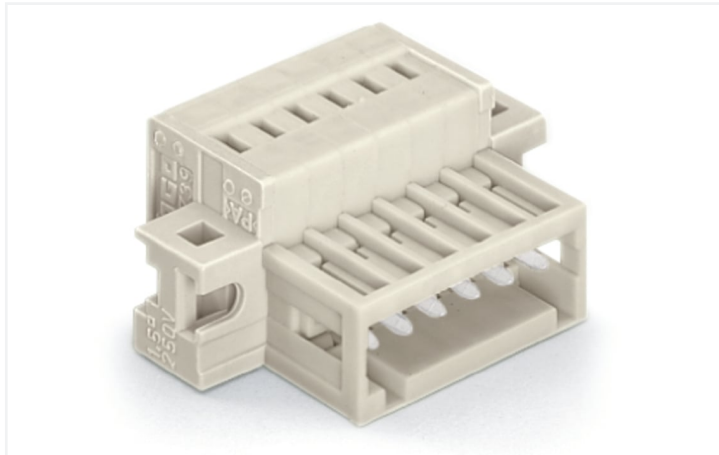


Data Sheet | Item Number: 734-304/019-000

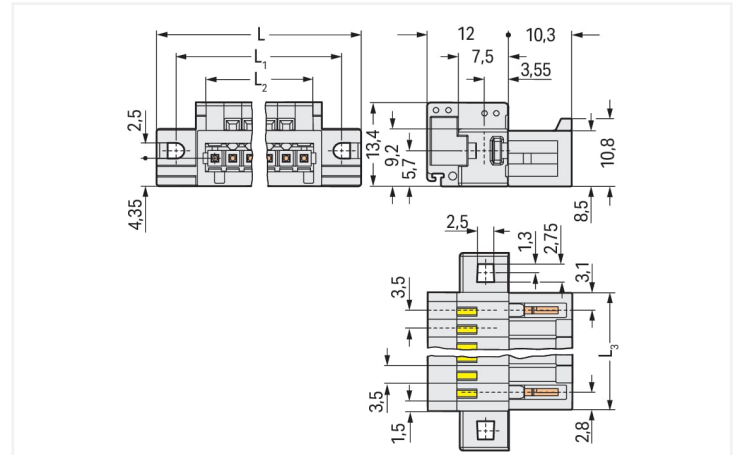
1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole;
100% protected against mismating; clamping collar; 1,50 mm²; light gray

<https://www.wago.com/734-304/019-000>



Color: ■ light gray

Similar to illustration



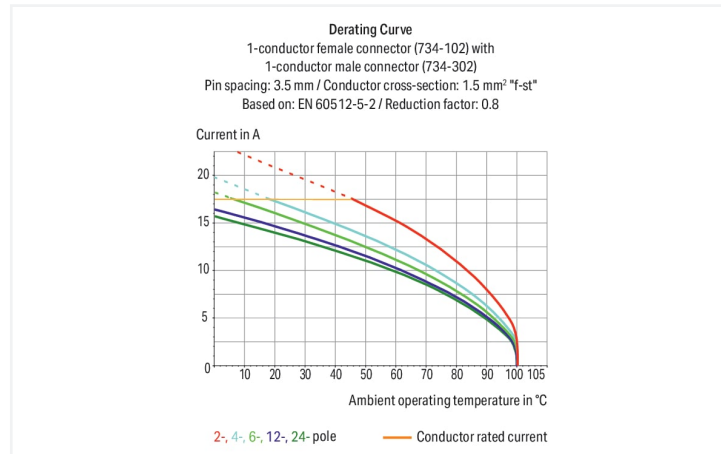
Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$

$L1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$

$L2 = \text{pole no.} \times \text{pin spacing}$

$L3 = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



Stiftleiste Serie 734 mit Betätigungswerkzeug

Bei dieser Stiftleiste mit der Artikelnummer 734-304/019-000 ist eine ordentliche Elektroinstallation das Hauptaugenmerk. Mit unseren Leiterplatten-Steckverbindern erhalten Sie ein ganzheitliches Steckverbindersystem, das vielseitig Verwendung finden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Bemessungsstrom und -spannung sind wichtige Kriterien bei der Auswahl eines Leiterplatten-Steckverbinders: Sie geben Auskunft über die möglichen Einsatzbereiche und Anwendungen. Bei diesem Produkt beträgt die Bemessungsspannung 160 V und der Bemessungsstrom 10 A. Bei dieser Stiftleiste ist für den Leiteranschluss eine Abisolierlänge im Bereich von 6 bis 7 mm nötig. Dieses Produkt ist mit der CAGE CLAMP®-Technologie ausgestattet. Der zuverlässige und wartungsfreie CAGE CLAMP® Universalanschluss bietet die Möglichkeit, alle Arten von Leitern mit einer Käfigzugfeder anzuschließen, ohne, dass eine Vorbehandlung der Leiter erforderlich ist. Das Aufcrimpen von Aderendhülsen kann somit entfallen. Die Maße betragen in Breite x Höhe x Tiefe 28,8 x 13,4 x 22,3 mm. Diese Stiftleiste ist in Abhängigkeit von der Leiterart für Leiterquerschnitte von 0,08 mm² bis 1,5 mm² geeignet. Bei dieser Klemmenleiste mit 1 Ebene können über die 4 Klemmstellen 4 Potenziale / 4 Pol verbunden werden. Die Klemmfeder wurde aus Chrom-Nickel-Federstahl (CrNi) gefertigt, die Kontakte sind produziert aus Elektrolytkupfer (ECu) und das lichtgraue Gehäuse aus Polyamid (PA66) sorgt für die Isolierung. Die Kontaktoberfläche besteht aus Zinn. Diese Stiftleiste/Stecker wird durch ein Betätigungswerkzeug betätigt. Das "Multi Connection System" – MCS von WAGO ist das vielfältige Steckverbindersystem mit überzeugenden Lösungen für Ihre Anwendungen. Die Montage erfolgt auf einer Durchführungs- und einer Oberflächenmontage.



