

Data sheet | Item number: 734-112

1-conductor female plug; 100% protected against mismatching; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray



RoHS Compliant

BOMcheck.net

Color:

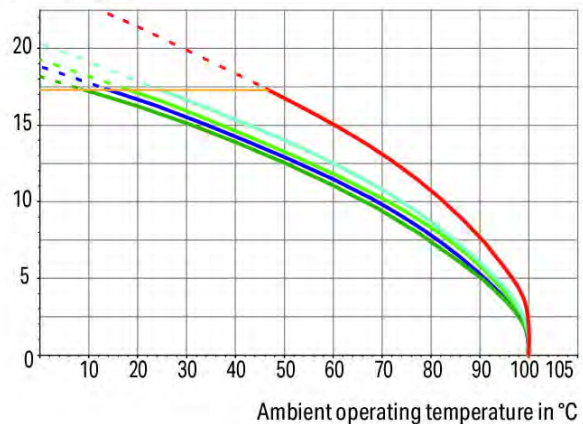
Derating Curve

1-conductor female connector (734-102) with
THT male header (734-132)

Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8

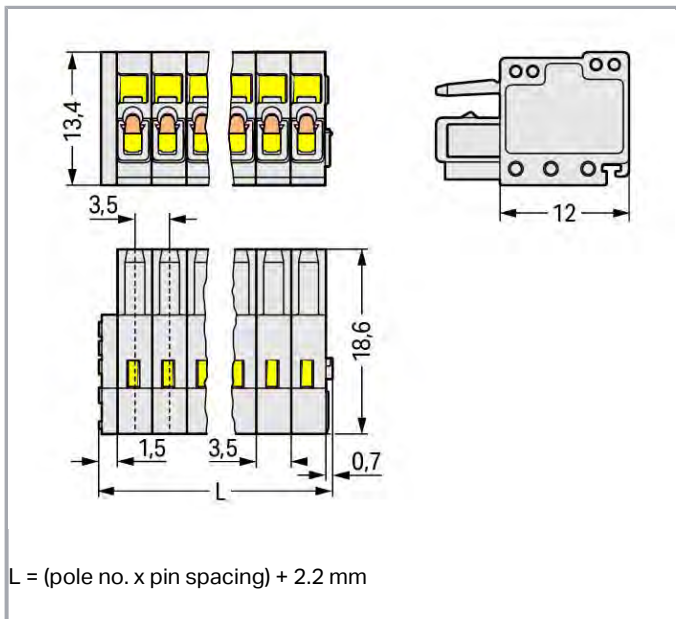
Current in A



2-, 4-, 6-, 12-, 24- pole

Conductor rated current

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



Item description

- Universal connection for all conductor types
- 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 mismatching
- Coding via coding fingers

Safety information 1:

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. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Data

Electrical data

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

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

Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2

Approvals per UL 1059

Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A
Approvals per	UL 1059

Approvals per CSA

Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
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
Strip length	6 ... 7 mm / 0.24 ... 0.28 inch
Pole No.	12
Total number of connection points	12
Total number of potentials	12
Number of connection types	1
Number of levels	1
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.
Conductor entry direction to mating direction	0°

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



Geometrical Data

Pin spacing	3,5 mm / 0.138 inch
Width	44,2 mm / 1.74 inch
Height	13,4 mm / 0.528 inch
Depth	18,6 mm / 0.732 inch

Plug connection

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

Material Data

Color	light gray
Material group	I
Insulation material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.14 MJ
Weight	9.1 g

Environmental Requirements

Limit temperature range	-60 ... +100 °C
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Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4044918493680
Customs tariff number	85366990990

Approvals / Certificates

Country specific Approvals

Certificate

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

Logo	Approval	Additional Approval Text	name
	CCA DEKRA Certification B.V.	EN 61984	2169534.02
	CSA DEKRA Certification B.V.	C22.2	1465035

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1869876- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z
	LR Lloyds Register	IEC 61984	96/20035 (E5)

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	UL 1977	20150318- E45171
	UR Underwriters Laboratories Inc.	UL 1059	20190122- E45172

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

Counterpart



Item no.734-142/010-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Gold-plated contacts; Pin spacing 3.5 mm; 12-pole; light gray



Item no.734-142/105-604

THR male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; black



Item no.734-142

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; light gray



Item no.734-142/046-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; light gray



Item no.734-142/105-604/997-407

THR male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 12-pole; black



Item no.734-172

THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; light gray



Item no.734-172/105-604

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; black



Item no.734-172/105-604/997-407

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 12-pole; black



Item no.734-312

1-conductor male connector; 100% protected against mismatching; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray



Item no.734-312/019-000

1-conductor male connector; 100% protected against mismatching; clamping collar; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray



Item no.734-312/018-000

1-conductor male connector; 100% protected against mismatching; Snap-in mounting feet; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray

