

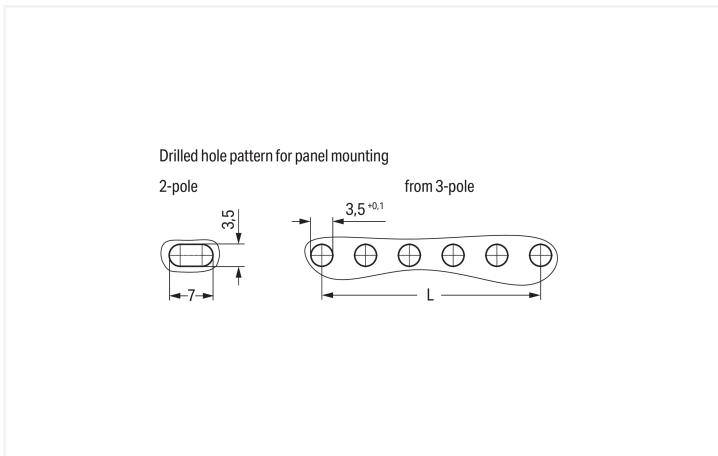
Data Sheet | Item Number: 734-218/008-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 18-pole; 100% protected against mismatching; Snap-in mounting feet; 1,50 mm²; orange

<https://www.wago.com/734-218/008-000>

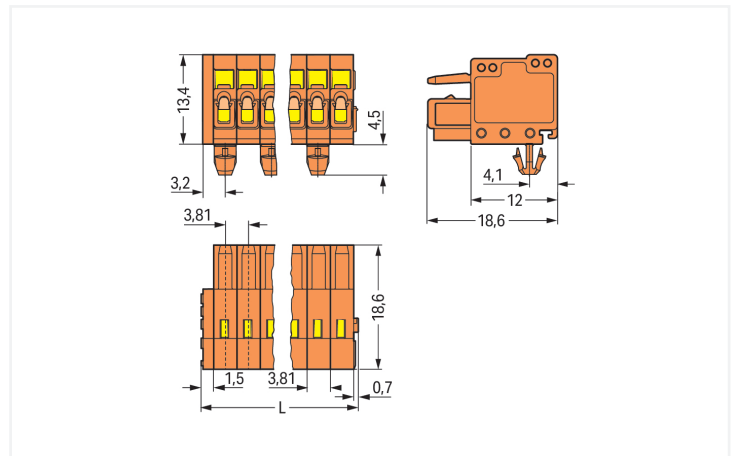


Color: ■ orange



Dimensions in mm

Even pole number: $L = (\text{pole no.} - 2) \times \text{pin spacing}$
Odd pole number: $L = (\text{pole no.} - 1) \times \text{pin spacing}$



Dimensions in mm

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

Female connector, 734 Series, CAGE CLAMP®

This female connector (item number 734-218/008-000) simplifies electrical installations. Conductors can only be connected to this female connector if their strip length is between 6 and 7 mm. Featuring one conductor terminal along with CAGE CLAMP®, this connector is highly versatile. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (70.78 x 18.9 x 18.6) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

Tin is used for coating the contact surfaces.

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			Approvals per	UL 1059		
	III	III	II		Use group	B	C
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		
	B	C	D
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Connection Data

Clamping units	18
Total number of potentials	18
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	18
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	70.78 mm / 2.787 inches
Height	18.9 mm / 0.744 inches
Height from the surface	13.4 mm / 0.528 inches
Depth	18.6 mm / 0.732 inches
Drilled hole diameter for snap-in mounting foot with tolerance	3.5 ^(+0.1) mm

Mechanical data

Variable coding	Yes
Housing sheet thickness	0.6 ... 1.2 mm / 0.024 ... 0.047 inches
Mounting type	Snap-in foot
Mounting type	Panel mounting
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
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	Copper alloy
Contact Plating	Tin
Fire load	0.267 MJ
Weight	15 g

Environmental requirements

Limit temperature range	-60 ... +100 °C	Environmental Testing	
Processing temperature	-35 ... +60 °C		Test specification: Railway applications – Rolling stock – Electronic equipment
		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

Environmental Testing

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
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	DE
GTIN	4050821597339
Customs tariff number	85366990990

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
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	EN 61984	NL-54190
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-105522
UL Underwriters Laboratories Inc.	UL 1059	E45172
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 734-218/008-000	↓
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Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	↓
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CAD/CAE-Data

CAD data
 2D/3D Models
 734-218/008-000

CAE data
 ZUKEN Portal
 734-218/008-000

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 734-348
 1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 18-pole; 100% protected against mismatching; 1,50 mm²; orange

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 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; 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 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

1.2.1.1 Ferrule



Item No.: 216-143
 Ferrule; Sleeve for 1 mm² / 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 mm² / AWG 18; un-insulated; electro-tin plated; silver-colored

Item No.: 216-204
 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

Item No.: 216-224
 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-244
 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.: 216-264
 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.: 216-284
 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 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-colored

1.2.2 Installation

1.2.2.1 Mounting accessories



Item No.: 209-137
 Mounting adapter; can be used as end stop; 6.5 mm wide; gray

1.2.3 Marking

1.2.3.1 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

1.2.4 Strain relief

1.2.4.1 Strain relief plate



Item No.: 734-428
 Strain relief plate; for female and male connectors; 1 part; Pin spacing 3.81 mm; orange

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.: 734-231

Operating tool; black



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

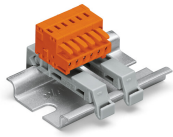
Operating tool; made of insulating material; 1-way; loose; black



Item No.: 734-230

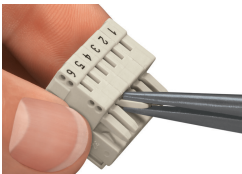
Operating tool; made of insulating material; 1-way; white

Installation Notes



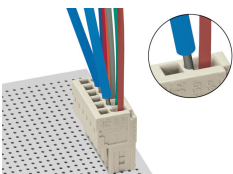
Using two DIN-35 rail mounting adapters (209-137) for 3 or more poles; distance between two mounting adapters: maximum 7 poles

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