

Data Sheet | Item Number: 733-108

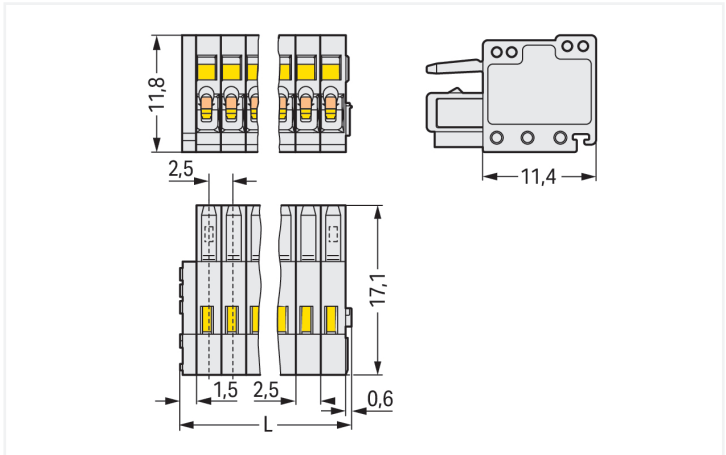
1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 8-po-
le; 100% protected against mismatching; 0,50 mm²; light gray

<https://www.wago.com/733-108>

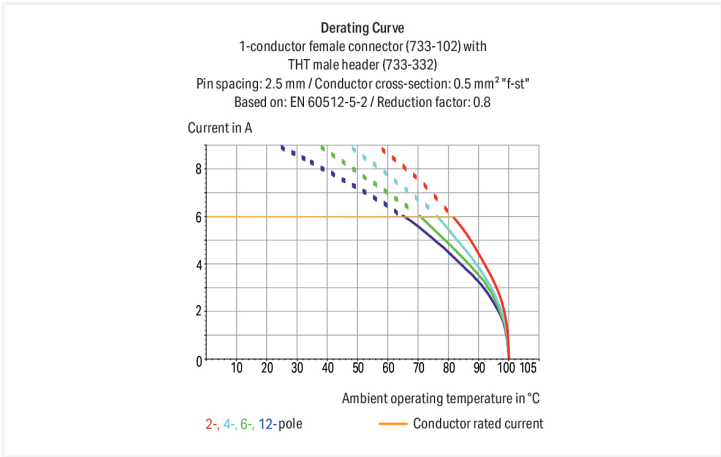


Color: ■ light gray

Similar to illustration



Dimensions in mm
L = (pole no. x pin spacing) + 2.1 mm



Federleiste/Buchse Serie 733 mit Betätigungswerkzeug

Die Federleiste/Buchse mit der Artikelnummer 733-108 ermöglicht eine reibungslose Elektroinstallation. Mit unseren Leiterplatten-Steckverbindern erhalten Sie ein ganzheitliches Steckverbindersystem, das vielseitig verwendet werden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Diese Federleiste/Buchse benötigt für den Leiteranschluss eine Abisolierlänge zwischen 5 und 6 mm. Dieses Produkt basiert auf der CAGE CLAMP®-Technologie. Der zuverlässige und wartungsfreie CAGE CLAMP® Universalanschluss bietet die Möglichkeit, alle Arten von Leitern mit einer Käfigzugfeder anzuschließen, ohne, dass eine Vorbehandlung der Leiter erforderlich ist. Das Aufcrimpen von Aderendhülsen kann somit entfallen. In Breite x Höhe x Tiefe sind die Abmessungen (22,1 x 11,8 x 17,1) mm. In Abhängigkeit von der Leiterart ist diese Federleiste/Buchse für Leiterquerschnitte von 0,08 mm² bis 0,5 mm² ausgelegt. Die Kontaktoberfläche ist aus Zinn. Diese Federleiste/Buchse wird durch ein Betätigungswerkzeug betätigt. Das MCS – "Multi Connection System" von WAGO ist ein vielfältiges Steckverbindersystem für Ihre durchgängige Systemverdrahtung. Es ermöglicht Ihnen eine vereinfachte Verdrahtung in der Kabelvorkonfektionierung und auf Geräten durch zwei Betätigungsrichtungen für die CAGE CLAMP®-Varianten.

