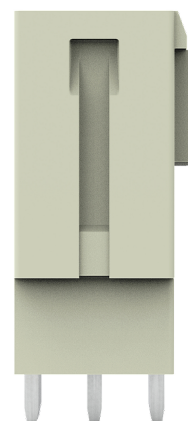
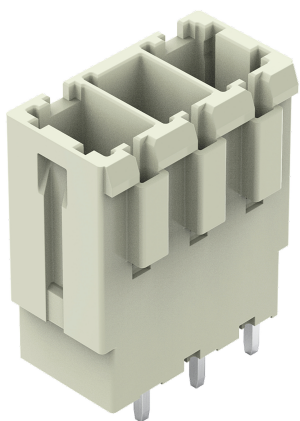


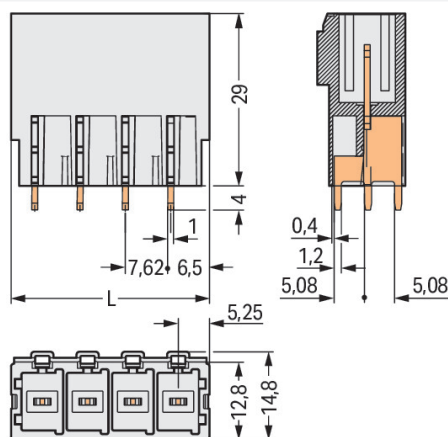
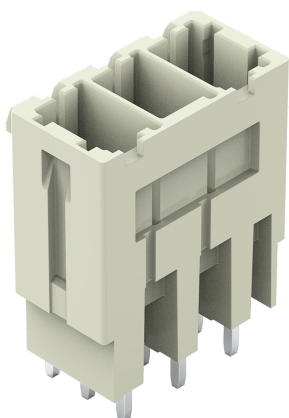
Data Sheet | Item Number: 831-3603

THT male header; 1.0 x 1.2 mm solder pin; straight; 100% protected against mis-mating; Pin spacing 7.62 mm; 3-pole; light gray

<https://www.wago.com/831-3603>

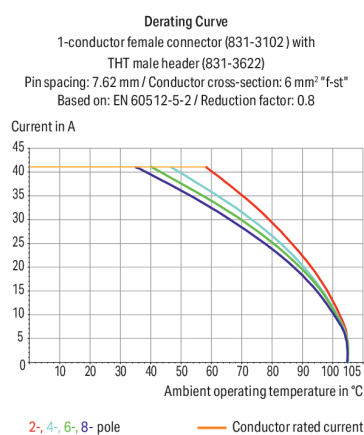


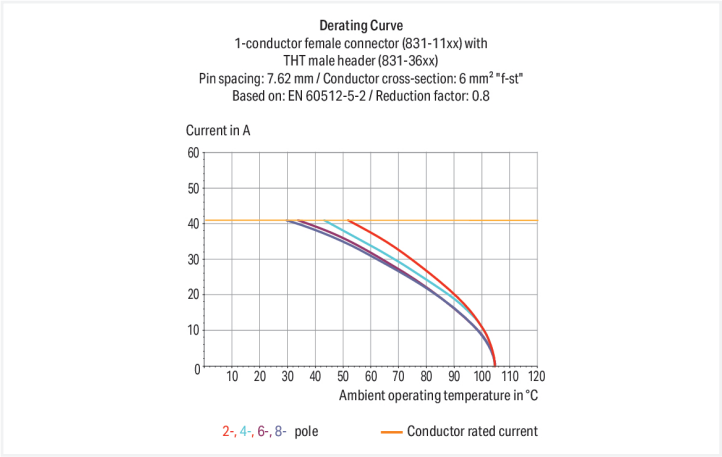
Color: ■ light gray



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 10.5 \text{ mm}$







Stiftleiste Serie 831, lichtgrau

Die Stiftleiste (Artikelnummer 831-3603) bietet eine reibungslose Elektroinstallation. Mit unseren Leiterplatten-Steckverbindern bekommen Sie ein ganzheitliches Steckverbindersystem, das vielseitig verwendet werden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Die Abmessungen sind in Breite x Höhe x Tiefe (25,74 x 33 x 14,8) mm. Die Oberfläche der Kontakte besteht aus Zinn. Das MCS – "Multi Connection System" von WAGO ist ein vielfältiges Steckverbindersystem für Ihre durchgängige Systemverdrahtung. Es ermöglicht Ihnen eine vereinfachte Verdrahtung in der Kabelvorkonfektionierung und auf Geräten durch zwei Betätigungsrichtungen für die CAGE CLAMP®-Varianten. Die Verlötlung des Leiterplatten-Steckverbinders erfolgt mittels THT.

