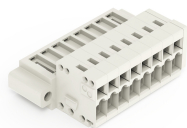


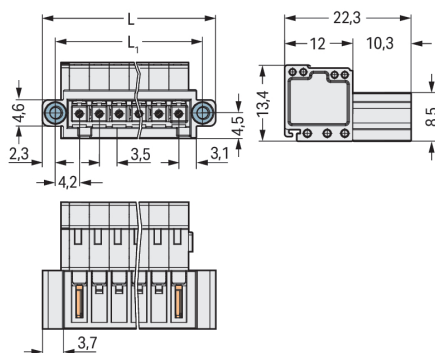
Data Sheet | Item Number: 734-308/109-000

1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismatching; Threaded flange; light gray

<https://www.wago.com/734-308/109-000>

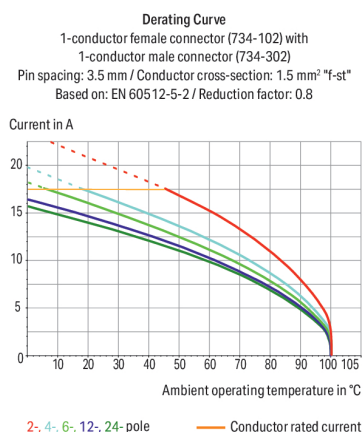


Color: ■ light gray



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$
 $L1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$



Male connector, 734 Series, 0 ° conductor exit to connection direction

Our male connector (item number 734-308/109-000) ensures effortless electrical installations. Strip lengths must be between 6 and 7 mm when connecting conductors to this male connector. This product features one conductor terminal and utilizes CAGE CLAMP®. Our celebrated universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. The item's dimensions are (37.5 x 13.4 x 22.3) mm (width x height x depth). Depending on the type of conductor, this male connector is designed for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

The contact surface is coated with tin.

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	8
Total number of potentials	8
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	8
Conductor entry direction to mating direction	0 °

Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	37.5 mm / 1.476 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
Locking of plug-in connection	Threaded flange

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	0.113 MJ
Weight	7.3 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)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143266437
Customs tariff number	85366930000

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,With Exemption
RoHS Exemption	6(c)
SCIP notification number (Austria)	c758880b-eac8-4fe5-9820-191ca39bc3bd
SCIP notification number (Belgium)	c528aa43-3d7d-49f2-b5e1-6dd927891f0d
SCIP notification number (Bulgaria)	c8cea570-44b6-43a7-9c69-ebfb7d35a877
SCIP notification number (Czech Republic)	7007850d-6b8d-459b-851e-9a773a16be43
SCIP notification number (Denmark)	e9c73716-9dab-431c-887d-89180e9faa51
SCIP notification number (Finland)	7bbceaae-53b4-4882-a5bf-df198b8c9882
SCIP notification number (France)	bc5999b9-f799-4785-a6d4-7bf34a4eaebf
SCIP notification number (Germany)	37a69655-9820-410d-a9f0-b1b4f40ff477
SCIP notification number (Hungary)	24828a3d-83e0-446f-9d41-356cfbc41ab9
SCIP notification number (Italy)	8d2d3312-d44a-46ae-b95a-9a57fc03883d
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SCIP notification number (Romania)	e1e6d32a-31ac-4623-8ed7-0bb6557f9afc
SCIP notification number (Sweden)	835c66b6-c1f7-4a8d-8f1b-42041153c0e3



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	EN 61984	NL-54190
CSA DEKRA Certification B.V.	C22.2	1465035
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-105522
UL Underwriters Laboratories Inc.	UL 1977	E 45171

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
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 734-308/109-000



Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB



CAD/CAE-Data	
CAD data 2D/3D Models 734-308/109-000 ↓	CAE data ZUKEN Portal 734-308/109-000 ↓

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

	
Item No.: 734-108/107-000 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismatching; Screw flange; light gray	Item No.: 2734-108/107-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismatching; Screw flange; 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.: 216-321 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

1.2.4 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

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.: 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



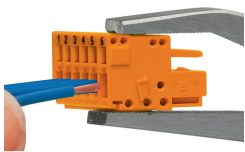
Item No.: 210-250
Operating tool; for MCS MINI and MIDI with
CAGE CLAMP® connection; red



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

Installation Notes

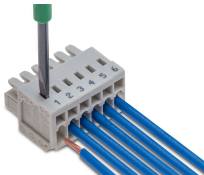
Conductor termination



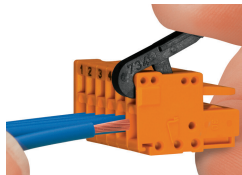
Inserting a conductor into CAGE CLAMP®
unit via operating tool (210-251 or 210-250).



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

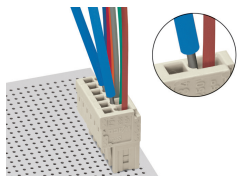


Inserting a conductor via (2.5 x 0.4) mm
screwdriver – CAGE CLAMP® actuation per-
pendicular to conductor entry.



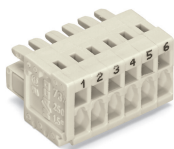
Inserting a conductor into CAGE CLAMP®
unit via operating tool (734-191).

Testing



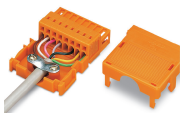
Testing via 1 mm Ø test pin (735-500) –
CAGE CLAMP® connection – touch contact.

Marking



Labeling via direct marking or self-adhesive
strips.

Installation



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