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				
Overvoltage category	III	III	II	Use group	B	C
Pollution degree	3	2	2	Rated voltage	150 V	-
Nominal voltage	100 V	160 V	320 V	Rated current	4 A	-
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV			
Rated current	6 A	6 A	6 A			

Approvals per		CSA		
Use group	B	C	D	
Rated voltage	150 V	-	-	
Rated current	4 A	-	-	

Connection data			
Clamping units	8	Connection 1	
Total number of potentials	8	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 ... 0.5 mm² / 28 ... 20 AWG
		Fine-stranded conductor	0.08 ... 0.5 mm² / 28 ... 20 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 0.34 mm²
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.34 mm²
		Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
		Pole number	8
		Conductor entry direction to mating direction	0°

Physical data		
Pin spacing	2.5 mm / 0.098 inches	
Width	22.1 mm / 0.87 inches	
Height	11.8 mm / 0.465 inches	
Depth	17.1 mm / 0.673 inches	

Mechanical data		
Variable coding	Yes	
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	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	Copper alloy
Contact Plating	Tin
Fire load	0.062 MJ
Weight	3.5 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)	
PU (SPU)	100 pcs	
Packaging type	Box	
Country of origin	DE	
GTIN	4044918294119	
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 8.0	EC002638	
ECCN	NO US CLASSIFICATION	

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	2169534.01	Railway WAGO GmbH & Co. KG	-	Railway Ready
CCA DEKRA Certification B.V.	IEC 61984	NL-31141			
CSA DEKRA Certification B.V.	C22.2	1465035			
UL UL International Germany GmbH	UL 1977	E45171			
UL 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 733-108

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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 733-108

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CAE data

EPLAN Data Portal 733-108

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ZUKEN Portal 733-108

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1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug

 Item No.: 733-208 1-conductor male connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 8-pole; 100% protected against mismatching; 0,50 mm²; light gray	 Item No.: 733-208/033-000 1-conductor male connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 8-pole; 100% protected against mismatching; Strain relief plate; 0,50 mm²; light gray	 Item No.: 733-368/105-604/997-406 THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 2.5 mm; 8-pole; black	 Item No.: 733-368/105-604 THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 8-pole; black
 Item No.: 733-338/105-604/997-446 THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 2.5 mm; 8-pole; black	 Item No.: 733-338/105-604 THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 8-pole; black	 Item No.: 733-368 THT male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 8-pole; light gray	 Item No.: 733-338 THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 8-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 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.: 216-151
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated



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.: 216-152
Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

1.2.2 Marking

1.2.2.1 Marking strip



Item No.: 210-331/250-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/250-207
Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/250-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/250-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.3 Strain relief

1.2.3.1 Strain relief plate



Item No.: 734-128
Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; Pin spacing 3.5 mm; light gray

1.2.4 Test and measurement

1.2.4.1 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

1.2.5 Tool

1.2.5.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Item No.: 210-251
Operating tool; for MCS MICRO and MINI with CAGE CLAMP® connection; yellow

Item No.: 233-335
Operating tool; green

Item No.: 233-331
Operating tool; insulated; yellow



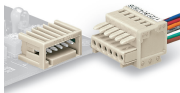
Item No.: 733-130
Operating tool; made of insulating material; 1-way; loose; white

Item No.: 733-191
Operating tool; made of insulating material; 1-way; loose; yellow

Item No.: 233-332
Operating tool; made of insulating material; white

Installation Notes

Mismatching protection

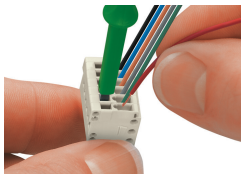


Male headers and female connectors are 100% protected against mismatching. Only mating halves with the same pole number can be connected.

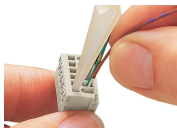
Conductor termination



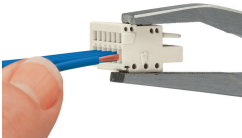
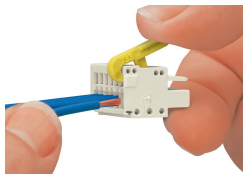
Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Conductor termination via screwdriver (233-335) – parallel to CAGE CLAMP® actuation



Conductor termination via operating tool (733-191)



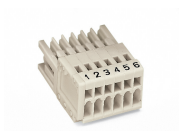
Conductor termination via operating tool (210-251)

Coding

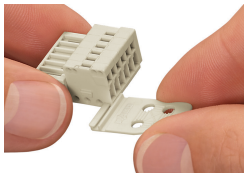


Coding a female connector – removing coding finger(s).

Marking



Strain relief



Strain relief plates for factory or in-the-field assembly

Testing



Testing via 1 mm Ø test pin (735-500), touch contact.