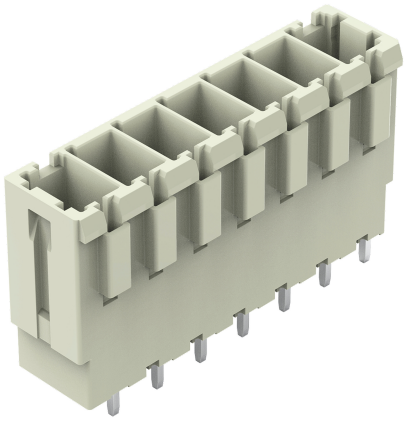
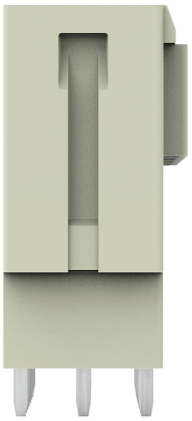
Data Sheet | Item Number: 831-3607

THT male header; 1.0 x 1.2 mm solder pin; straight; 100% protected against mismating; Pin spacing 7.62 mm; 7-pole; light gray

https://www.wago.com/831-3607





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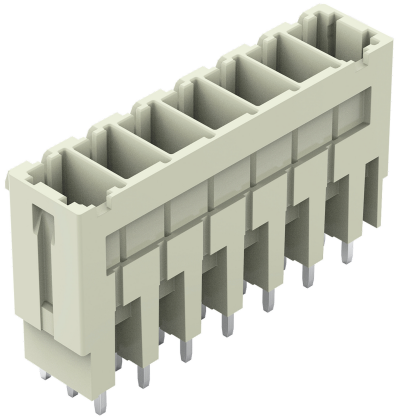



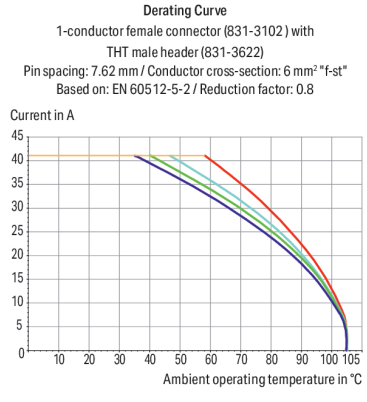

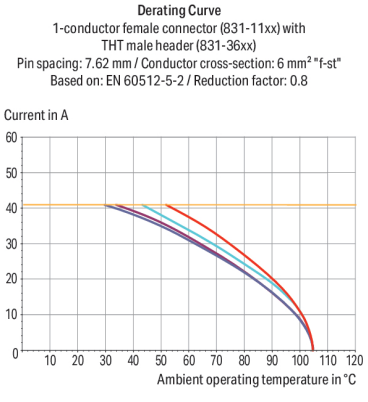

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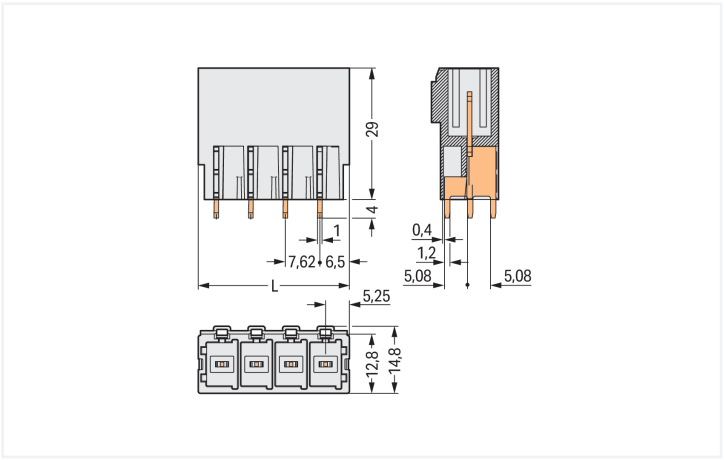

