

Data sheet | Item number: 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



RoHS Compliant

Color:

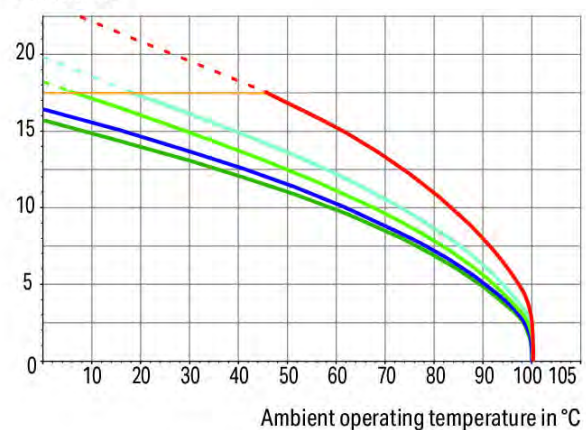
Derating Curve

1-conductor female connector (734-102) with
1-conductor male connector (734-302)

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

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

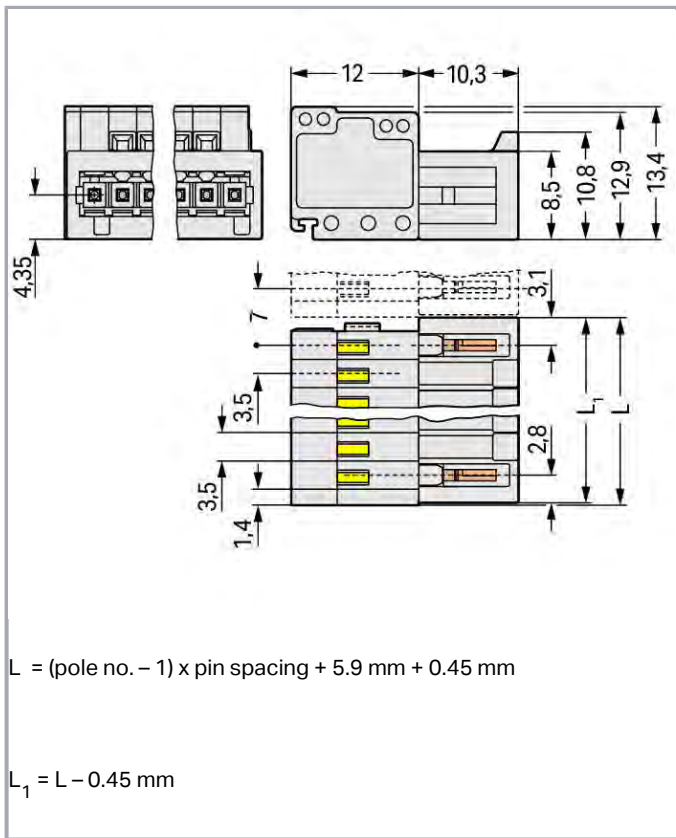
Current in A



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
- For wire-to-wire and board-to-wire connections
- Strain relief plates and housings for factory and field assembly
- 100% protected against mismatching
- Coding via coding fingers

Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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

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



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
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) $\hat{=}$ 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

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



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°

Geometrical Data

Pin spacing	3.5 mm / 0.138 inch
Width	44.4 mm / 1.748 inch
Height	13.4 mm / 0.528 inch
Depth	22.3 mm / 0.878 inch

Plug connection

Contact type (pluggable connector)	Male connector/plug
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	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.194 MJ
Weight	9.8 g

Environmental Requirements

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

Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	PL
GTIN	4044918513685
Customs tariff number	85366990990

