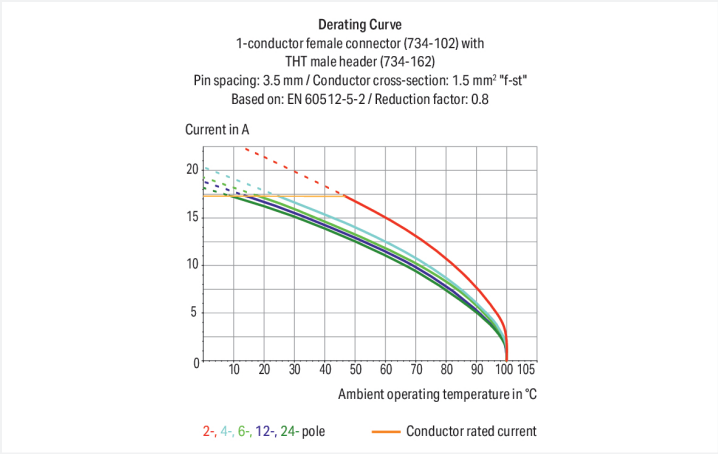
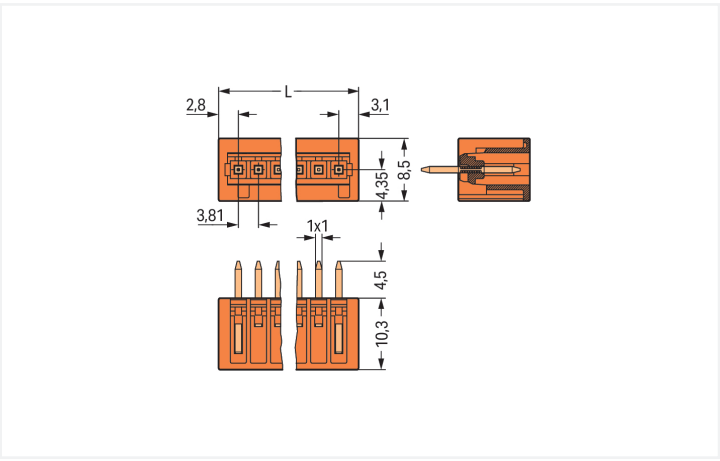
Data Sheet | Item Number: 734-250

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.81 mm; 20-pole; orange

https://www.wago.com/734-250



Color: orange



Dimensions in mm
L = (pole no. – 1) x pin spacing + 5.9 mm

Male connector, 734 Series, orange

This male connector (item number 734-250) simplifies electrical installations. The dimensions are (78.29 x 14.8 x 8.5) mm (width x height x depth).

Tin is used for coating the contact surfaces. THT is used to assemble the pcb connector.

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 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	160 V	160 V	320 V
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV
Rated current	10 A	10 A	10 A

Approvals per UL 1059

Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	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	20
Number of connection types	1
Number of levels	1

Connection 1

Pole number	20

Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	78.29 mm / 3.082 inches
Height	14.8 mm / 0.583 inches
Height from the surface	10.3 mm / 0.406 inches
Depth	8.5 mm / 0.335 inches
Solder pin length	4.5 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter with tolerance	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	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	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	0.082 MJ
Weight	4.8 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

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	4044918848053
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

Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	EN 61984	NL-54190
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-105522
UL Underwriters Laboratories Inc.	UL 1977	E 45171

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

Approval	Standard	Certificate Name
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 734-250

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models 734-250

CAE data

EPLAN Data Portal 734-250

ZUKEN Portal 734-250

PCB Design

Symbol and Footprint via SamacSys 734-250

Symbol and Footprint via Ultra Librarian 734-250

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

Item No.: 734-220/037-000
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; Lateral locking levers; orange

Item No.: 734-220
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; orange

Item No.: 2734-220/027-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; clamping collar; orange

Item No.: 2734-220/031-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; clamping collar; orange

Item No.: 2734-220/037-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; Lateral locking levers; orange

Item No.: 2734-220
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; orange

Item No.: 734-580
THT female header; angled; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; 0.9 x 0.9 mm solder pin; orange

Item No.: 734-580/037-000
THT female header; angled; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; Locking lever; 0.9 x 0.9 mm solder pin; orange

Item No.: 734-520
THT female header; straight; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; 0.9 x 0.9 mm solder pin; orange

Item No.: 734-520/037-000
THT female header; straight; Pin spacing 3.81 mm; 20-pole; 100% protected against mismating; Locking lever; 0.9 x 0.9 mm solder pin; orange

1.2 Optional Accessories

1.2.1 Coding

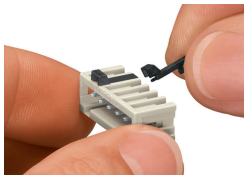
1.2.1.1 Coding

Item No.: 734-159
Coding key; to be snapped above top level; black

Item No.: 734-130
Coding key; to be snapped above top level; white

Installation Notes

Coding



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