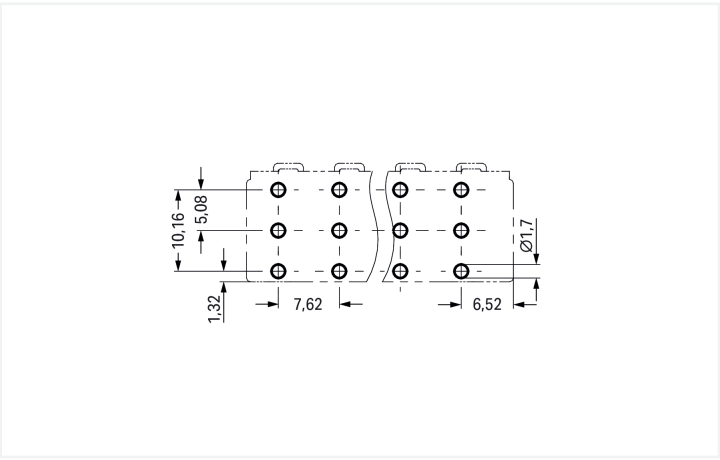

Dimensions in mm
L = (Polzahl – 1) x Rastermaß + 10,5 mm

Male connector, 831 Series, with 7.62 mm pin spacing

Our male connector (item number 831-3607) simplifies electrical installations. Dimensions: (56.22 x 33 x 14.8) mm (width x height x depth).

Tin is used for coating the contact surfaces. The pcb connector is designed for THT soldering.

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 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 impulse withstand voltage	6 kV	6 kV	6 kV
Rated current	41 A	41 A	41 A

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

Approvals per	CSA		
Use group	B	C	D
Rated voltage	-	300 V	600 V
Rated current	-	41 A	5 A

Connection Data

Total number of potentials	7
Number of connection types	1
Number of levels	1

Connection 1

Pole number	7

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Physical data

Pin spacing	7.62 mm / 0.3 inches
Width	56.22 mm / 2.213 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	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	0.274 MJ
Weight	19.5 g

Environmental requirements

Limit temperature range	-60 … +105 °C
Processing temperature	-35 … +60 °C

Environmental Testing

Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	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

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Environmental Testing

Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	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 testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse 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 testing: Monitoring of contact faults and interruptions	Passed
Extended testing: 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)	12 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454002152
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 10.0	EC002637
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

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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	71-129589 REV.1
UR 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

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 831-3607

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models 831-3607

CAE data

EPLAN Data Portal 831-3607

ZUKEN Portal 831-3607

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PCB Design
Symbol and Footprint via SamacSys 831-3607
Symbol and Footprint via Ultra Librarian 831-3607

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 831-1107
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; 10,00 mm²; light gray



Item No.: 831-1107/000-004
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; black



Item No.: 831-1107/322-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; Centered locking levers; 10,00 mm²; light gray



Item No.: 831-1107/037-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray



Item No.: 831-1107/038-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray



Item No.: 831-3107
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; 10,00 mm²; light gray



Item No.: 831-3107/000-9037
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; direct marking; 10,00 mm²; light gray



Item No.: 831-3107/136-000
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; Gripping plate; 10,00 mm²; light gray



Item No.: 831-3107/037-000
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray



Item No.: 831-3107/037-9037
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; Lateral locking levers; direct marking; 10,00 mm²; light gray



Item No.: 831-3527
THT female header; angled; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; 1.0 x 1.2 mm solder pin; light gray



Item No.: 831-3507
THT female header; straight; Pin spacing 7.62 mm; 7-pole; 100% protected against mismating; 1.0 x 1.2 mm solder pin; light gray

1.2 Optional Accessories

1.2.1 Coding

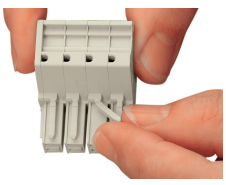
1.2.1.1 Coding



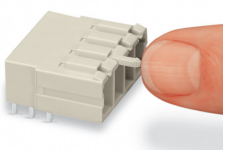
Item No.: 831-500
Coding pin carrier with six coding pins; orange

Installation Notes

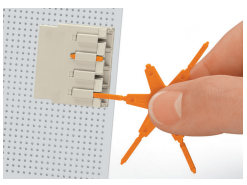
Coding



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.

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