

Data Sheet | Item Number: 734-242

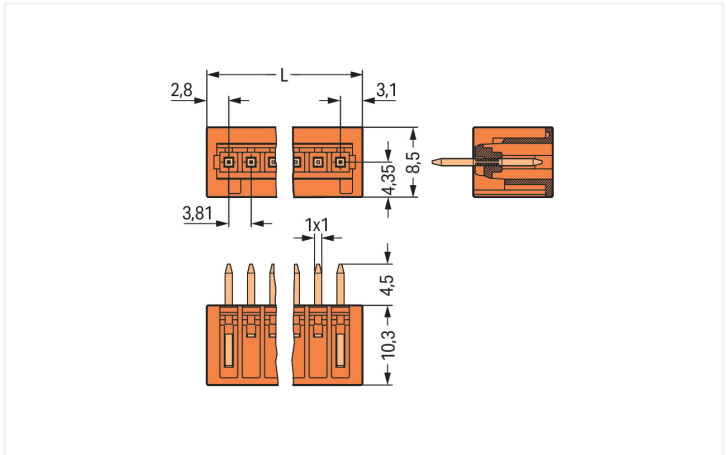
THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 12-pole; orange

<https://www.wago.com/734-242>

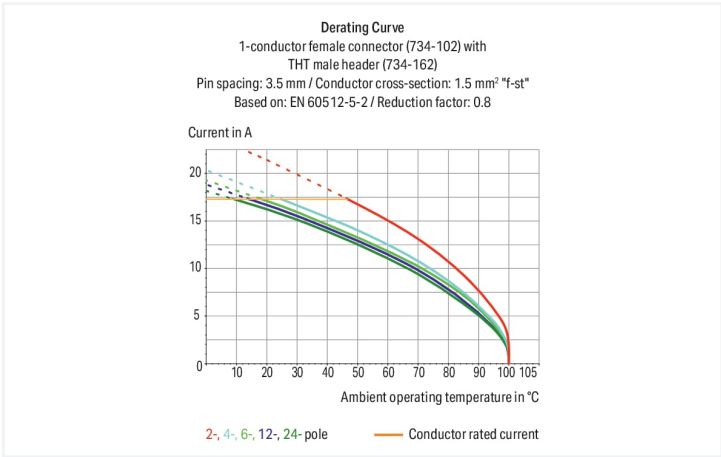


Color: ■ orange

Similar to illustration



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

Variants:

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.

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	
Overvoltage category		III	III	II	UL 1059	
Pollution degree		3	2	2	Use group	B C D
Nominal voltage		160 V	160 V	320 V	Rated voltage	300 V - 300 V
Rated surge voltage		2.5 kV	2.5 kV	2.5 kV	Rated current	10 A - 10 A
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	12	Connection 1	
Number of connection types	1	Pole number	12
Number of levels	1		

Physical data		
Pin spacing	3.81 mm / 0.15 inches	
Width	47.81 mm / 1.882 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	0.049 MJ	
Weight	2.8 g	



Environmental requirements

Limit temperature range	-60 ... +100 °C	Environmental Testing (Environmental Conditions)	
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 – 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 ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 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

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)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918847988
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 734-242	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 734-242	EPLAN Data Portal 734-242
	
	ZUKEN Portal 734-242
	

PCB Design	
Symbol and Footprint via SamacSys 734-242	
Symbol and Footprint via Ultra Librarian 734-242	

1 Compatible Products
1.1 System counterpart
1.1.1 Female connector/socket

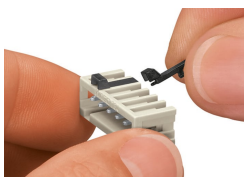
 Item No.: 734-212 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 1,50 mm²; orange	 Item No.: 734-212/037-000 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; orange	 Item No.: 2734-212 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 1,50 mm²; orange	 Item No.: 2734-212/027-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; orange
 Item No.: 2734-212/031-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; orange	 Item No.: 2734-212/037-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; orange	 Item No.: 734-572 THT female header; angled; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange	 Item No.: 734-572/037-000 THT female header; angled; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; orange
 Item No.: 734-512 THT female header; straight; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange	 Item No.: 734-512/037-000 THT female header; straight; Pin spacing 3.81 mm; 12-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
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Installation Notes

Coding



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