Für den Leiteranschluss werden bei dieser Stiftleiste Abisolierlängen von 13 bis 15 mm benötigt. Bei diesem Produkt findet die Push-in CAGE CLAMP®-Technologie Verwendung. Mit der Push-in CAGE CLAMP® An-schlusstechnik wird der Anschluss aller Leiterarten perfekt. Durch den Zusatznutzen des direkten Steckens können Leiter mit ausreichender Knick-steifigkeit sowie feindrähtige Leiter mit Aderendhülse ohne Werkzeug gesteckt werden. Die Abmessungen sind in Breite x Höhe x Tiefe (24,74 x 27,5 x 46) mm. In Abhängigkeit von der Leiterart ist diese Stiftleiste gemacht für Leiterquerschnitte von 0,5 mm² bis 10 mm². Für die Oberfläche der Kontakte wurde Zinn verwendet. Diese Stiftleiste/Stecker wird durch ein Betätigungswerkzeug betätigt. Das "Multi Connection System" – MCS von WAGO ist das vielfältige Steckverbindersystem mit überzeugenden Lösungen für Ihre Anwendungen.





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		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		800 V	1000 V	1000 V
Rated surge voltage		8 kV	8 kV	8 kV
Rated current		41 A	41 A	41 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		-	600 V	-
Rated current		-	42 A	-
Approvals per		CSA		
Use group		B	C	D
Rated voltage		-	600 V	-
Rated current		-	41 A	-

Connection data																						
Clamping units	3	Connection 1 <table><tr><td>Connection technology</td><td>Push-in CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Actuation direction 1</td><td>Operation parallel to conductor entry</td></tr><tr><td>Solid conductor</td><td>0.5 ... 10 mm² / 20 ... 8 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.5 ... 10 mm² / 20 ... 8 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.5 ... 6 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.5 ... 6 mm²</td></tr><tr><td>Strip length</td><td>13 ... 15 mm / 0.51 ... 0.59 inches</td></tr><tr><td>Pole number</td><td>3</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0 °</td></tr></table>	Connection technology	Push-in CAGE CLAMP®	Actuation type	Operating tool	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	3	Conductor entry direction to mating direction	0 °
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Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm²																					
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches																					
Pole number	3																					
Conductor entry direction to mating direction	0 °																					
Total number of potentials	3																					
Number of connection types	1																					
Number of levels	1																					

Physical data	
Pin spacing	7.62 mm / 0.3 inches
Width	24.74 mm / 0.974 inches
Height	27.5 mm / 1.083 inches
Depth	46 mm / 1.811 inches



Mechanical data																																
Variable coding		Yes																														
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		0.322 MJ																														
Weight		21.9 g																														
Environmental requirements																																
Limit temperature range	-60 ... +105 °C	Environmental Testing (Environmental Conditions) <table><tr><td>Test specification Railway applications – Rolling stock – Electronic equipment</td><td>DIN EN 50155 (VDE 0115-200):2022-06</td></tr><tr><td>Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td>Spectrum/Installation location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Function test with noise-like vibration</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>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)</td></tr><tr><td>Test duration per axis</td><td>10 min. 5 h</td></tr><tr><td>Test directions</td><td>X, Y and Z axes X, Y and Z axes X, Y and Z axes</td></tr><tr><td>Monitoring for contact faults/interruptions</td><td>Passed</td></tr><tr><td>Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Simulated service life test through increased levels of noise-like vibration</td><td>Test passed according to Section 9 of the standard</td></tr><tr><td>Extended test scope: Monitoring for contact faults/interruptions</td><td>Passed Passed</td></tr><tr><td>Extended test scope: Voltage drop measurement before and after each axis</td><td>Passed Passed</td></tr><tr><td>Shock test</td><td>Test passed according to Section 10 of the standard</td></tr><tr><td>Shock form</td><td>Half sine</td></tr></table>	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
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Shock test	Test passed according to Section 10 of the standard																															
Shock form	Half sine																															
Processing temperature	-35 ... +60 °C																															



Environmental Testing (Environmental Conditions)	
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)		48 pcs
Packaging type		Box
Country of origin		PL
GTIN		4055143511360
Customs tariff number		85366930000

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals		
		
Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-61360/M1
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-116057
UL 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 831-3203/133-000	



Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 831-3103
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; 10,00 mm²; light gray



Item No.: 831-3523
THT female header; angled; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray



Item No.: 831-3503
THT female header; straight; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; 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 Test and measurement

1.2.5.1 Testing accessories



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

1.2.6 Tool

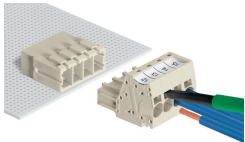
1.2.6.1 Operating tool



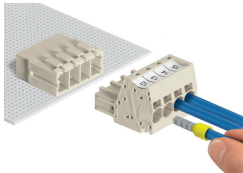
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a
partially insulated shaft; multicoloured

Installation Notes

Conductor termination

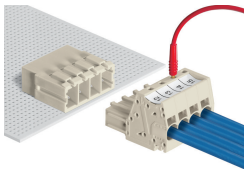


Inserting fine-stranded conductors via
(5.5 x 0.8) mm screwdriver.



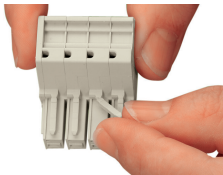
Solid and ferruled conductors are termi-
nated by simply pushing them into unit.

Testing

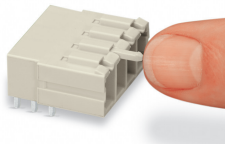


Testing with 2 mm Ø test plug.

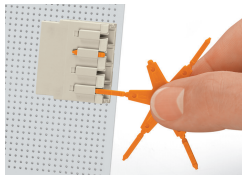
Coding



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.