

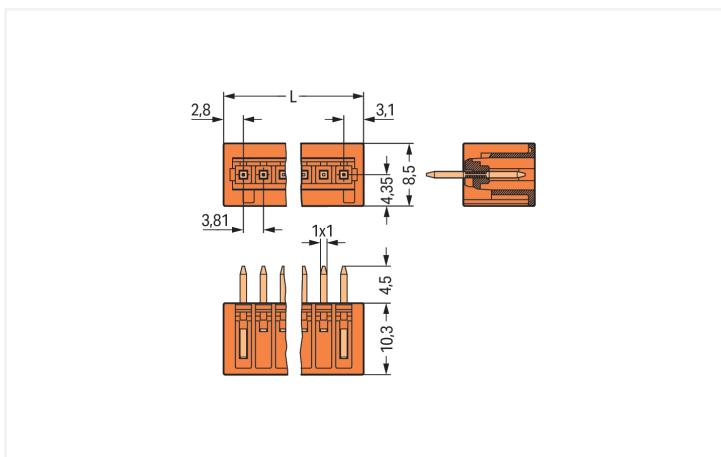
## Data Sheet | Item Number: 734-239

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 9-pole; orange

<https://www.wago.com/734-239>



Color: ■ orange



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Male connector, 734 Series, orange

Enjoy error-free electrical installations with this male connector (item number 734-239). The item's dimensions are (28.76 x 14.8 x 8.5) mm (width x height x depth).

The contact surface is coated with tin. 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			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		160 V	160 V	320 V	Rated current		10 A	-	10 A
Rated impulse withstand voltage		2.5 kV	2.5 kV	2.5 kV					
Rated current		10 A	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

		Connection 1	
Total number of potentials	9	Pole number	9
Number of connection types	1		
Number of levels	1		

## Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	28.76 mm / 1.132 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	1.4 <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	orange
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	0.035 MJ
Weight	2.2 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918847957
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
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### 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 734-239 

**Documentation**

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

**CAD/CAE-Data**

CAD data
2D/3D Models 734-239 

CAE data
EPLAN Data Portal 734-239 
ZUKEN Portal 734-239 

**PCB Design**

Symbol and Footprint via SamacSys 734-239 
Symbol and Footprint via Ultra Librarian 734-239 

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.: 734-209/037-000**

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; orange

**Item No.: 734-209**

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; orange

**Item No.: 2734-209/031-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; clamping collar; orange

**Item No.: 2734-209/037-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; orange



**Item No.: 2734-209**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; orange

**Item No.: 734-569**

THT female header; angled; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange

**Item No.: 734-569/037-000**

THT female header; angled; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; orange

**Item No.: 734-509**

THT female header; straight; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange



**Item No.: 734-509/037-000**

THT female header; straight; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; 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**

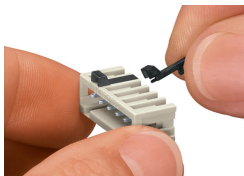
Coding key; to be snapped above top level; black

**Item No.: 734-130**

Coding key; to be snapped above top level; white

## Installation Notes

### Coding



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