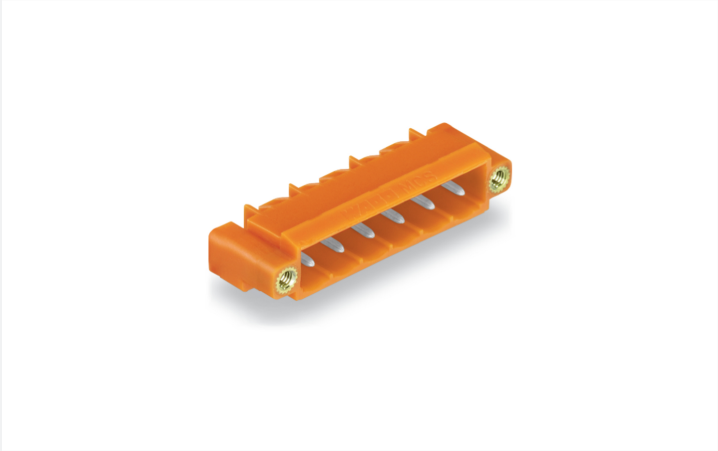
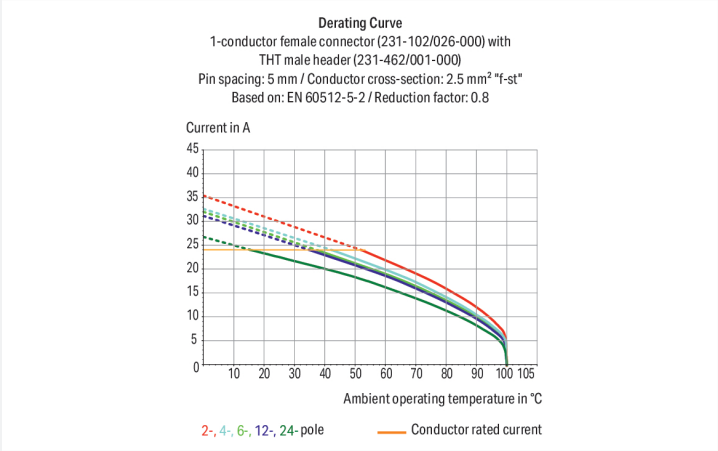
Data Sheet | Item Number: 231-533/108-000

THT male header; 1.0 x 1.0 mm solder pin; angled; Threaded flange; Pin spacing 5.08 mm; 3-pole; orange

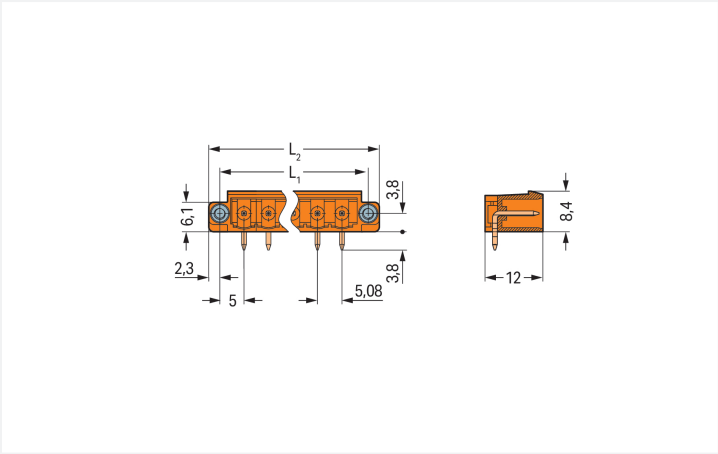
https://www.wago.com/231-533/108-000





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, orange

Our male connector (item number 231-533/108-000) ensures effortless electrical installations. Dimensions: (25.24 x 12.2 x 12) mm (width x height x depth).

The contact surface is coated with tin. 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 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	3
Number of connection types	1
Number of levels	1

Connection 1

Pole number	3

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	25.24 mm / 0.994 inches
Height	12.2 mm / 0.48 inches
Height from the surface	8.4 mm / 0.331 inches
Depth	12 mm / 0.472 inches
Solder pin length	3.8 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

Continued on next page

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	0 °
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	0.029 MJ
Weight	1.8 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

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)	200 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918866828
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)	08dfd299-c06f-4b8c-9721-f226736d8289
SCIP notification number (Belgium)	df2543b0-234d-49dd-a856-36f39a376eb7
SCIP notification number (Bulgaria)	c465cb03-3b41-489c-aecb-044f127215df
SCIP notification number (Czech Republic)	c6fb789c-0e54-4b84-8a84-d8b339baed2a
SCIP notification number (Denmark)	8f1328c8-eff9-461e-a004-a15714ccafae
SCIP notification number (Finland)	a990c0cd-37cc-49f5-8875-8987e5ef9b44
SCIP notification number (France)	011e785f-c7d5-4888-aef2-d3631260e303
SCIP notification number (Germany)	b91735df-6c9a-451d-8683-110942a69193
SCIP notification number (Hungary)	39ecd190-f626-46e5-b788-95cb20663207
SCIP notification number (Italy)	8a8d9d61-7347-4eff-a800-2d837f08fdf9
SCIP notification number (Netherlands)	7d601439-c5c3-40f0-ab40-8f1167b04fd9
SCIP notification number (Poland)	6809eb9d-280b-4fad-82b9-1d0cbc2d8707
SCIP notification number (Romania)	0d9c7c21-9a94-41ef-9088-d2acfdec944a
SCIP notification number (Sweden)	e9162e91-7133-4778-9714-8b76ba23e36c

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Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UL Underwriters Laboratories Inc.	UL 1977	E45171
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
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
231-533/108-000

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models
231-533/108-000

CAE data

EPLAN Data Portal
231-533/108-000

ZUKEN Portal
231-533/108-000

Continued on next page

PCB Design
Symbol and Footprint via SamacSys 231-533/108-000
Symbol and Footprint via Ultra Librarian 231-533/108-000

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 231-303/107-000
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; Screw flange; orange



Item No.: 2231-303/107-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; Screw flange; orange



Item No.: 231-2303/107-000
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-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

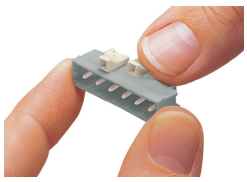
1.2.1.2 Intermediate plate



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

Installation Notes

Coding



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