

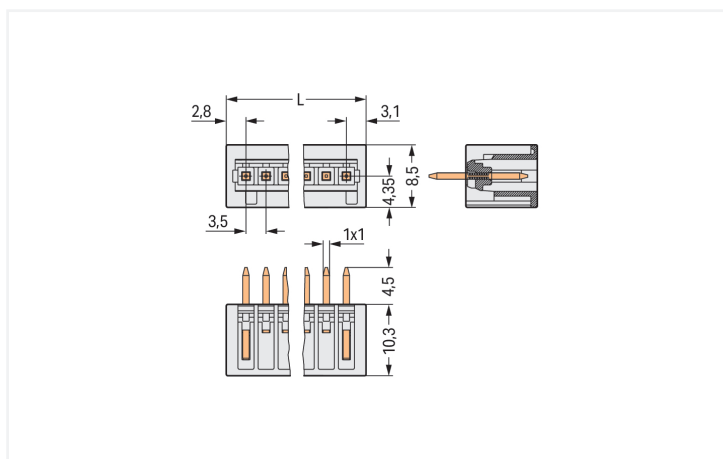
Data Sheet | Item Number: 734-146

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

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



Color: ■ light gray



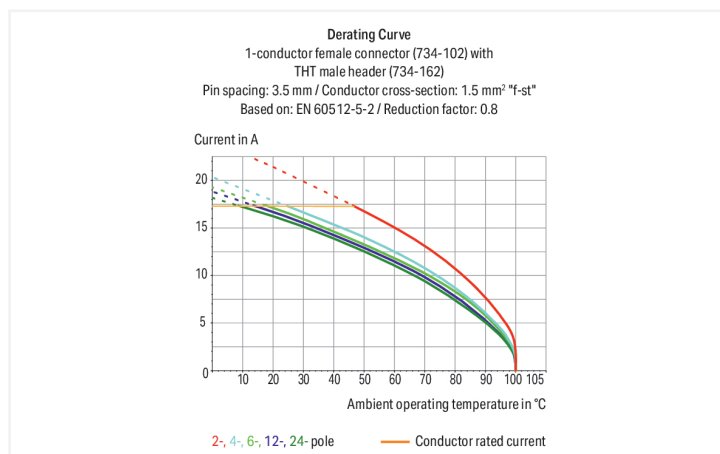
Dimensions in mm

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

Male connector, 734 Series, light gray

Our male connector (item number 734-146) ensures effortless electrical installations. The dimensions are (58.4 x 14.8 x 8.5) mm (width x height x depth).

Tin is used for coating the contact surfaces. The pcb connector is designed for THT soldering.





Notes	
Safety Information	The MCS – <i>MULTI CONNECTION SYSTEM</i> 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 3.8 mm pin projection for male headers with straight solder pins 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		
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	14.8 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 ^(+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	0.055 MJ
Weight	3.7 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><tr><td>Acceleration</td><td>5g (highest test level used for all axes)</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	Acceleration	5g (highest test level used for all axes)
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Acceleration	5g (highest test level used for all axes)																																											
Processing temperature	-35 ... +60 °C																																											



Environmental Testing	
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	4044918847766
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
CCA DEKRA Certification B.V.	EN 61984	2169534.02
CCA DEKRA Certification B.V.	EN 61984	nl-54190
CSA DEKRA Certification B.V.	C22.2	1465035
UL Underwriters Laboratories Inc.	UL 1977	E 45171



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



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
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 734-146
↓

Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB
↓

CAD/CAE-Data

CAD data
2D/3D Models 734-146
↓

CAE data
EPLAN Data Portal 734-146
↓
ZUKEN Portal 734-146
↓

PCB Design
Symbol and Footprint via SamacSys 734-146
↓
Symbol and Footprint via Ultra Librarian 734-146
↓



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 734-116/037-000
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; light gray



Item No.: 734-116/037-000/035-000
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray



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.: 2734-1116/327-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; 1,50 mm²; light gray



Item No.: 2734-1116/329-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Centered locking levers; 1,50 mm²; light gray



Item No.: 2734-1116/329-000/336-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Centered locking levers; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-1116/327-047
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; direct marking; 1,50 mm²; light gray



Item No.: 2734-1116/327-9037
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; direct marking; 1,50 mm²; light gray



Item No.: 2734-1116/038-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 2734-1116/328-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 2734-1116/038-000/336-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-1116/327-000/336-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-116/027-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; clamping collar; light gray



Item No.: 2734-116/037-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Lateral locking levers; light gray



Item No.: 2734-116
1-conductor female connector; push-button; Push-in 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

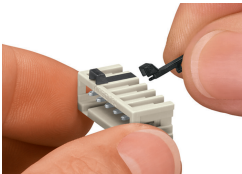


Item No.: 734-130
Coding key; to be snapped above top level; white



Installation Notes

Coding



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