

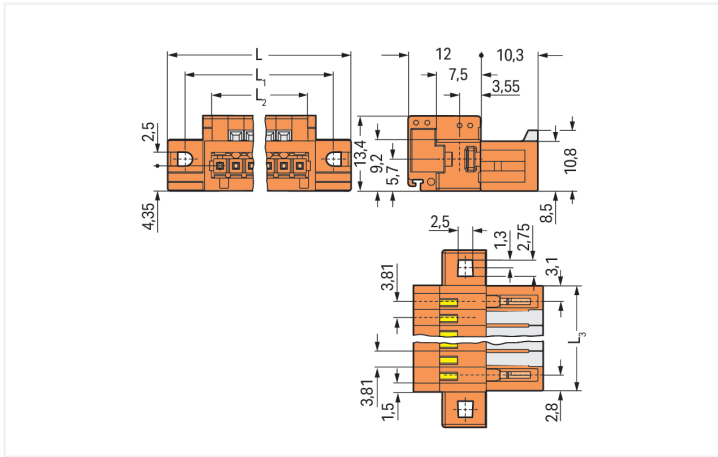
Data Sheet | Item Number: 734-342/019-000

1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole;
100% protected against mismating; clamping collar; orange

<https://www.wago.com/734-342/019-000>

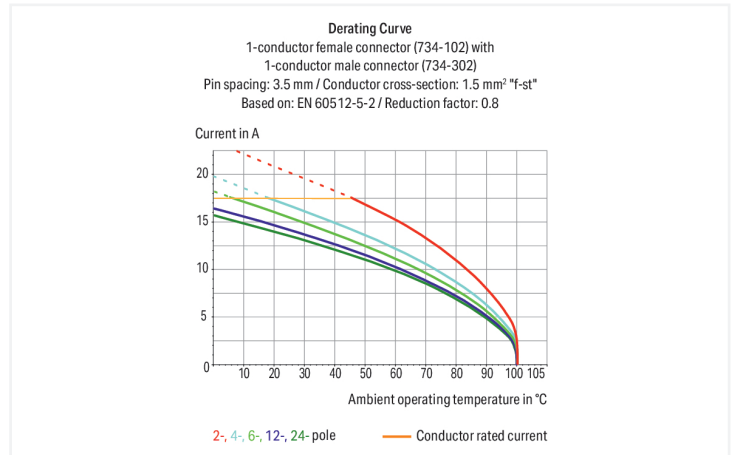


Color: ■ orange



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$
 $L1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$
 $L2 = \text{pole no.} \times \text{pin spacing}$
 $L3 = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



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

Our male connector (item number 734-342/019-000) is designed for seamless electrical installations. Ensure that the strip lengths are between 6 and 7 mm when connecting conductors to this male 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. Dimensions: (60.52 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.

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	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Clamping units	12
Total number of potentials	12
Number of connection types	1
Number of levels	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	12
Conductor entry direction to mating direction	0 °

Pin spacing	3.81 mm / 0.15 inches
Width	60.52 mm / 2.383 inches
Height	13.4 mm / 0.528 inches
Depth	22.3 mm / 0.878 inches

Mechanical data

Variable coding	Yes
Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting
Anti-rotation protection	Yes
Suitable for through-panel applications	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	orange
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	0.214 MJ
Weight	11.9 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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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



Environmental Testing	
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)
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)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4055143269056
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, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	EN 61984	NL-54190	Railway WAGO GmbH & Co. KG	-	Railway Ready
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			



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 734-342/019-000

Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB

CAD/CAE-Data

CAD data
2D/3D Models 734-342/019-000

CAE data
EPLAN Data Portal 734-342/019-000
ZUKEN Portal 734-342/019-000

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 734-212
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; orange



Item No.: 734-572
THT female header; angled; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange



Item No.: 734-512
THT female header; straight; Pin spacing 3.81 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange



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 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; 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

1.2.6 Strain relief

1.2.6.1 Strain relief plate

Item No.: 734-229 Strain relief plate; for female and male connectors; 25 mm wide; 1 part; Pin spacing 3.81 mm; orange

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 0,5mm ²

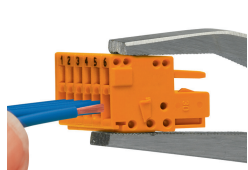
1.2.8 Tool

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

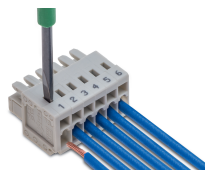
Conductor termination



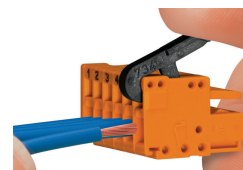
Inserting a conductor into CAGE CLAMP® unit via operating tool (210-251 or 210-250).



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

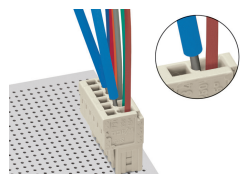


Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



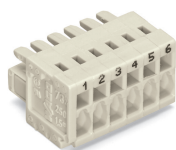
Inserting a conductor into CAGE CLAMP® unit via operating tool (734-191).

Testing



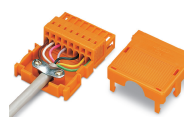
Testing via 1 mm Ø test pin (735-500) – CAGE CLAMP® connection – touch contact.

Marking



Labeling via direct marking or self-adhesive strips.

Installation



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