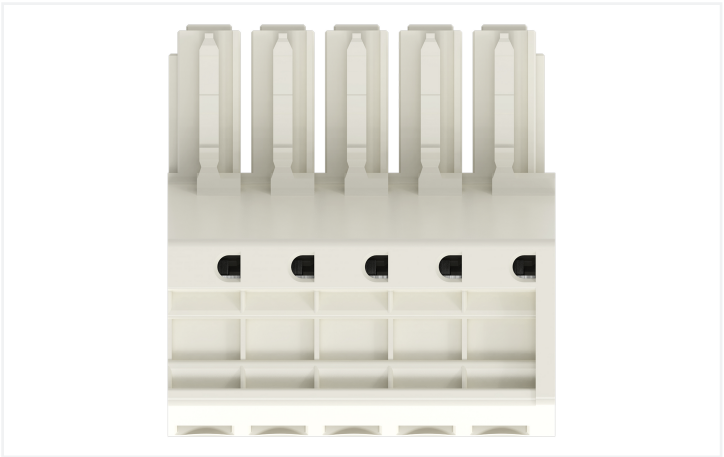
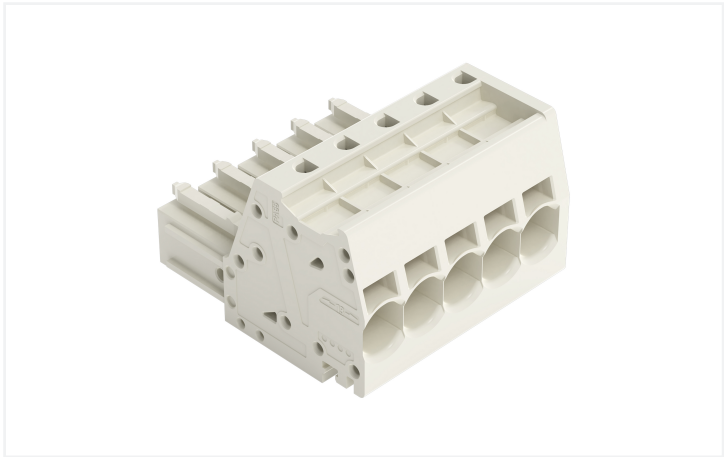


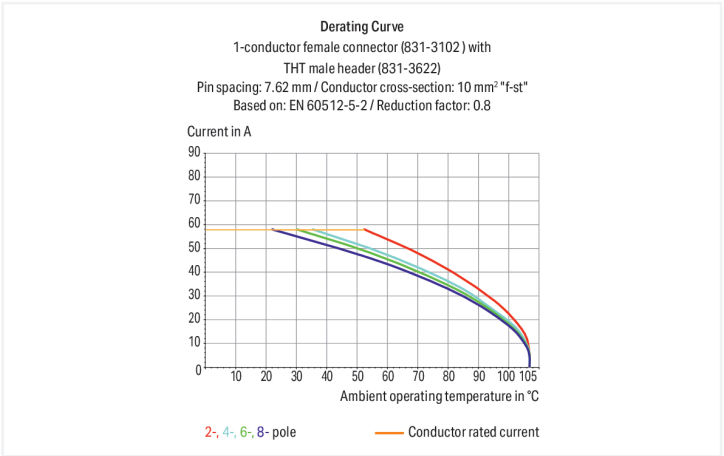
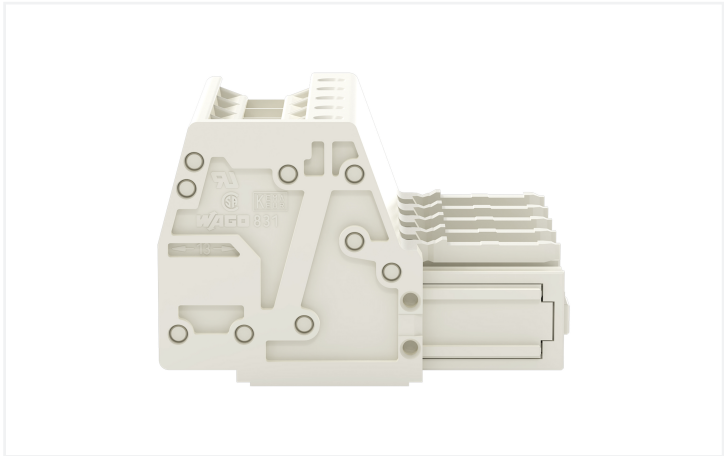
Data Sheet | Item Number: 831-3105

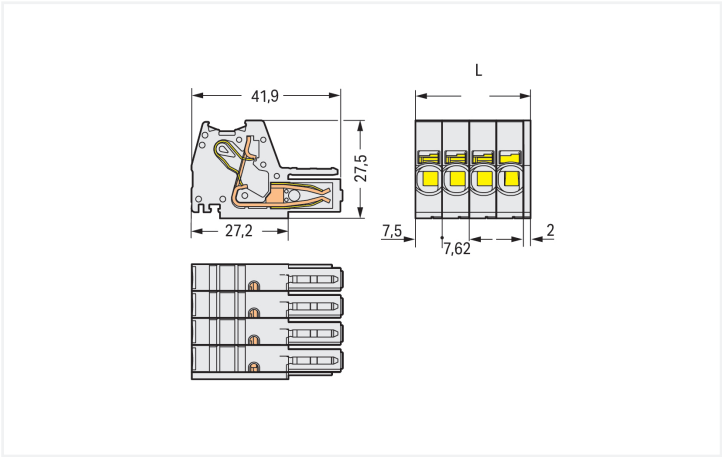
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; 10,00 mm²; light gray

