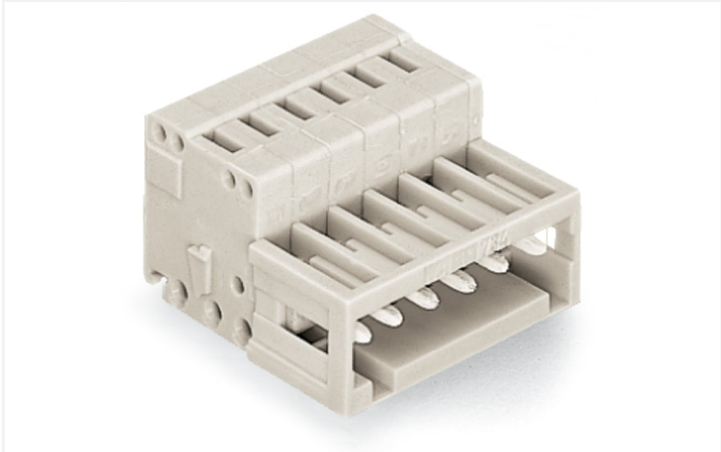


Data Sheet | Item Number: 734-312

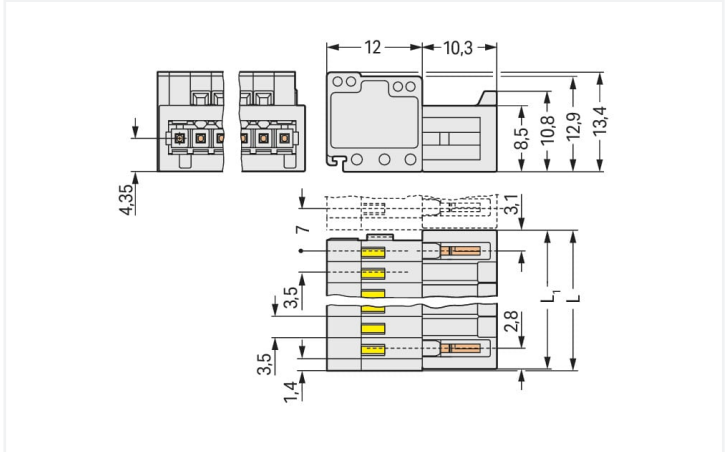
1-conductor male connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-po-
le; 100% protected against mismatching; 1,50 mm²; light gray

<https://www.wago.com/734-312>

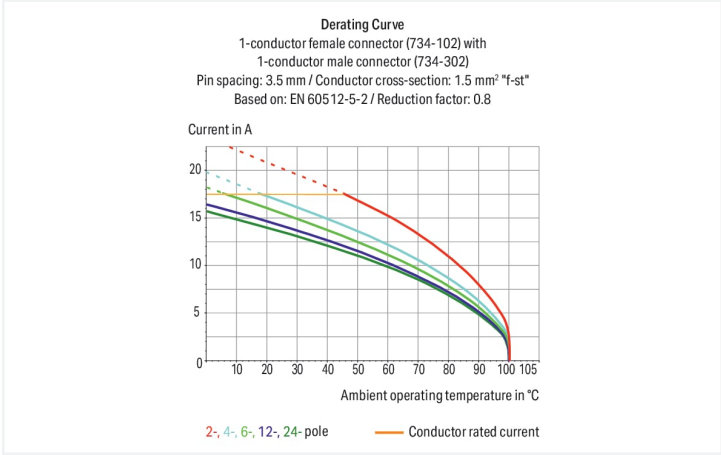


Color: ■ light gray

Similar to illustration



Dimensions in mm
L = (pole no. – 1) x pin spacing + 5.9 mm + 0.45 mm
L1 = L – 0.45 mm



- 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 option available

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 versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/ . Other pole numbers Gold-plated or partially gold-plated contact surfaces



Electrical data

Ratings per IEC/EN 60664-1				Approvals per UL 1059			
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 surge 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

Connection data

Clamping units	12	Connection 1	
Total number of potentials	12	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	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°

Physical data

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

Mechanical data

Variable coding	Yes
Anti-rotation protection	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	light gray
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	0.182 MJ
Weight	9.8 g

Environmental requirements	
Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed



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 9.0	EC002638	
ETIM 8.0	EC002638	
PU (SPU)	50 pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4044918513685	
Customs tariff number	85366930000	