Notes	
Safety Information	The MCS – <i>MULTI CONNECTION SYSTEM</i> 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 Protection against PCB mounting errors 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	500 V	630 V	1000 V	
Rated surge voltage	6 kV	6 kV	6 kV	
Rated current	41 A	41 A	41 A	
Approvals per		CSA		
Use group	B	C	D	
Rated voltage	-	300 V	600 V	
Rated current	-	41 A	5 A	

Approvals per				UL 1059	
Use group		B	C	D	
Rated voltage		-	300 V	600 V	
Rated current		-	42 A	5 A	

Connection data				
Total number of potentials		3	Connection 1	
Number of connection types		1	Pole number	
Number of levels		1	3	
Physical data				
Pin spacing		7.62 mm / 0.3 inches		
Width		25.74 mm / 1.013 inches		
Height		33 mm / 1.299 inches		
Height from the surface		29 mm / 1.142 inches		
Depth		14.8 mm / 0.583 inches		
Solder pin length		4 mm		
Solder pin dimensions		1 x 1.2 mm		
Drilled hole diameter with tolerance		1.7 ^(+0.1) mm		
Mechanical data				
Variable coding		Yes		
Anti-rotation protection		Yes		
Plug-in connection				
Contact type (pluggable connector)		Male connector/plug		
Connector (connection type)		for PCB		
Mismating protection		Yes		
Mating direction to the PCB		90 °		
PCB contact				
PCB contact		THT		
Solder pin arrangement		over the entire male connector (in-line)		
Number of solder pins per potential		3		



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
Contact material		Electrolytic copper (E _{CU})
Contact Plating		Tin
Fire load		0 MJ
Weight		8.8 g

Environmental requirements		
Limit temperature range	-60 ... +105 °C	Environmental Testing (Environmental Conditions)
Processing temperature	-35 ... +60 °C	
		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
		Acceleration
		0.101g (highest test level used for all axes)
		Test duration per axis
		10 min.
		Test directions
		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
		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 test scope: Monitoring for contact faults/interruptions
		Passed
		Extended test scope: Voltage drop measurement before and after each axis
		Passed
		Shock test
		Test passed according to Section 10 of the standard
		Shock 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 test scope: Monitoring for contact faults/interruptions
		Passed
		Extended test scope: Voltage drop measurement before and after each axis
		Passed
		Vibration and shock stress for rolling stock equipment
		Passed



Commercial data		
Product Group	3 (Multi Conn. System)	
PU (SPU)	48 pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4045454002114	
Customs tariff number	85366930000	

Product classification		
UNSPSC	39121409	
eCl@ss 10.0	27-44-04-02	
eCl@ss 9.0	27-44-04-02	
ETIM 9.0	EC002637	
ETIM 8.0	EC002637	
ECCN	NO US CLASSIFICATION	

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
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			

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 831-3603			

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 831-3603	

CAE data	
EPLAN Data Portal 831-3603	
ZUKEN Portal 831-3603	

PCB Design	
Symbol and Footprint via SamacSys 831-3603	
Symbol and Footprint via Ultra Librarian 831-3603	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

 Item No.: 831-1103 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; 10,00 mm²; light gray	 Item No.: 831-1103/000-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; black	 Item No.: 831-1103/302-004 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Centered locking levers; 10,00 mm²; black	 Item No.: 831-1103/320-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Centered locking levers; 10,00 mm²; light gray
 Item No.: 831-1103/322-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Centered locking levers; 10,00 mm²; light gray	 Item No.: 831-1103/037-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 10,00 mm²; light gray	 Item No.: 831-1103/038-000 1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 10,00 mm²; light gray	 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.: 831-3103/000-9037 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; direct marking; 10,00 mm²; light gray	 Item No.: 831-3103/133-000 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Gripping plate; 10,00 mm²; light gray	 Item No.: 831-3103/037-000 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 10,00 mm²; light gray	 Item No.: 831-3103/037-9037 1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; direct marking; 10,00 mm²; light gray

1.1.1 Female connector/socket



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

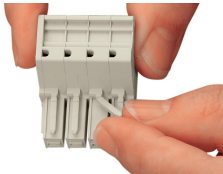
1.2.1.1 Coding



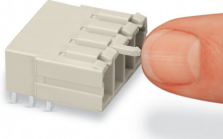
Item No.: 831-500
Coding pin carrier with six coding pins; orange

Installation Notes

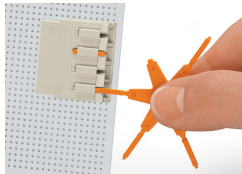
Coding



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.