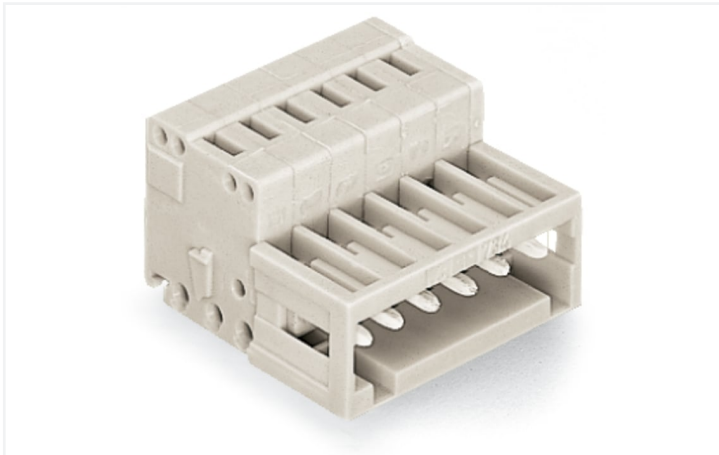


Data Sheet | Item Number: 734-303

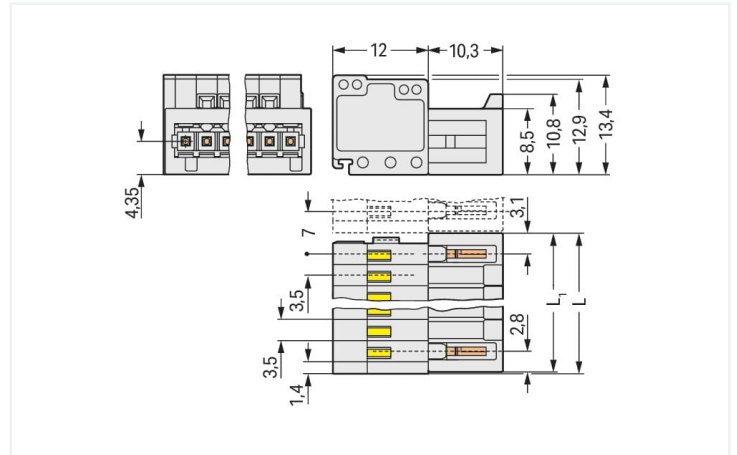
1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole;
100% protected against mismatching; 1,50 mm²; light gray

<https://www.wago.com/734-303>



Color: ■ light gray

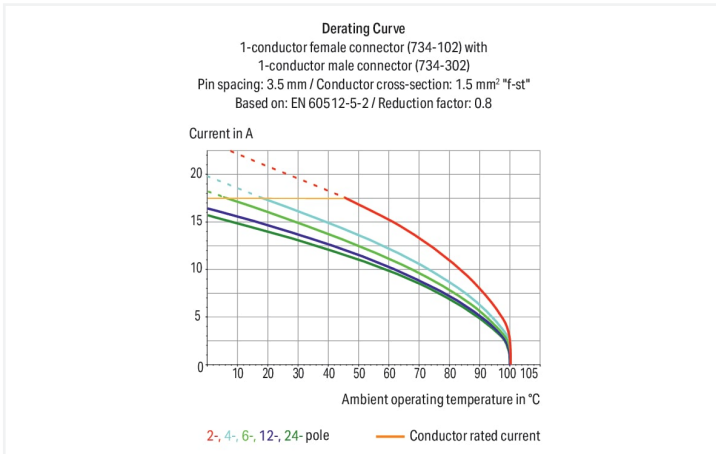
Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$

$L1 = L - 0.45 \text{ mm}$



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Strain relief plates and housings for factory and field assembly
- 100% protected against mismatching
- Coding option available

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	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 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm ²
Note (conductor cross-section)	Terminating 1.5 mm ² 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	12.9 mm / 0.508 inches
Height	13.4 mm / 0.528 inches
Depth	22.3 mm / 0.878 inches

Mechanical data

Variable coding	Yes
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	0.053 MJ
Weight	2.7 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
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)	200 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918513494
Customs tariff number	8536693000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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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
DNV DNV GL SE	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 734-303



