

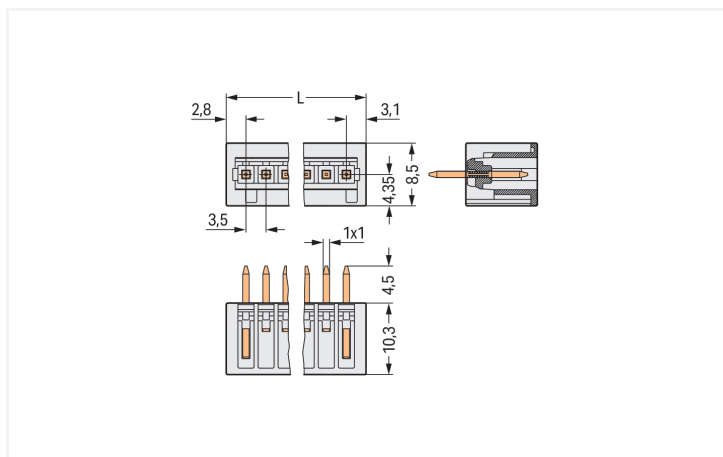
Data Sheet | Item Number: 734-146/046-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 16-pole; light gray

<https://www.wago.com/734-146/046-000>



Color: ■ light gray



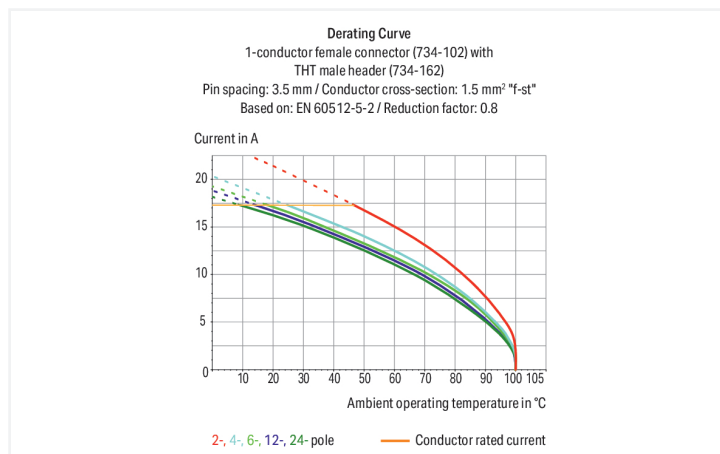
Dimensions in mm

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

Male connector, 734 Series, with 3.5 mm pin spacing

Our male connector (item number 734-146/046-000) is designed for seamless electrical installations. The item's dimensions are (58.4 x 14.1 x 8.5) 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 – 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	16
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	16

Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	58.4 mm / 2.299 inches
Height	14.1 mm / 0.555 inches
Height from the surface	8.5 mm / 0.335 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	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	0.061 MJ
Weight	3.6 g

Environmental requirements																																										
Limit temperature range	-60 ... +100 °C	<table><tr><th colspan="2">Environmental Testing</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 – Vibration and shock tests</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td>Spectrum/Mounting location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Functional test with noise-like oscillations</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.101g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>10 min.</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Monitoring of contact faults and 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 oscillations</td><td>Test passed according to Section 9 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.572g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>5 h</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Extended testing: Monitoring of contact faults and interruptions</td><td>Passed</td></tr><tr><td>Extended testing: Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Shock test</td><td>Test passed according to Section 10 of the standard</td></tr><tr><td>Shock pulse form</td><td>Half sine</td></tr></table>	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
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Shock pulse form	Half sine																																									
Processing temperature	-35 ... +60 °C																																									



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	4045454689032
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	Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1465035	Railway WAGO GmbH & Co. KG	-	Railway Ready

Approvals for marine applications		
		
Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance

734-146/046-000

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

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CAD/CAE-Data

PCB Design

Symbol and Footprint via SamacSys

734-146/046-000

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Symbol and Footprint via Ultra Librarian

734-146/046-000

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1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 734-116

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; light gray



Item No.: 734-546

THT female header; angled; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-546/037-000

THT female header; angled; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-476

THT female header; straight; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-476/037-000

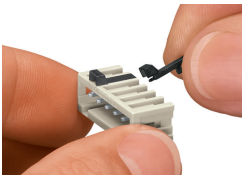
THT female header; straight; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray



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

Installation Notes
Coding



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