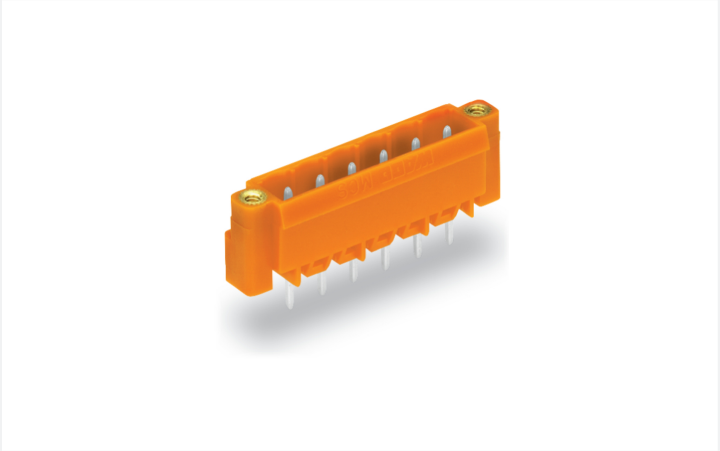
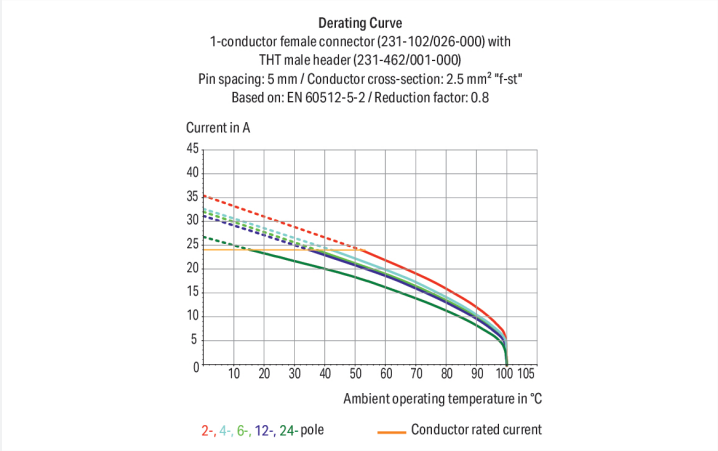
Data Sheet | Item Number: 231-346/108-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Threaded flange; Pin spacing 5.08 mm; 16-pole; orange

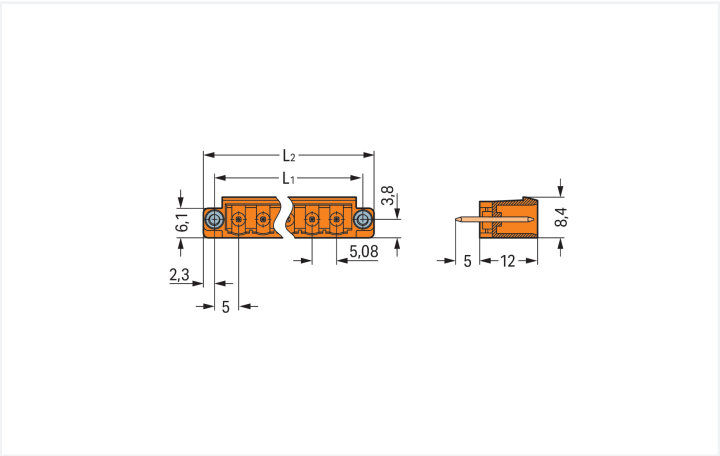
https://www.wago.com/231-346/108-000





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 x 1 mm

Our male connector (item number 231-346/108-000) simplifies electrical installations. Dimensions: (91.28 x 17 x 8.4) 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 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	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 x 1 mm
Drilled hole diameter	$1.4^{(+0.1)}$ 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	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	0.091 MJ
Weight	5.8 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)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454029173
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)	06380b25-04f5-4bcc-b9c3-912ee6f7dd14
SCIP notification number (Belgium)	3f91cb0b-aad6-464d-a7e0-d40a740752d5
SCIP notification number (Bulgaria)	892487d1-e274-477d-af3e-f8eea3030749
SCIP notification number (Czech Republic)	8d6c7d53-8531-49d3-8735-7b4490d82384
SCIP notification number (Denmark)	966feeed-db40-4a0c-a21c-0d16b66cac00
SCIP notification number (Finland)	81321a22-2fdf-462e-9127-bd6be2712688
SCIP notification number (France)	47ecc41d-8efa-4634-ae52-6a5b4f81da88
SCIP notification number (Germany)	fd665e75-ecb4-4de5-ba05-40b4b7a3bdd4
SCIP notification number (Hungary)	f359b52c-1c34-43a7-8636-dcb5ad6e8888
SCIP notification number (Italy)	23ab09f0-0420-4598-ade9-b08718f613c8
SCIP notification number (Netherlands)	217d525a-ce5c-4e72-b79d-7f826ece4ca7
SCIP notification number (Poland)	7ae97f53-c902-4047-a548-97a5c557f18e
SCIP notification number (Romania)	a0e487dd-611a-402b-a7c0-8e1039fa5bea
SCIP notification number (Sweden)	e4dfa69d-9f7c-4b45-9bda-71ba6f3040a8

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
UL UL International Germany GmbH	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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
231-346/108-000

Documentation

Additional Information

Technical Section — 03.04.2019 — pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models
231-346/108-000

CAE data

EPLAN Data Portal
231-346/108-000

ZUKEN Portal
231-346/108-000

PCB Design

Symbol and Footprint via SamacSys
231-346/108-000

Symbol and Footprint via Ultra Librarian
231-346/108-000

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

Item No.: 2231-316/107-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 16-pole; Screw flange; 2,50 mm²; orange

Item No.: 231-2316/107-000
2-conductor female connector; Push-in 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

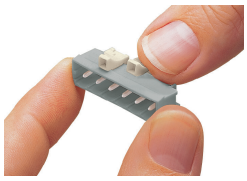
Item No.: 231-129
Coding key; snap-on type; light gray

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).