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models 734-303



CAE data

EPLAN Data Portal 734-303



ZUKEN Portal 734-303



1 Compatible Products

1.1 System counterpart

1.1.1 Distribution connector



Item No.: 734-363

2-conductor combi strip; 100% protected against mismatching; 1.5 mm²; 3-pole; Pin spacing 3.5 mm; light gray



Item No.: 734-363/037-000

2-conductor combi strip; 100% protected against mismatching; 1.5 mm²; Locking lever; 3-pole; Pin spacing 3.5 mm; light gray



Item No.: 734-363/008-000

2-conductor combi strip; 100% protected against mismatching; Snap-in mounting feet; 1.5 mm²; 3-pole; Pin spacing 3.5 mm; light gray

1.1.2 Female connector/socket



Item No.: 734-103

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; 1,50 mm²; light gray



Item No.: 734-103/037-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 734-103/037-000/032-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray



Item No.: 734-103/008-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Snap-in mounting feet; 1,50 mm²; light gray



Item No.: 2734-1103/327-000

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; 1,50 mm²; light gray



Item No.: 2734-1103/327-047

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; direct marking; 1,50 mm²; light gray



Item No.: 2734-1103/327-9037

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; direct marking; 1,50 mm²; light gray



Item No.: 2734-1103/038-000

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray

1.1.2 Female connector/socket



Item No.: 2734-1103/038-000/333-000
 1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-1103/327-000/333-000
 1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-103
 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; 1,50 mm²; light gray



Item No.: 2734-103/031-000
 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; light gray



Item No.: 2734-103/037-000
 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 734-533
 THT female header; angled; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-533/037-000
 THT female header; angled; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-463
 THT female header; straight; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-463/037-000
 THT female header; straight; Pin spacing 3.5 mm; 3-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.: 734-130
 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.: 216-241
 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.: 216-201
 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

1.2.3.1 Ferrule

 Item No.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	 Item No.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; un-insulated; electro-tin plated; silver-colored
 Item No.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 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 mm ² / 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 mm ² / 18 AWG; insulated; electro-tin plated; gray	 Item No.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray
 Item No.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; un-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 mm ² / AWG 20; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-243 Ferrule; Sleeve for 1 mm ² / 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 mm ² / 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 mm ² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated
 Item No.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	 Item No.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black
 Item No.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; 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 mm ² / AWG 16; insulated; 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 mm ² / AWG 16; insulated; 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 mm ² / AWG 16; un-insulated; electro-tin plated
 Item No.: 216-144 Ferrule; Sleeve for 1.5 mm ² / 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 mm ² / AWG 16; un-insulated; electro-tin plated; silver-colored		

1.2.4 Marking

1.2.4.1 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
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1.2.5 Strain relief

1.2.5.1 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

1.2.5.2 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

1.2.6 Test and measurement

1.2.6.1 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

1.2.7 Tool

1.2.7.1 Operating tool



Item No.: 734-190

Combination operating tool; natural



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

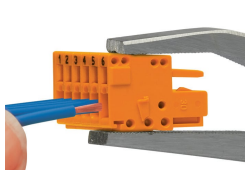


Item No.: 734-191

Operating tool; made of insulating material; 1-way; loose; black

Installation Notes

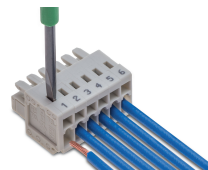
Conductor termination



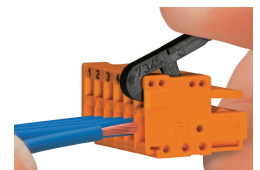
Inserting a conductor into CAGE CLAMP® unit via operating tool (210-251 or 210-250).



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

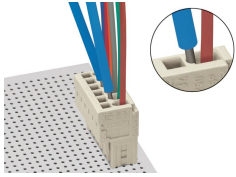


Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



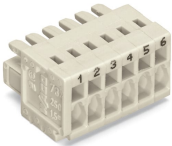
Inserting a conductor into CAGE CLAMP® unit via operating tool (734-191).

Testing



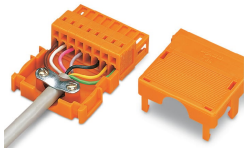
Testing via 1 mm Ø test pin (735-500) – CAGE CLAMP® connection – touch contact.

Marking



Labeling via direct marking or self-adhesive strips.

Installation



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