

Data Sheet | Item Number: 733-333

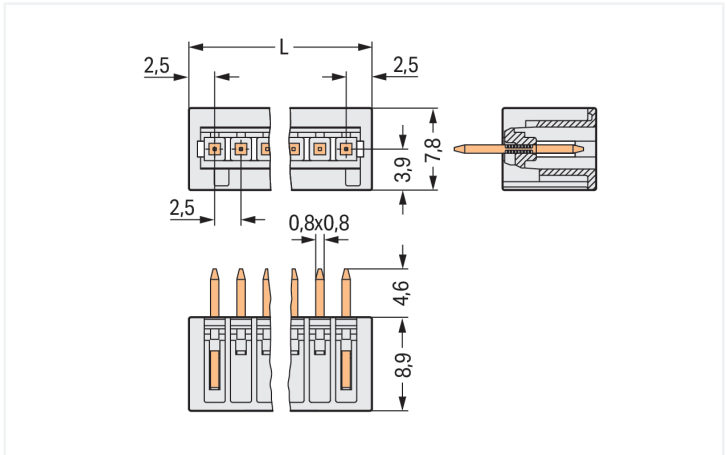
THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mis-mating; Pin spacing 2.5 mm; 3-pole; light gray

<https://www.wago.com/733-333>



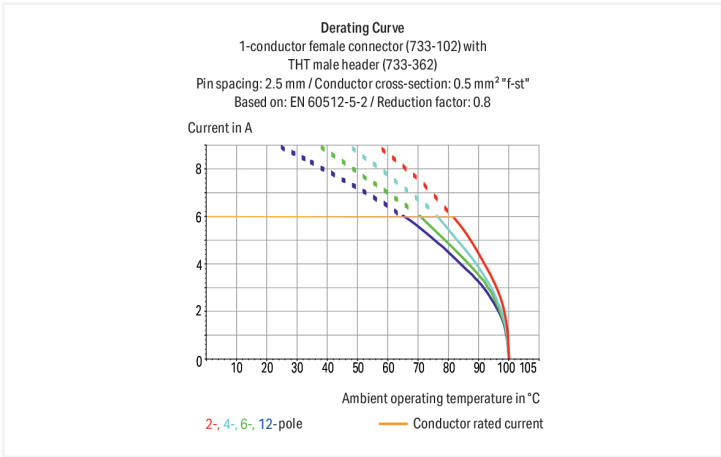
Color: ■ light gray

Similar to illustration



Dimensions in mm

L = (pole no. + 1) x pin spacing



Stiftleiste Serie 733 mit Rastermaß 2,5 mm

Die Stiftleiste hat die Artikelnummer 733-333 und bietet eine fehlerfreie Elektroinstallation. Setzen Sie beim Design-In Ihres Gerätes auf alterprobte Sicherheit: Mit Leiterplatten-Steckverbindern erhalten Sie vielseitige Verwendungsmöglichkeiten. In Breite x Höhe x Tiefe sind die Abmessungen (10 x 13,5 x 7,8) mm. Die Oberfläche der Kontakte ist aus Zinn. Das MCS – "Multi Connection System" von WAGO ist ein vielfältiges Steckverbindersystem für Ihre durchgängige Systemverdrahtung. Es ermöglicht Ihnen eine vereinfachte Verdrahtung in der Kabelvorkonfektionierung und auf Geräten durch zwei Betätigungsrichtungen für die CAGE CLAMP®-Varianten. Der Leiterplatten-Steckverbinder wird mittels THT verlötet.

Notes	
Safety Information	The MCS – <i>MULTI CONNECTION SYSTEM</i> 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 <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .



Electrical data						
Ratings per		IEC/EN 60664-1			Approvals per	
		UL 1059				
Overvoltage category	III	III	II	Use group	B	C
Pollution degree	3	2	2	Rated voltage	150 V	-
Nominal voltage	80 V	160 V	320 V	Rated current	4 A	-
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV			
Rated current	6 A	6 A	6 A			

Approvals per		CSA		
Use group	B	C	D	
Rated voltage	150 V	-	-	
Rated current	4 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	2.5 mm / 0.098 inches
Width	10 mm / 0.394 inches
Height	13.5 mm / 0.531 inches
Height from the surface	8.9 mm / 0.35 inches
Depth	7.8 mm / 0.307 inches
Solder pin length	4.6 mm
Solder pin dimensions	0.8 x 0.8 mm
Drilled hole diameter with tolerance	1.1 <sup>(+0.1)</sup> 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	Yes
Mating direction to the PCB	90 °

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)		<a href="#">Information on material specifications can be found here</a>
Color	light gray	
Material group	I	
Insulation material (main housing)	Polyamide (PA66)	
Flammability class per UL94	V0	
Contact material	Electrolytic copper (E <sub>CU</sub> )	
Contact Plating	Tin	
Fire load	0.009 MJ	
Weight	0.5 g	

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








Commercial data		
Product Group	3 (Multi Conn. System)	
PU (SPU)	200 pcs	
Packaging type	Box	
Country of origin	CN	
GTIN	4050821035602	
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 8.0	EC002637	
ECCN	NO US CLASSIFICATION	

Environmental Product Compliance		
RoHS Compliance Status	Compliant, No Exemption	

### Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
   					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61984	2169534.01	Railway WAGO GmbH & Co. KG	-	Railway Ready
CCA DEKRA Certification B.V.	IEC 61984	NL-31141			
CSA DEKRA Certification B.V.	C22.2	1465035			
UL UL International Germany GmbH	UL 1977	E45171			
UL Underwriters Laboratories Inc.	UL 1059	E45172			

### Approvals for marine applications

  		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
DNV DNV GL SE	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 733-333

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models 733-333

↓

CAE data

EPLAN Data Portal 733-333

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ZUKEN Portal 733-333

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PCB Design

Symbol and Footprint via SamacSys 733-333

↓

Symbol and Footprint via Ultra Librarian 733-333

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1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



[Item No.: 733-103](#)  
1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 0,50 mm²; light gray

[Item No.: 733-103/037-000](#)  
1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 0,50 mm²; light gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



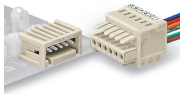
Item No.: 733-331  
Coding key; snap-on type; black



Item No.: 733-330  
Coding key; snap-on type; white

Installation Notes

Mismating protection



Male headers and female connectors are 100% protected against mismating. Only mating halves with the same pole number can be connected.

Coding



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