

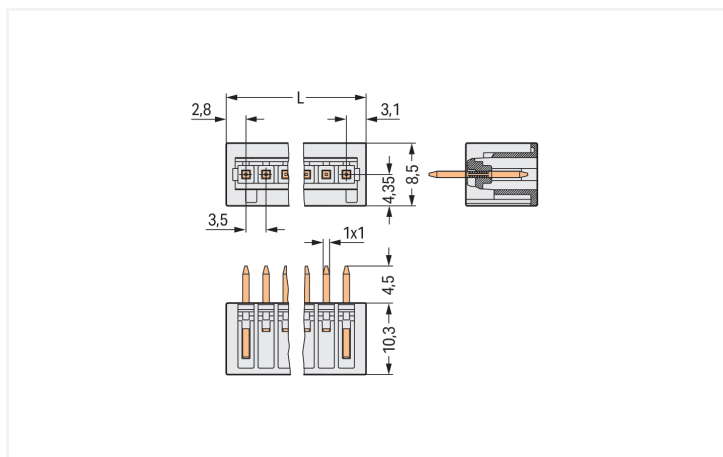
Data Sheet | Item Number: 734-146

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>



Color: ■ light gray



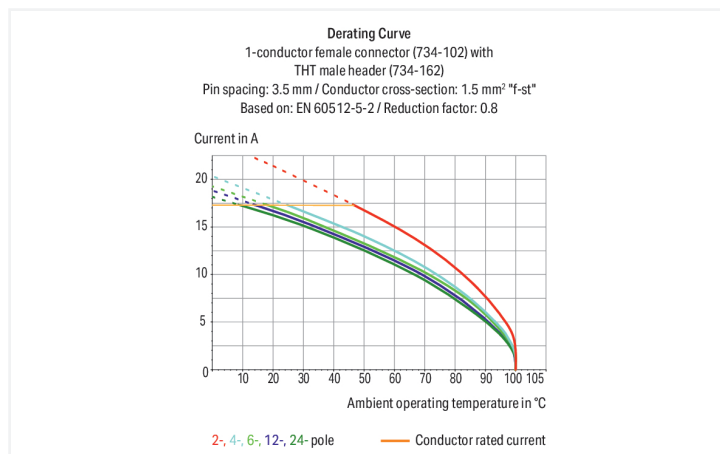
Dimensions in mm

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

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 – 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 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	
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	14.8 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	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	3.7 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 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



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	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	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61984	2169534.02	Railway WAGO GmbH & Co. KG	-	Railway Ready
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			



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

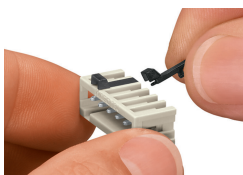
1.2.1 Coding

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
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Installation Notes

Coding



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