<https://www.wago.com/831-3105>



Color: ■ light gray





Dimensions in mm
L = (pole no. – 1) x pin spacing + 9.5 mm

Female connector, 831 Series, light gray

This female connector (item number 831-3105) simplifies electrical installations. Ensure that the strip lengths are between 13 and 15 mm when connecting conductors to this female connector. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing to use any tools—all thanks to its pluggable design. The dimensions are (39.98 x 27.6 x 41.9) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.5 mm² to 10 mm².

Tin is used for coating the contact surfaces.

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 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	-
Rated current		-	41 A	-



Connection Data																						
Clamping units	5	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>5</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	5	Conductor entry direction to mating direction	0 °
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	5																					
Conductor entry direction to mating direction	0 °																					
Total number of potentials	5																					
Number of connection types	1																					
Number of levels	1																					

Physical data		
Pin spacing	7.62 mm / 0.3 inches	
Width	39.98 mm / 1.574 inches	
Height	27.6 mm / 1.087 inches	
Depth	41.9 mm / 1.65 inches	

Mechanical data		
Variable coding	Yes	
Anti-rotation protection	Yes	

Plug-in connection		
Contact type (pluggable connector)	Female connector/socket	
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)	
Material of the additional spring for socket contact	Chrome-nickel spring steel (CrNi)	
Contact material	Electrolytic copper (E _{Cu})	
Contact Plating	Tin	
Fire load	0.478 MJ	
Weight	37 g	



Environmental requirements	
Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C

Commercial data	
Product Group	3 (Multi Conn. System)
PU (SPU)	24 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966834130
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
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			Approvals for marine applications		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-61360/M1	LR Lloyds Register	IEC 61984	96/20035 (E5)
CSA DEKRA Certification B.V.	C22.2	1466354			
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-116057			
UR Underwriters Laboratories Inc.	UL 1059	UL-US-2426356-0			



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 831-3105

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Documentation

Additional Information

Technical Section

03.04.2019

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CAD data

2D/3D Models 831-3105

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CAE data

EPLAN Data Portal 831-3105

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ZUKEN Portal 831-3105

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1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 831-3205
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; 10,00 mm²; light gray



Item No.: 831-3205/007-000
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; DIN-35 rail mounting; 10,00 mm²; light gray



Item No.: 831-3205/007-9034
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; DIN-35 rail mounting; direct marking; 10,00 mm²; light gray



Item No.: 831-3205/000-9034
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; direct marking; 10,00 mm²; light gray



Item No.: 831-3205/135-000
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; 100% protected against mismatching; Strain relief plate; 10,00 mm²; light gray



Item No.: 831-3205/000-9032
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 5-pole; Preceding ground contact; 100% protected against mismatching; direct marking; 10,00 mm²; light gray



Item No.: 831-3625
THT male header; 1.0 x 1.2 mm solder pin; angled; 100% protected against mismatching; Pin spacing 7.62 mm; 5-pole; light gray



Item No.: 831-3645
THT male header; 1.0 x 1.2 mm solder pin; angled; 100% protected against mismatching; Pin spacing 7.62 mm; 5-pole; light gray



Item No.: 831-3605
THT male header; 1.0 x 1.2 mm solder pin; straight; 100% protected against mismatching; Pin spacing 7.62 mm; 5-pole; light gray



1.2 Optional Accessories			
1.2.1 Marking			
1.2.1.1 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
 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		



1.2.1.2 Marking strip



Item No.: 2009-110/762-802
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



Item No.: 2009-110/762-803
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



Item No.: 2009-110/762-804
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



Item No.: 2009-110/762-805
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



Item No.: 2009-110/762-806
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



Item No.: 2009-110/762-807
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



Item No.: 2009-110/762-808
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



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

1.2.2 Strain relief

1.2.2.1 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

1.2.3 Test and measurement

1.2.3.1 Testing accessories



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

1.2.4 Tool

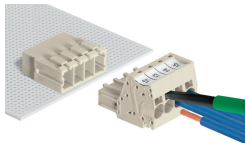
1.2.4.1 Operating tool



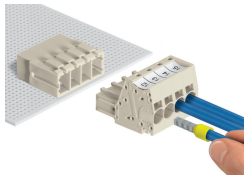
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination

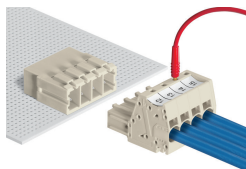


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



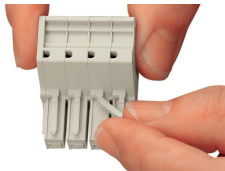
Solid and ferruled conductors are terminated by simply pushing them into unit.

Testing



Testing with 2 mm Ø test plug.

Coding



Break or cut off coding pin from female connector.

Marking



Direct marking of female and male connectors



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