

Data Sheet | Item Number: 733-333

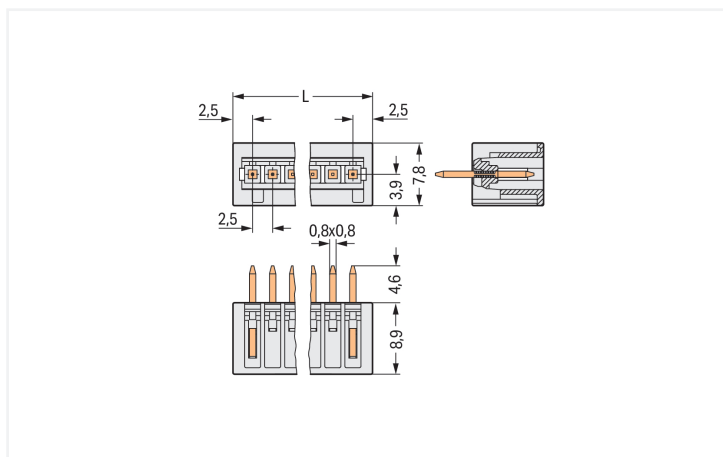
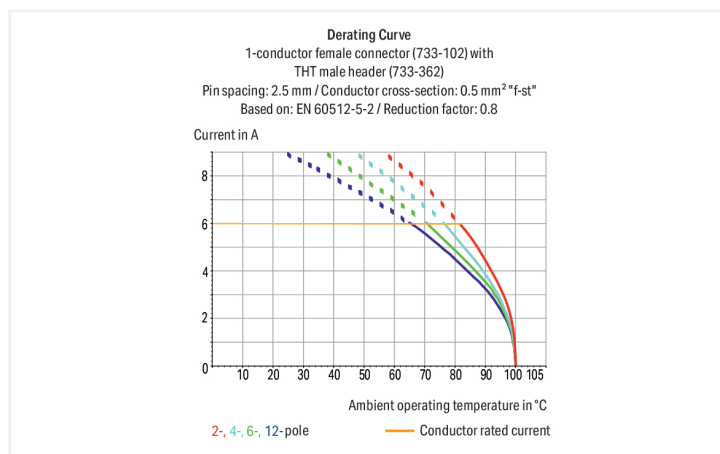
THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating;
Pin spacing 2.5 mm; 3-pole; light gray

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



Color: ■ light gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} + 1) \times \text{pin spacing}$

Male connector, 733 Series, light gray

This male connector (item number 733-333) simplifies electrical installations. Dimensions: (10 x 13.5 x 7.8) 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 – <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 https://configurator.wago.com/ .

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

Approvals per		CSA		
Use group		B	C	D
Rated voltage		150 V	-	-
Rated current		4 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	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	1.1 ^(+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	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)	Information on material specifications can be found here
Color	light gray
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	0.009 MJ
Weight	0.5 g

Environmental requirements		
Limit temperature range	-60 ... +100 °C	Environmental Testing
Processing temperature	-35 ... +60 °C	
		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
		Acceleration
		5g (highest test level used for all axes)



Environmental Testing	
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	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 10.0	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
CCA DEKRA Certification B.V.	EN 61984	2169534.01
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



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
DNV DNV GL SE	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 733-333

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
ZUKEN Portal 733-333

PCB Design
Symbol and Footprint via SamacSys 733-333
Symbol and Footprint via Ultra Librarian 733-333

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



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; light gray



Item No.: 733-103

1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 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

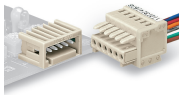


Item No.: 733-330

Coding key; snap-on type; white

Installation Notes

Mismatching protection



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

Coding



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