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
CCA DEKRA Certification B.V.	EN 61984	2169534.02	Railway WAGO GmbH & Co. KG	-	Railway Ready
CCA DEKRA Certification B.V.	EN 61984	nl-54190			
CSA DEKRA Certification B.V.	C22.2	1465035			
UL Underwriters Laboratories Inc.	UL 1977	E 45171			
UR Underwriters Laboratories Inc.	UL 1059	E45172			

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)



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 734-312

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models 734-312

↓

CAE data

EPLAN Data Portal 734-312

↓

ZUKEN Portal 734-312

↓

1 Compatible Products

1.1 System counterpart

1.1.1 Distribution connector



Item No.: 734-372

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

Item No.: 734-372/037-000

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

Item No.: 734-372/008-000

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

1.1.2 Female connector/socket

133

133

133

133

Item No.: 734-112

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

Item No.: 734-112/037-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray

Item No.: 734-112/008-000

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

Item No.: 2734-1112/327-000

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; 1,50 mm²; light gray

133

133

133

133

Item No.: 2734-1112/329-000

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Centered locking levers; 1,50 mm²; light gray

Item No.: 2734-1112/329-000/336-000

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Centered locking levers; Strain relief plate; 1,50 mm²; light gray

Item No.: 2734-1112/327-047

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; direct marking; 1,50 mm²; light gray

Item No.: 2734-1112/327-9037

1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; direct marking; 1,50 mm²; light gray



1.1.2 Female connector/socket



Item No.: 2734-1112/038-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 2734-1112/328-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 2734-1112/038-000/336-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-1112/327-000/336-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Strain relief plate; 1,50 mm²; light gray



Item No.: 2734-112
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; 1,50 mm²; light gray



Item No.: 2734-112/027-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; light gray



Item No.: 2734-112/031-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; light gray



Item No.: 2734-112/037-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray



Item No.: 734-542
THT female header; angled; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-542/037-000
THT female header; angled; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-472
THT female header; straight; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray



Item No.: 734-472/037-000
THT female header; straight; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray

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.: 216-301
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.: 216-241
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.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



1.2.3.1 Ferrule

 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; un-insulated; 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; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; 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; un-insulated; 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; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; 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; un-insulated; electro-tin plated
 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		

1.2.4 Marking

1.2.4.1 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
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1.2.5 Strain relief

1.2.5.1 Strain relief housing



Item No.: 734-612
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 3.5 mm; 12-pole; light gray

1.2.5.2 Strain relief plate



Item No.: 734-129
Strain relief plate; for female and male connectors; 25 mm wide; 1 part; Pin spacing 3.5 mm; light gray

1.2.6 Test and measurement

1.2.6.1 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

1.2.7 Tool

1.2.7.1 Operating tool



Item No.: 734-190
Combination operating tool; natural



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



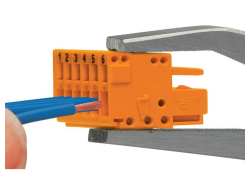
Item No.: 210-250
Operating tool; for MCS MINI and MIDI with CAGE CLAMP® connection; red



Item No.: 734-191
Operating tool; made of insulating material; 1-way; loose; black

Installation Notes

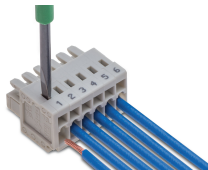
Conductor termination



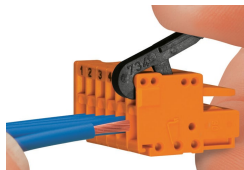
Inserting a conductor into CAGE CLAMP® unit via operating tool (210-251 or 210-250).



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

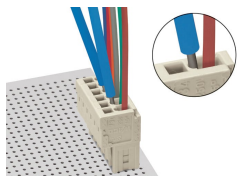


Inserting a conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



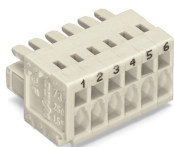
Inserting a conductor into CAGE CLAMP® unit via operating tool (734-191).

Testing



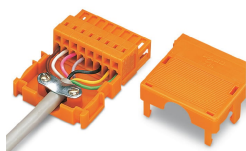
Testing via 1 mm Ø test pin (735-500) – CAGE CLAMP® connection – touch contact.

Marking



Labeling via direct marking or self-adhesive strips.

Installation



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