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

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate 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.2734-112 1-conductor female plug; 100% protected against mismatching; push-button; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.2734-112/027-000 1-conductor female plug; 100% protected against mismatching; push-button; 1,50 mm ² ; light gray
	Item no.2734-112/031-000 1-conductor female plug; 100% protected against mismatching; push-button; clamping collar; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-112 1-conductor female plug; 100% protected against mismatching; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.2734-112/037-000 1-conductor female plug; 100% protected against mismatching; push-button; Locking lever; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-112/008-000 1-conductor female plug; 100% protected against mismatching; Snap-in mounting feet; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-112/037-000 1-conductor female plug; 100% protected against mismatching; Locking lever; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-372 2-conductor combi strip; 100% protected against mismatching; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-372/008-000 2-conductor combi strip; 100% protected against mismatching; Snap-in mounting feet; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-372/037-000 2-conductor combi strip; 100% protected against mismatching; Locking lever; 1.5 mm ² ; Pin spacing 3.5 mm; 12-pole; 1,50 mm ² ; light gray
	Item no.734-472 THT female header; 0.9 x 0.9 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; light gray
	Item no.734-542 THT female header; 0.9 x 0.9 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; light gray
	Item no.734-542/037-000 THT female header; 0.9 x 0.9 mm solder pin; angled; 100% protected against mismatching; Locking lever; Pin spacing 3.5 mm; 12-pole; light gray

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



Item no. 734-472/037-000

THT female header; 0.9 x 0.9 mm solder pin; straight; 100% protected against mismating; Locking lever; Pin spacing 3.5 mm; 12-pole; light gray

Compatible products

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

protection



Item no.: 734-420

Cover for male connectors; for 734 Series; IP20 protection; black

check



Item no.: 735-500

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

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

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



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

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

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



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
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.: 216-243
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.: 216-244
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.: 216-262
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.: 216-263
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.: 216-264
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.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item no.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

Item no.: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item no.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

Coding



Item no.: 734-130
Coding key; to be snapped above top level; white

Strain relief plate



Item no.: 734-129
Strain relief plate; light gray

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

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

CAD/CAE-Data

CAD data

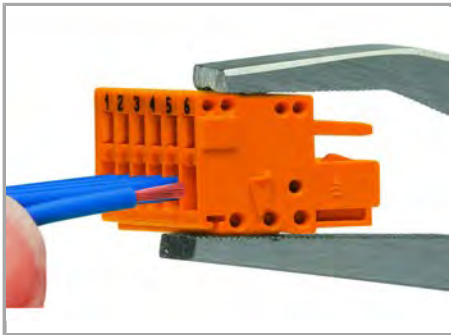
2D/3D Models 734-312

CAE data

EPLAN Data Portal 734-312

Installation Notes

Inserting a conductor



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

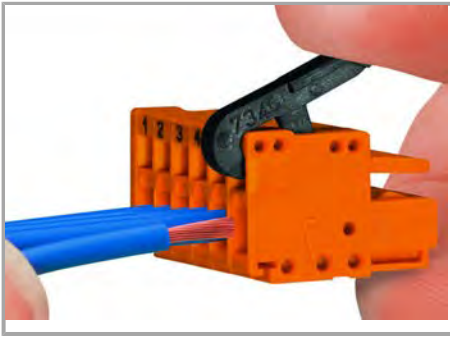


Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



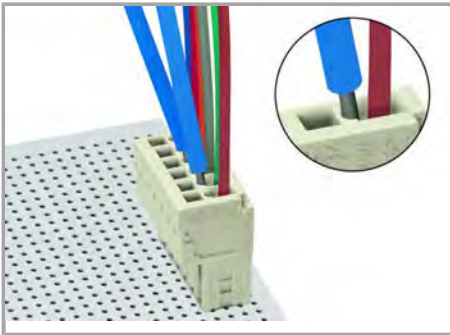
Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.

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



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

Testing



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

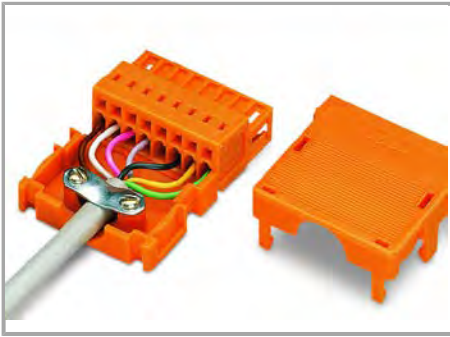
Marking



Labeling via direct marking or self-adhesive strips.

Assembly

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!