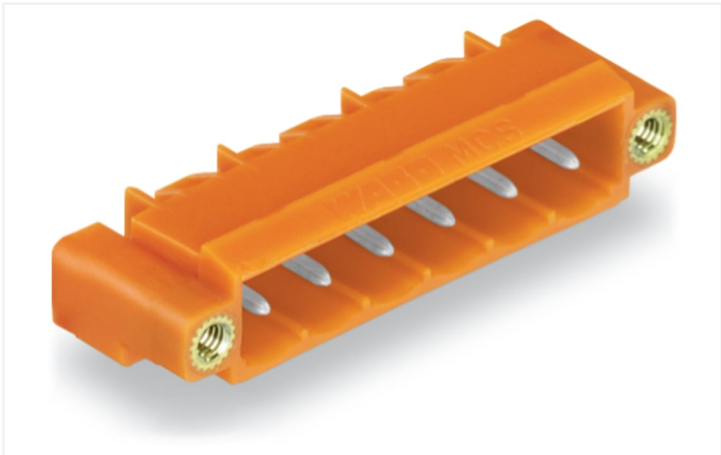
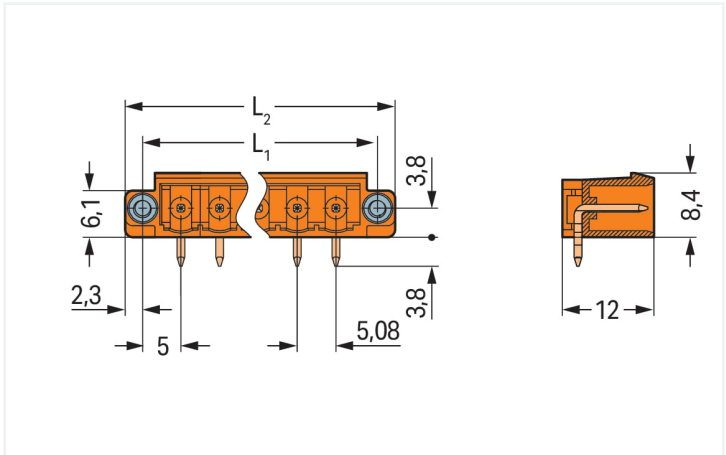


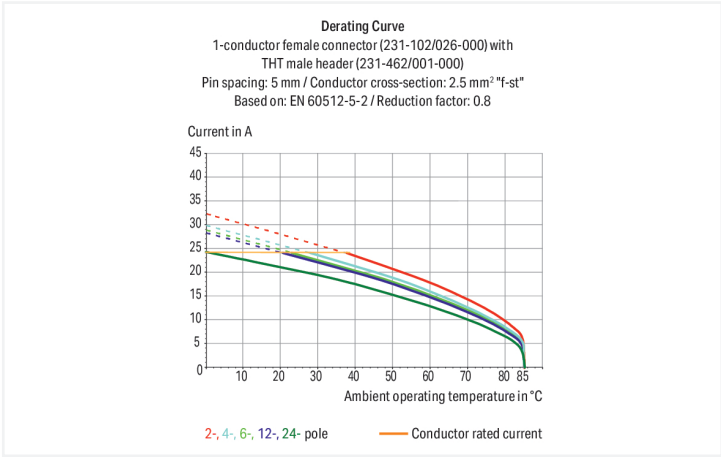


Color: ■ orange

Similar to illustration



Dimensions in mm
L1 = (pole no. x pin spacing) + 5.4 mm
L2 = (pole no. x pin spacing) + 10 mm



- Horizontal or vertical PCB mounting via straight or angled solder pins
- 1.2 x 1.2 mm solder pins allow nominal current up to 16 A, enhancing stability of shorter headers
- With coding fingers

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				Approvals per UL 1059			
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	250 V	320 V	630 V	Rated current	15 A	-	10 A
Rated surge voltage	4 kV	4 kV	4 kV				
Rated current	16 A	16 A	16 A				

Approvals per UL 1977		Approvals per CSA			
Rated voltage	600 V	Use group	B	C	D
Rated current	15 A	Rated voltage	300 V	-	300 V
		Rated current	15 A	-	10 A

Connection data

Total number of potentials	3	Connection 1	
Number of connection types	1	Pole number	3
Number of levels	1		

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	1.2 x 1.2 mm
Drilled hole diameter with tolerance	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	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	0.032 MJ
Weight	2 g

Environmental requirements	
Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed



Commercial data	
Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 8.0	EC002637
PU (SPU)	200 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454843724
Customs tariff number	85366930000

Environmental Product Compliance	
CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c)
SCIP notification number (Austria)	3fb8c5f9-c0a1-4e0a-bf50-55800fe088c1
SCIP notification number (Belgium)	26d311ab-c318-4aeb-8bae-d7262e8b90de
SCIP notification number (Bulgaria)	cb990534-6cc6-43d9-91d0-b3c5c52aaec5
SCIP notification number (Czech Republic)	823a16b0-bd0d-4315-9392-b37adb2191d2
SCIP notification number (Denmark)	22a5d87f-471f-483f-8762-c2b874e8616c
SCIP notification number (Finland)	227800f3-94ce-41d1-8ca9-1f035aaf0fe8
SCIP notification number (France)	f2294126-e67e-4c56-b029-6871ec49f4c1
SCIP notification number (Germany)	22e41761-a54a-4d7a-b6f7-962b7ce49c69
SCIP notification number (Hungary)	50b62315-f4a1-43f1-8215-630045fbf065
SCIP notification number (Italy)	ae4f4c21-2808-49eb-844a-b88271299a08
SCIP notification number (Netherlands)	b8f453c5-0622-4029-b3c1-2f2809ae66ea
SCIP notification number (Poland)	628adf8d-c716-4976-8847-1c4b27bc4da1
SCIP notification number (Romania)	c3505917-b77f-405a-97a3-8294f83d9fe4
SCIP notification number (Sweden)	e58b3538-a16f-488f-9a49-b1c8413fb18b

Approvals / Certificates					
General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-39756/A1	Railway WAGO GmbH & Co. KG	-	Railway Ready
CSA DEKRA Certification B.V.	C22.2	1466354			
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453			
UR Underwriters Laboratories Inc.	UL 1059	E45172			



Approvals for marine applications



Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 231-563/108-000	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data
2D/3D Models 231-563/108-000

CAE data
ZUKEN Portal 231-563/108-000

PCB Design	
Symbol and Footprint via SamacSys 231-563/108-000	
Symbol and Footprint via Ultra Librarian 231-563/108-000	

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; 2,50 mm²; 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

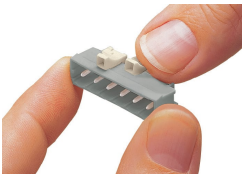
1.2.1.2 Intermediate plate



Item No.: [231-500](#)
Spacer; for formation of groups; light gray

Installation Notes

Coding



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