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

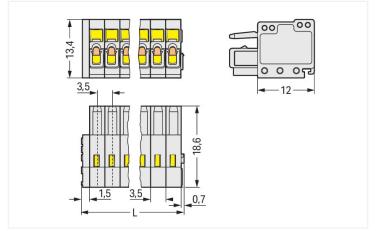


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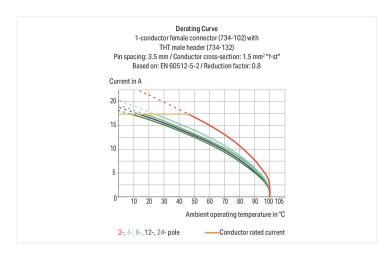


Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 2.2 mm



- Universal connection for all conductor types
- $\bullet \ \ \text{Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP§ actuation}\\$
- Strain relief plates and housings for field assembly
- 100% protected against mismating
- Coding option available

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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	IEG	C/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	В	С	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Approvals per		CSA	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Connection data		
Connection points	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 mm <sup>2</sup>
Note (conductor cross-section)	Terminating 1.5 mm <sup>2</sup> 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	12.7 mm / 0.5 inches
Height	13.4 mm / 0.528 inches
Denth	18.6 mm / 0.732 inches

Mechanical data	
Variable coding	Yes
Anti-rotation protection	Yes

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

Material data	
Note (material data)	<a href="https://www.wago.com/us/material-specifications">Information on material</a>
	specifications can be found here
Color	light gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.041 MJ
Weight	2.5 g

E	Invironmental requirements	
L	imit temperature range	-60 +100 °C
Р	Processing temperature	-35 +60 °C

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 8.0	EC002638
ETIM 7.0	EC002638
PU (SPU)	200 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918492416
Customs tariff number	85366990990

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	UL 1977	E 45171

# General approvals

Underwriters Laboratories

UL 1059

E45172

https://www.wago.com/734-103



#### 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)

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# **Environmental Product Compliance**

Compliance Search

**Environmental Product** Compliance 734-103



### Documentation

Additional Information

**Technical Section** 

03.04.2019

. 2010.85 KB



### CAD/CAE-Data

CAD data

2D/3D Models 734-103



CAE data

EPLAN Data Portal 734-103





### 1 Compatible Products

# 1.1 System counterpart

# 1.1.1 Distribution connector







#### Item No.: 734-363

2-conductor combi strip; 100% protected against mismating; 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 mismating; 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 mismating; Snap-in mounting feet; 1.5 mm<sup>2</sup>; 3-pole; Pin spacing 3.5 mm; light gray

https://www.wago.com/734-103

#### 1.1.2 Male connector/plug



#### Item No.: 734-303

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



#### Item No.: 734-303/019-000

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



### Item No.: 734-303/018-000

1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3pole; 100% protected against mismating; DIN-35 rail/panel mounting; Snap-in mounting feet; 1,50 mm<sup>2</sup>; light gray



### Item No.: 734-163/105-604/997-405

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; in tape-and-reel packaging; Pin spacing 3.5 mm; 3-pole; black



#### Item No.: 734-163/105-604

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Pin spacing 3.5 mm; 3-pole; black



#### Item No.: 734-133/105-604/997-405

THR male header: 1.0 x 1.0 mm solder pin: straight; 100% protected against mismating; in tape-and-reel packaging; Pin spacing 3.5 mm; 3-pole; black



THR male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.5 mm; 3-pole; black



THT double-deck male header: 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Pin spacing 3.5 mm; 6pole; light gray



#### Item No.: 734-403/001-000

THT double-deck male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Pin spacing 3.5 mm; 6pole; light gray



Item No.: 734-163 THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Pin spacing 3.5 mm; 3-pole; light gray

#### Item No.: 734-133/010-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Gold-plated contacts; 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 mismating; Pin spacing 3.5 mm; 3-pole; light gray

#### Item No.: 734-133/046-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.5 mm; 3-pole; light gray

#### 1.2 Optional Accessories

#### 1.2.1 Ferrule

# 1.2.1.1 Ferrule

Item No.: 216-301



Ferrule: Sleeve for 0.25 mm<sup>2</sup> / AWG 24: in-

sulated; electro-tin plated; yellow

# Item No.: 216-321

Ferrule: Sleeve for 0.25 mm<sup>2</sup> / AWG 24: insulated; electro-tin plated; yellow

# Item No.: 216-151

Ferrule: Sleeve for 0.25 mm<sup>2</sup> / AWG 24: uninsulated; electro-tin plated

#### Item No.: 216-131

Ferrule: Sleeve for 0.25 mm<sup>2</sup> / AWG 24: uninsulated; electro-tin plated; silver-colored



#### Item No.: 216-302

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

#### Item No.: 216-322

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

#### Item No.: 216-132

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

#### Item No.: 216-152

Ferrule: Sleeve for 0.34 mm<sup>2</sup> / AWG 24: uninsulated; electro-tin plated



#### Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

#### Item No.: 216-201

Item No.: 216-121

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

#### Item No.: 216-221

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

#### Item No.: 216-141

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



insulated; electro-tin plated; silver-colo-

#### Item No.: 216-242 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

#### Item No.: 216-222

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

#### Item No.: 216-142

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; 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<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-co-

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#### 1.2.1.1 Ferrule

Item No.: 216-122

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-co-lored

Item No.: 216-243

Ferrule; Sleeve for 1 mm<sup>2</sup> / 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<sup>2</sup> / 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<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

Item No.: 216-223

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

Item No.: 216-103

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

Item No.: 216-143

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228. Part 1/08.92 Item No.: 216-123

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored

Item No.: 216-204

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

Item No.: 216-224

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

Item No.: 216-244

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

Ferrule; Sleeve for 1.5 mm² / 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<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

Item No.: 216-144

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; 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; uninsulated; electro-tin plated; silver-colored

1.2.2 Insulation stop

1.2.2.1 Insulation stop

Item No.: 734-671

Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "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; MAR-KED; 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; 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



#### 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  $0.5\text{mm}^2$ 

#### 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

# 20

#### 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® connection

Subject to changes. Please also observe the further product documentation!