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 surge 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		
Clamping units	4	
Total number of potentials	4	
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	4	
Conductor entry direction to mating direction	0°	



Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	28.8 mm / 1.134 inches
Height	13.4 mm / 0.528 inches
Depth	22.3 mm / 0.878 inches

Mechanical data	
Variable coding	Yes
Mounting type	Mounting flange Feed-through mounting Panel mounting
Anti-rotation protection	Yes

Plug-in connection	
Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes

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	Electrolytic copper (E _{Cu})
Contact Plating	Tin
Fire load	0.09 MJ
Weight	4.3 g

Environmental requirements	
Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C
Environmental Testing (Environmental Conditions)	
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



Environmental Testing (Environmental Conditions)	
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	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 9.0	EC002638
ETIM 8.0	EC002638
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143268844
Customs tariff number	85366930000

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals



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
UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations



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	-	19-HG1869876-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
DNV DNV GL SE	-	TAE000016Z

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 734-304/019-000



Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB



CAD/CAE-Data

CAD data
2D/3D Models 734-304/019-000



CAE data
EPLAN Data Portal 734-304/019-000
ZUKEN Portal 734-304/019-000



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: [734-104](#)
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; 100% protected against mismatching; 1,50 mm²; light gray



Item No.: [734-534](#)
THT female header; angled; Pin spacing 3.5 mm; 4-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: [734-464](#)
THT female header; straight; Pin spacing 3.5 mm; 4-pole; 100% protected against mismatching; 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.: 734-130
Coding key; to be snapped above top level; white

1.2.2 Cover

1.2.2.1 Cover



Item No.: 734-420
Cover for male connectors; for 734 Series; IP20 protection; black

1.2.3 Ferrule

1.2.3.1 Ferrule



Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



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.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



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 / AWG 24; uninsulated; electro-tin plated



Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-241
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



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



Item No.: 216-141
Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



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



Item No.: 216-242
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



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



Item No.: 216-142
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored



Item No.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



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



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



1.2.3.1 Ferrule

 Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; unin- sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; unin- sulated; electro-tin plated; silver-colored	 Item No.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; in- sulated; electro-tin plated; black	 Item No.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; in- sulated; electro-tin plated; black
 Item No.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; in- sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 Item No.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; in- sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 Item No.: 216-284 Ferrule; Sleeve for 1.5 mm² / AWG 16; in- sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 Item No.: 216-124 Ferrule; Sleeve for 1.5 mm² / AWG 16; un- insulated; electro-tin plated
 Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; un- insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	 Item No.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; un- insulated; electro-tin plated; silver-colo- red		

1.2.4 Installation

1.2.4.1 Mounting accessories

 Item No.: 231-295 Screw with nut	 Item No.: 231-195 Screw with nut; M2x12; for fixing element	 Item No.: 209-147 Self-tapping screw	 Item No.: 231-194 Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø
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1.2.5 Marking

1.2.5.1 Marking strip

 Item No.: 210-332/350-202 Marking strips; as a DIN A4 sheet; MAR- KED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal mar- king; Self-adhesive; white	 Item No.: 210-332/350-204 Marking strips; as a DIN A4 sheet; MAR- KED; 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; MAR- KED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white
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1.2.6 Strain relief

1.2.6.1 Strain relief plate

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

1.2.7 Test and measurement

1.2.7.1 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

1.2.8 Tool

1.2.8.1 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



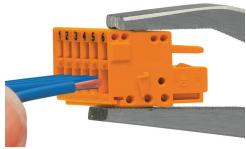
Item No.: 734-191
Operating tool; made of insulating material; 1-way; loose; black



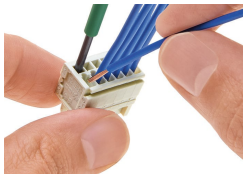
Item No.: 734-230
Operating tool; made of insulating material; 1-way; white

Installation Notes

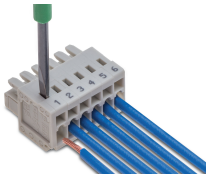
Conductor termination



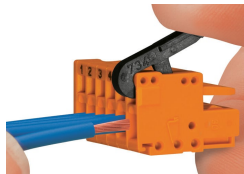
Inserting a conductor into CAGE CLAMP® unit via operating tool (210-251 or 210-250).



Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.

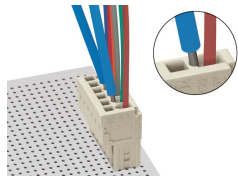


Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



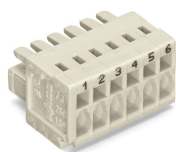
Inserting a conductor into CAGE CLAMP® unit via operating tool (734-191).

Testing



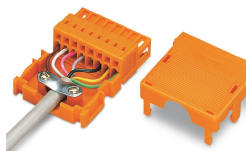
Testing via 1 mm Ø test pin (735-500) – CAGE CLAMP® connection – touch contact.

Marking



Labeling via direct marking or self-adhesive strips.

Installation



Strain relief housing for 734 Series Male and Female Connectors with CAGE CLAMP® connection