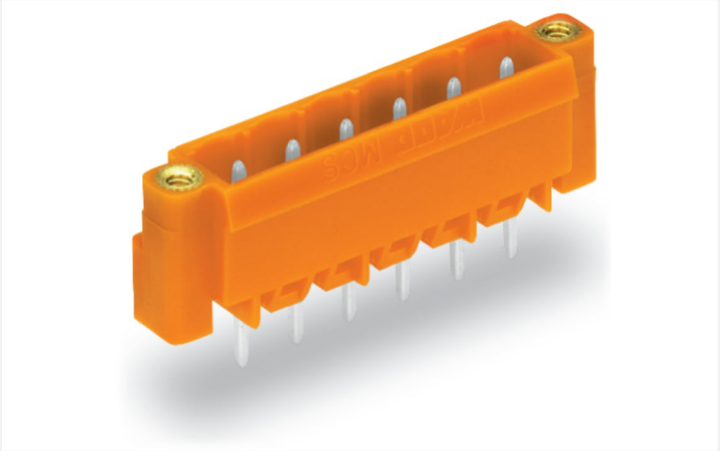
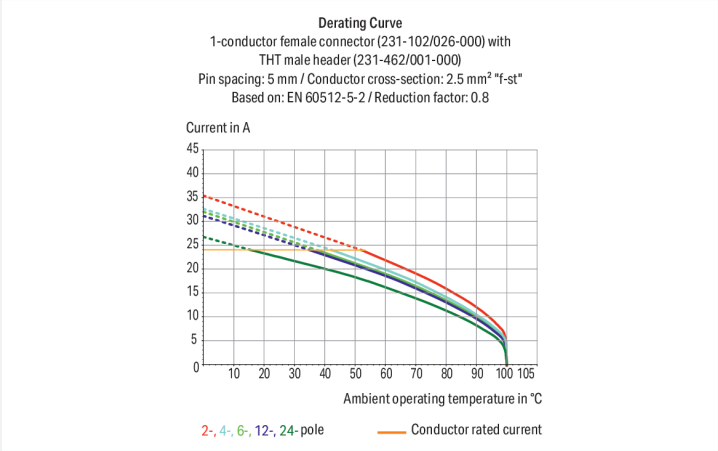
Data Sheet | Item Number: 231-338/108-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 8-pole; orange

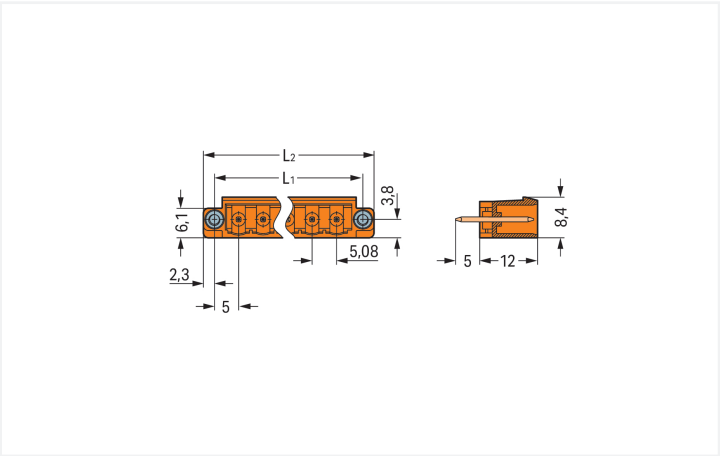
https://www.wago.com/231-338/108-000





Color: orange

Similar to illustration



Dimensions in mm
L1 = (pole no. x pin spacing) + 5.4 mmL2 = (pole no. x pin spacing) + 10 mm

Male connector, 231 Series, with 5.08 mm pin spacing

This male connector (item number 231-338/108-000) is designed for seamless electrical installations. The item's dimensions are (50.64 x 17 x 8.4) mm (width x height x depth).

The contact surface is coated with tin. The pcb connector is designed for THT soldering.

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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 3.8 mm pin projection for male headers with straight solder pins Gold-plated or partially gold-plated contact surfaces 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	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	12 A	12 A	12 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Ratings per UL 1977	
Rated current UL 1977	10 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Connection Data

Total number of potentials	8
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	8

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	50.64 mm / 1.994 inches
Height	17 mm / 0.669 inches
Height from the surface	12 mm / 0.472 inches
Depth	8.4 mm / 0.331 inches
Solder pin length	5 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter	$1.4^{(+0.1)}$ mm

Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

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Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	90 °
Locking of plug-in connection	Threaded flange

PCB contact

PCB contact	THT
Solder pin arrangement	over the entire male connector (in-line)
Number of solder pins per potential	1

Material data

Note (material data)	Information on material specifications can be found here
Color	orange
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	0.053 MJ
Weight	3.3 g

Environmental requirements

Limit temperature range	-60 … +100 °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
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

Continued on next page
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Environmental Testing

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)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918865470
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,With Exemption
RoHS Exemption	6(c)
SCIP notification number (Austria)	096e7bfd-f55c-45ad-a8c7-58e75b1b198d
SCIP notification number (Belgium)	86fd1922-ecb1-4a0a-90ce-16c8e632ae05
SCIP notification number (Bulgaria)	753d114f-781e-468c-90a0-453befa688f5
SCIP notification number (Czech Republic)	e266ec94-7d05-47d7-9fa9-4a6089e742f7
SCIP notification number (Denmark)	5aee175b-97a1-46c5-bfd9-83230a487605
SCIP notification number (Finland)	3c68d788-50b7-454b-9ce5-92b5f5027a9b
SCIP notification number (France)	8f8d2f6f-7ca6-4ff9-8dea-89c31ff92175
SCIP notification number (Germany)	2f1a0766-c7c3-4b49-8e43-5884e9dc5540
SCIP notification number (Hungary)	a6f082f8-f426-4881-bf9b-b2e9a68d11a9
SCIP notification number (Italy)	61ad3d11-6b01-40f9-a39a-7d7d3189d333
SCIP notification number (Netherlands)	ebe4109e-4849-40c2-ba49-d08e20e11118
SCIP notification number (Poland)	3cdc8228-d3d2-4fd4-aea7-22897b139dfc
SCIP notification number (Romania)	da275d53-443d-450e-96fa-5eb776ae1541
SCIP notification number (Sweden)	9592bfe1-d6cf-4099-859e-f8548ca4052f

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Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
231-338/108-000

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models
231-338/108-000

CAE data

EPLAN Data Portal
231-338/108-000

ZUKEN Portal
231-338/108-000

PCB Design

Symbol and Footprint via SamacSys
231-338/108-000

Symbol and Footprint via Ultra Librarian
231-338/108-000

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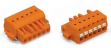
1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 231-308/107-000
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 8-pole; Screw flange; orange



Item No.: 2231-308/107-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 8-pole; Screw flange; orange



Item No.: 231-2308/107-000
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 8-pole; Screw flange; orange

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 231-129
Coding key; snap-on type; light gray

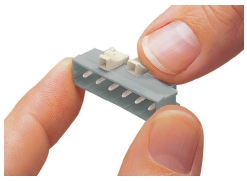
1.2.1.2 Intermediate plate



Item No.: 231-500
Spacer; for formation of groups; light gray

Installation Notes

Coding



Coding a male header – fitting coding key(s).

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