Item no.734-372/008-000

Subject to change



2-conductor combi strip; 100% protected against mismatching; Snap-in mounting feet; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray



Item no. 734-372/037-000

2-conductor combi strip; 100% protected against mismatching; Locking lever; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray



Item no. 734-372

2-conductor combi strip; 100% protected against mismatching; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 1,50 mm²; light gray



Item no. 734-412

THT double-deck male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 24-pole; light gray



Item no. 734-412/001-000

THT double-deck male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 24-pole; light gray

Compatible products

Insulation stop



Item no.: 734-671

Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 8 pieces/strip; light gray

Marking accessories

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

check



Item no.: 735-500

Test pin; 1 mm Ø; with solder connection for test wire

tools

Item no.: 210-250

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



Operating tool; for MCS MINI & MIDI with CAGE CLAMP® connection; red



Item no.: 210-251

Operating tool; for MCS MICRO & MINI with CAGE CLAMP® connection; yellow



Item no.: 210-647

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item no.: 734-190

Combination operating tool; natural



Item no.: 734-191

Operating tool; loose; black



Item no.: 734-230

Push-button



Item no.: 734-231

Operating tool; black

Strain relief plate



Item no.: 734-129

Strain relief plate; light gray

ferrule



Item no.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated



Item no.: 216-102

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



Item no.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



Item no.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated



Item no.: 216-121

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated



Item no.: 216-122

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



Item no.: 216-123

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



Item no.: 216-124

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

Item no.: 216-131

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

	Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated
	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.: 216-142 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.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
	Item no.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated
	Item no.: 216-152 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; white
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray
	Item no.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray
	Item no.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black
	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.: 216-242

Subject to change.

	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.: 216-243 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.: 216-244 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.: 216-262 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.: 216-263 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.: 216-264 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.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

CAD/CAE-Data

CAD data

2D/3D Models 734-112

CAE data

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

Installation Notes

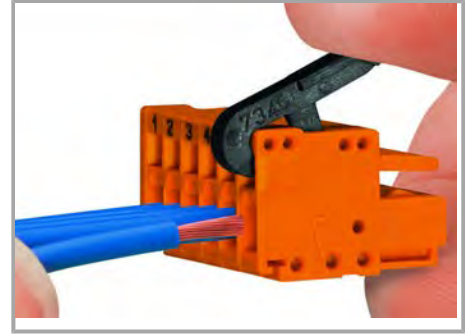
Conductor termination



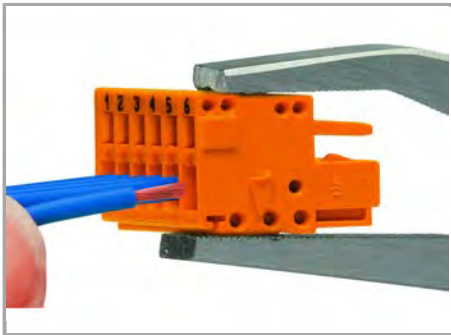
Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



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



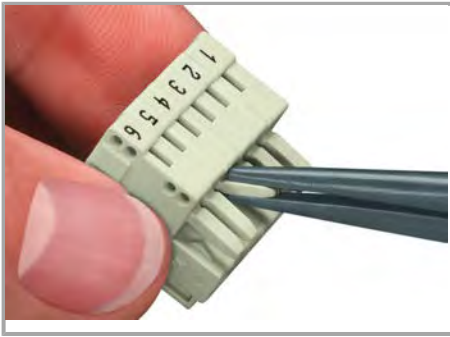
Inserting a conductor into CAGE CLAMP® unit via operating lever (734-191).



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

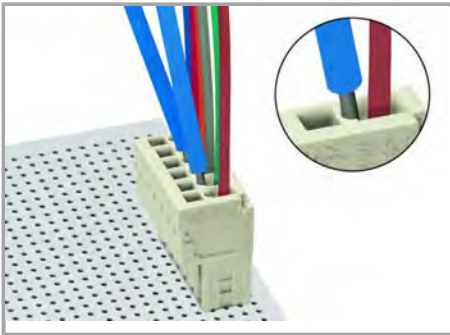
Coding

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



Coding a female connector – removing coding finger(s).

Testing



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

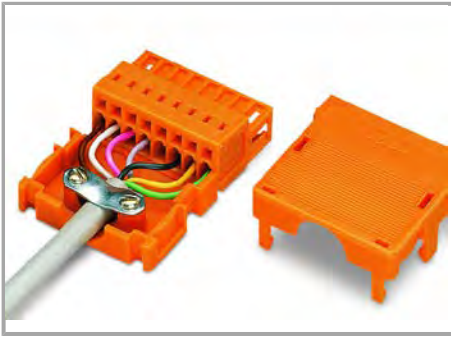
Marking



Labeling via direct marking or self-adhesive strips.

Installation

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



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

Product family

<i>MCS</i> MINI

[Show all products from the family](#)

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