

Data Sheet | Item Number: 734-103/037-000

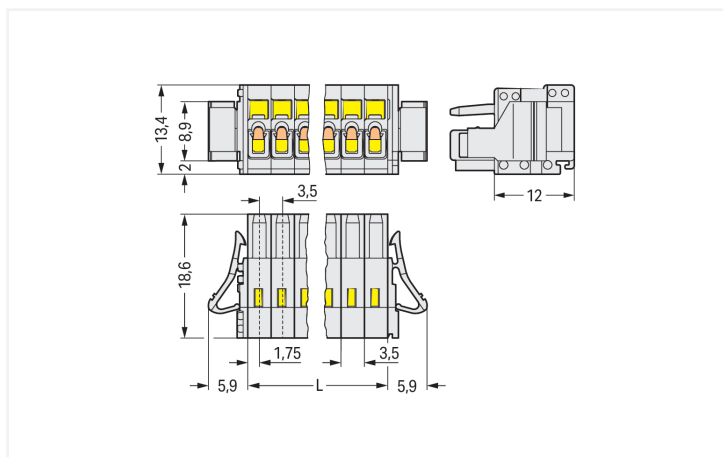
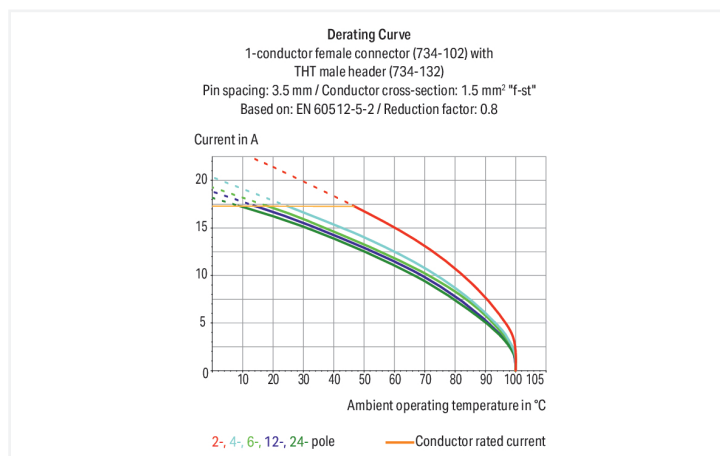
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole;
100% protected against mismating; Lateral locking levers; light gray

<https://www.wago.com/734-103/037-000>



Color: ■ light gray

Similar to illustration



Dimensions in mm

L = pole no. x pin spacing

Female connector, 734 Series, with 3.5 mm pin spacing

Our female connector (item number 734-103/037-000) simplifies electrical installations. Ensure that the strip lengths are between 6 and 7 mm when connecting conductors to this female connector. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a convenient and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The item's dimensions are (22.3 x 13.4 x 18.6) mm (width x height x depth). Depending on the type of conductor, this female connector is ideal for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

Tin is used for coating the contact surfaces.



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 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	
Clamping units	3
Total number of potentials	3
Number of connection types	1
Number of levels	1
Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Actuation direction 1	Operation parallel to conductor entry
Actuation direction 2	Operation perpendicular to conductor entry
Solid conductor	0.08 ... 1.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm² / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm²
Note (conductor cross-section)	Terminating 1.5 mm² conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row.
Strip length	6 ... 7 mm / 0.24 ... 0.28 inches
Pole number	3
Conductor entry direction to mating direction	0 °

Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	22.3 mm / 0.878 inches
Height	13.4 mm / 0.528 inches
Depth	18.6 mm / 0.732 inches

Mechanical data	
Variable coding	Yes
Anti-rotation protection	Yes

Plug-in connection	
Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	Yes
Locking of plug-in connection	Locking lever

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
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.051 MJ
Weight	2.9 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
Acceleration	5g (highest test level used for all axes)



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)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918494458
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 9.0	EC002638
ETIM 10.0	EC002638
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
UL Underwriters Laboratories Inc.	UL 1059	UL-US-L45172-6187124-1

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	
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV	
DNV DNV GL SE	-	TAE000016Z	
PRS Polski Rejestr Statków	-	TE/1095/880590/23	

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 734-103/037-000


Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB


CAD/CAE-Data

CAD data
2D/3D Models 734-103/037-000


CAE data
EPLAN Data Portal 734-103/037-000

ZUKEN Portal 734-103/037-000


1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 734-303 1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; light gray	Item No.: 734-163 THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 3-pole; light gray	Item No.: 734-133 THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 3-pole; light gray
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1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



Item No.: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-131
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item No.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-132
Ferrule; Sleeve for 0.34 mm² / 22 AWG; uninsulated; electro-tin plated



Item No.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-121
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



Item No.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-123
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored



Item No.: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-124
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

1.2.2 Insulation stop

1.2.2.1 Insulation stop



Item No.: 734-671
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 8 pieces/strip; light gray

1.2.3 Marking

1.2.3.1 Marking strip



Item No.: 210-332/350-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/350-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/350-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.4 Strain relief

1.2.4.1 Strain relief housing



Item No.: 734-603
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 3.5 mm; 3-pole; light gray

1.2.4.2 Strain relief plate

Item No.: 734-127
Strain relief plate; for female and male connectors; 6 mm wide; 1 part; Pin spacing 3.5 mm; light gray

1.2.5 Test and measurement

1.2.5.1 Testing accessories

Item No.: 735-500
WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

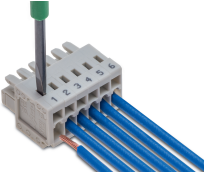
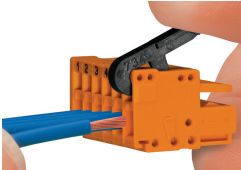
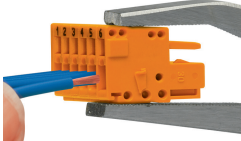
1.2.6 Tool

1.2.6.1 Operating tool

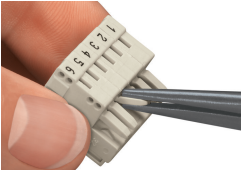
 Item No.: 734-190 Combination operating tool; natural	 Item No.: 734-231 Operating tool; black	 Item No.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	 Item No.: 210-647 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured
 Item No.: 210-251 Operating tool; for MCS MICRO and MINI with CAGE CLAMP® connection; yellow	 Item No.: 210-250 Operating tool; for MCS MINI and MIDI with CAGE CLAMP® connection; red	 Item No.: 734-191 Operating tool; made of insulating material; 1-way; loose; black	 Item No.: 734-230 Operating tool; made of insulating material; 1-way; white

Installation Notes

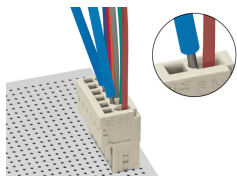
Conductor termination

 Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.	 Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.	 Inserting a conductor into CAGE CLAMP® unit via operating tool (734-191).	 Inserting a conductor into CAGE CLAMP® unit via operating tool (210-251 or 210-250).
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Coding

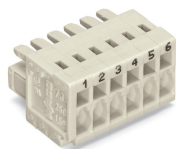

Coding a female connector – removing coding finger(s).

Testing



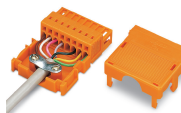
Testing via 1 mm Ø test pin (735-500) –
CAGE CLAMP® connection – touch contact.

Marking



Labeling via direct marking or self-adhesive
strips.

Installation



Strain relief housing for 734 Series Male and
Female Connectors with CAGE CLAMP® con-
nection