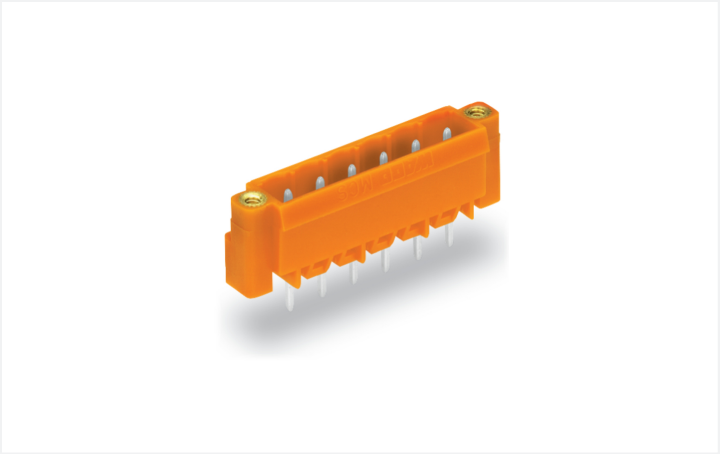
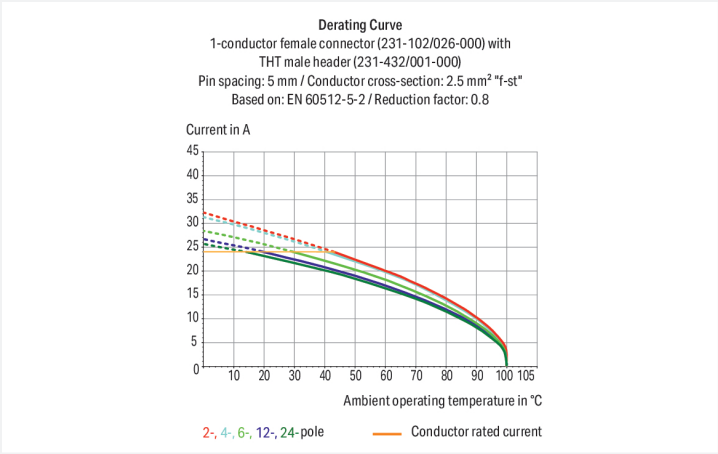
Data Sheet | Item Number: 231-376/108-000

THT male header; 1.2 x 1.2 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 16-pole; orange

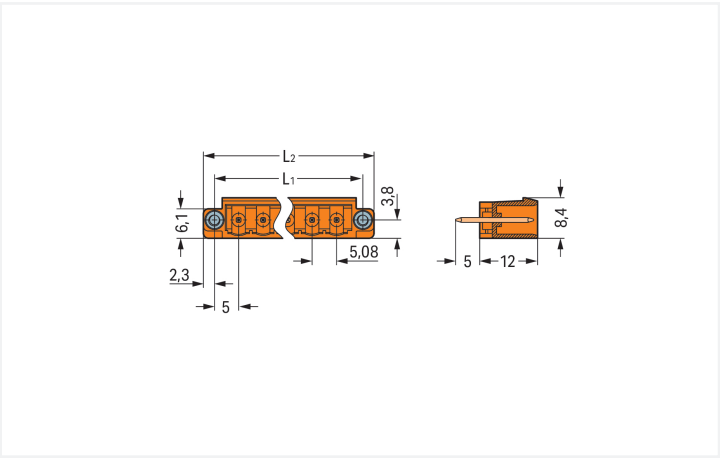
https://www.wago.com/231-376/108-000





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, solder pin dimensions 1.2 x 1.2 mm

Our male connector (item number 231-376/108-000) ensures effortless electrical installations. The dimensions are (91.28 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.

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	250 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	16 A	16 A	16 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Approvals per	UL 1977
Rated voltage	600 V
Rated current	15 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Connection Data

Total number of potentials	16
Number of connection types	1
Number of levels	1

Connection 1

Pole number	16

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	91.28 mm / 3.594 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	1.2 x 1.2 mm
!	1.7 $^{(+0.1)}$ 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	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	0.101 MJ
Weight	6.8 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

 Continued on next page

Environmental Testing

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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454845810
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)	3f4743b4-d513-440c-8075-611c336aac71
SCIP notification number (Belgium)	83ff237f-eca8-4376-95d6-b80504932669
SCIP notification number (Bulgaria)	99f821c9-f2ad-4972-a923-b5c62bc8a05c
SCIP notification number (Czech Republic)	e7a14740-b855-4975-a6c4-2d712863c407
SCIP notification number (Denmark)	dd094b88-6206-4143-8bb6-e7b2b81f0c45
SCIP notification number (Finland)	0b915417-3077-4eef-b62d-860ea275564e
SCIP notification number (France)	03e1e10e-8694-4223-8161-8c94bd92ca1c
SCIP notification number (Germany)	1404325c-7b72-46a8-97df-618b7c11a504
SCIP notification number (Hungary)	4a1af684-59cb-42c7-a89c-11ed76a86104
SCIP notification number (Italy)	28173042-f2bc-4d99-b59f-f136c3f3466d
SCIP notification number (Netherlands)	de2d3506-01d7-46c3-93d6-1c20dcfa7194
SCIP notification number (Poland)	96793e9c-32ed-4b22-a4ad-5483a2f097d7
SCIP notification number (Romania)	7306760c-d86f-42c5-8b01-be7514d92896
SCIP notification number (Sweden)	8458f6f9-eed8-4448-9b0c-2bc9e462a4d0

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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
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
231-376/108-000

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models
231-376/108-000

CAE data

ZUKEN Portal
231-376/108-000

PCB Design

Symbol and Footprint
via SamacSys
231-376/108-000

Symbol and Footprint
via Ultra Librarian
231-376/108-000

 Continued on next page

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

Item No.: 231-316/107-000
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; Screw flange; orange

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding

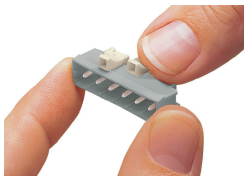
Item No.: 231-129
Coding key; snap-on type; light gray

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).