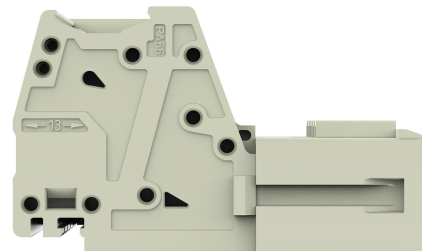
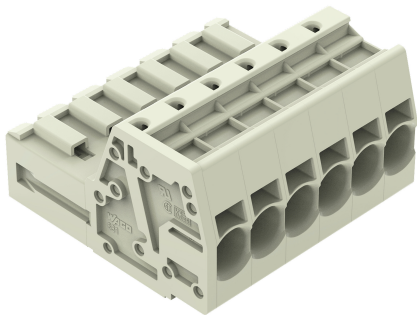


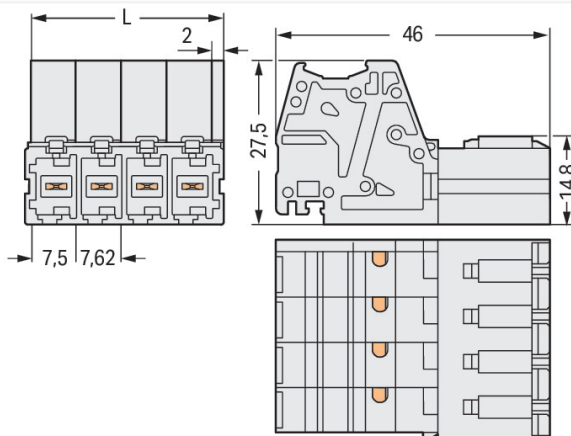
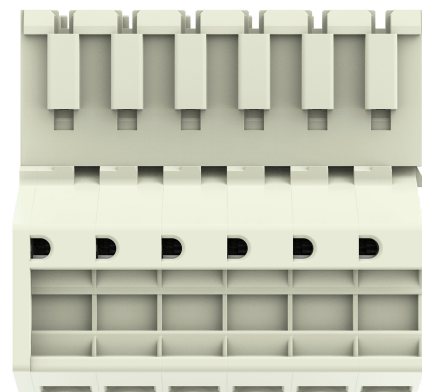
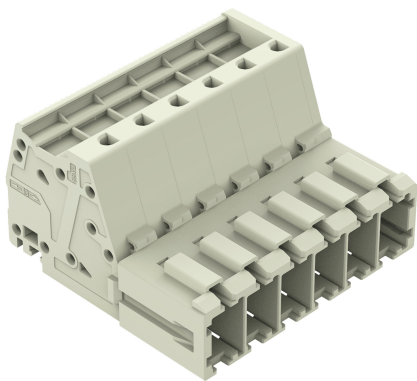
Data Sheet | Item Number: 831-3206

1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mismatching; 10,00 mm²; light gray

<https://www.wago.com/831-3206>



Color: ■ light gray

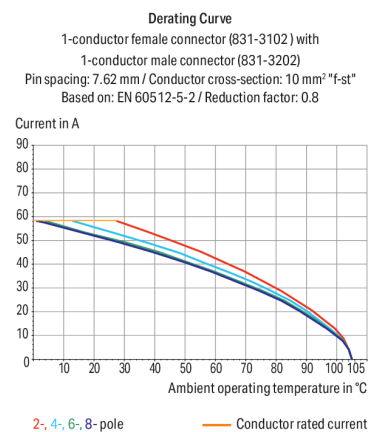


Dimensions in mm

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

Stiftleiste Serie 831, lichtgrau

Die Stiftleiste mit der Artikelnummer 831-3206 verspricht eine reibungslose Elektroinstallation. Unsere Leiterplatten-Steckverbinder geben Ihnen die größtmögliche Flexibilität bei verschiedenen Montagearten. Bei dieser Stiftleiste ist für den Leiteranschluss eine Abisolierlänge im Bereich von 13 bis 15 mm nötig. Bei diesem Produkt wird die Push-in CAGE CLAMP®-Technologie verwendet. Die Push-in CAGE CLAMP® Anschluss-technik ist der Universalanschluss für alle Leiterarten mit dem Zusatznutzen des direkten Steckens. Starre Leiter sowie feindrähtige Leiter mit Aderendhülse können ohne Werkzeug direkt in die Klemmstelle gesteckt werden. Die Maße sind in Breite x Höhe x Tiefe (47,6 x 27,5 x 46) mm. In Abhängigkeit von der Leiterart eignet sich die Stiftleiste für Leiterquerschnitte von 0,5 mm² bis 10 mm². Für die Kontaktoberfläche 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	6	Connection 1 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 6 Conductor entry direction to mating direction 0 °
Total number of potentials	6	
Number of connection types	1	
Number of levels	1	

Physical data	
Pin spacing	7.62 mm / 0.3 inches
Width	47.6 mm / 1.874 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		0.722 MJ																														
Weight		39.6 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
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																															
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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																															
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	
Product Group	3 (Multi Conn. System)
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)	24 (1) pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454160920
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
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-116057
UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations		
		
Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready

Approvals for marine applications

		
Approval	Standard	Certificate Name
LR Lloyds Register	IEC 61984	96/20035 (E5)



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 831-3206			

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 831-3206	

CAE data	
EPLAN Data Portal 831-3206	
ZUKEN Portal 831-3206	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 831-3106
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; 10,00 mm²; light gray



Item No.: 831-3106/000-9037
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; direct marking; 10,00 mm²; light gray



Item No.: 831-3106/135-000
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Gripping plate; 10,00 mm²; light gray



Item No.: 831-3106/037-000
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Lateral locking levers; 10,00 mm²; light gray



Item No.: 831-3106/037-9037
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; Lateral locking levers; direct marking; 10,00 mm²; light gray



Item No.: 831-3526
THT female header; angled; Pin spacing 7.62 mm; 6-pole; 100% protected against mismating; 1.0 x 1.2 mm solder pin; light gray



Item No.: 831-3506
THT female header; straight; Pin spacing 7.62 mm; 6-pole; 100% protected against mismating; 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



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



1.2.3.1 Marker



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



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

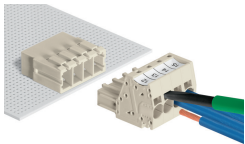
1.2.7.1 Operating tool



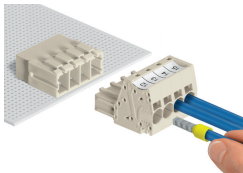
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination

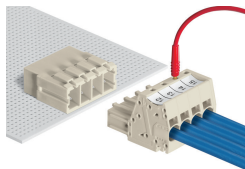


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.

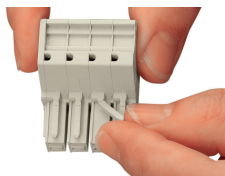


Solid and ferruled conductors are terminated by simply pushing them into unit.

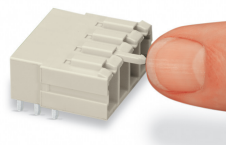
Testing



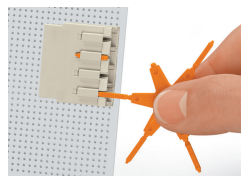
Testing with 2 mm Ø test plug.

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.