

Data Sheet | Item Number: 734-234

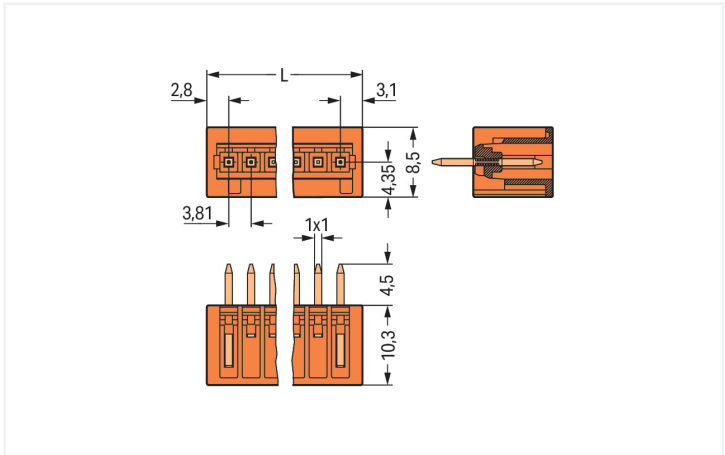
THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 4-pole; orange

<https://www.wago.com/734-234>

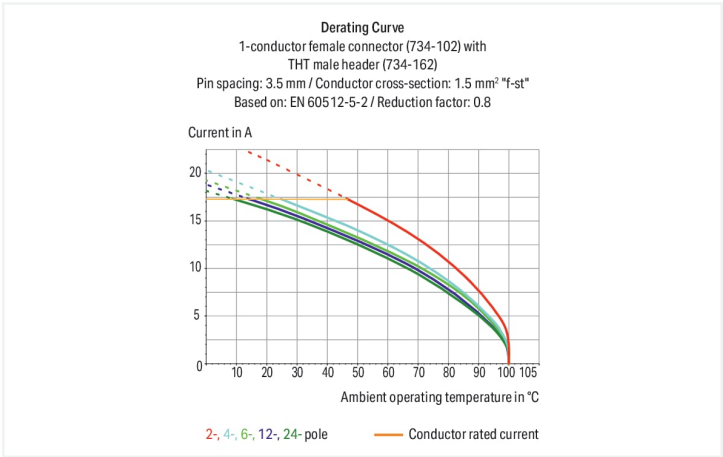


Color: ■ orange

Similar to illustration



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



- Horizontal or vertical PCB mounting via straight or angled solder pins
- 100% protected against mismatching; only mating halves with the same number of poles can be connected together
- Coding option available

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 <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      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 surge 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			
Total number of potentials	4	Connection 1	
Number of connection types	1	Pole number	4
Number of levels	1		

Physical data		
Pin spacing		3.81 mm / 0.15 inches
Width		17.33 mm / 0.682 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)		<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		0.019 MJ
Weight		1.1 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
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																																							
Processing temperature	-35 ... +60 °C																																							


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	4044918847865
Customs tariff number	85366930000

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
CB DEKRA Certification B.V.	EN 61984	NL-54190	Railway WAGO GmbH & Co. KG	-	Railway Ready
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-105522			
UL Underwriters Laboratories Inc.	UL 1977	E 45171			

Approvals for marine applications

		
Approval	Standard	Certificate Name
DNV DNV GL SE	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 734-234	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	





CAD/CAE-Data	
<div>CAD data</div> <div>2D/3D Models 734-234</div> <div>↓</div>	<div>CAE data</div> <div>EPLAN Data Portal 734-234</div> <div>↓</div>
	<div>ZUKEN Portal 734-234</div> <div>↓</div>

PCB Design	
<div>Symbol and Footprint via SamacSys 734-234</div> <div>↓</div>	
<div>Symbol and Footprint via Ultra Librarian 734-234</div> <div>↓</div>	

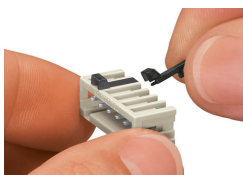
1 Compatible Products
1.1 System counterpart
1.1.1 Female connector/socket

 <div><b>Item No.: 734-204</b> 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; 1,50 mm²; orange</div>	 <div><b>Item No.: 734-204/037-000</b> 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; orange</div>	 <div><b>Item No.: 2734-204</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; 1,50 mm²; orange</div>	 <div><b>Item No.: 2734-204/031-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; orange</div>
 <div><b>Item No.: 2734-204/037-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; orange</div>	 <div><b>Item No.: 734-564</b> THT female header; angled; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange</div>	 <div><b>Item No.: 734-564/037-000</b> THT female header; angled; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; orange</div>	 <div><b>Item No.: 734-504</b> THT female header; straight; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange</div>
 <div><b>Item No.: 734-504/037-000</b> THT female header; straight; Pin spacing 3.81 mm; 4-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; orange</div>			

1.2 Optional Accessories	
1.2.1 Coding	
1.2.1.1 Coding	
	
<a href="#">Item No.: 734-159</a> Coding key; to be snapped above top level; black	<a href="#">Item No.: 734-130</a> Coding key; to be snapped above top level; white

## Installation Notes

### Coding



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