

Data sheet | Item number: 733-109

1-conductor female plug; 100% protected against mismatching; 0.5 mm²; Pin spacing 2.5 mm; 9-pole; light gray



www.wago.com/733-109

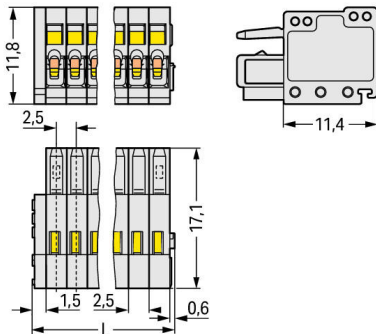
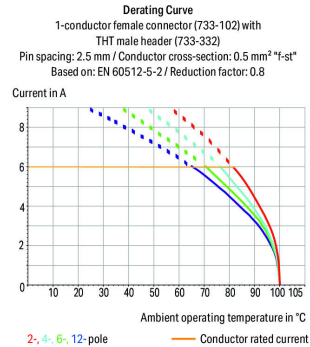


 Picture differs from the item.

RoHS  Compliant



Color: 



$$L = (\text{pole no.} \times \text{pin spacing}) + 2.1 \text{ mm}$$

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 for factory and field assembly

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

WAGO Kontakttechnik GmbH & Co. KG

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Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



- 100% protected against mismatching
- Coding option available

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**

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	100 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	6 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	4 A

Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	4 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG

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



Fine-stranded conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.34 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.34 mm ²
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch
Pole No.	9
Total number of connection points	9
Total number of potentials	9
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	2.5 mm / 0.098 inch
Width	24.6 mm / 0.969 inch
Height	11.8 mm / 0.465 inch
Depth	17.1 mm / 0.673 inch

Plug-in 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 (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.069 MJ
Weight	3.9 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	4045454819194
Customs tariff number	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61984	2169534.01
	CCA DEKRA Certification B.V.	IEC 61984	NL-31141
	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 1977	E45171

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



UL International Germany GmbH



UR
Underwriters Laboratories Inc.

UL 1059

E45172-
19950922

Counterpart



Item no.733-209/033-000

1-conductor male connector; 100% protected against mismatching; Strain relief plate; 0.5 mm²; Pin spacing 2.5 mm; 9-pole; 0,50 mm²; light gray

www.wago.com/733-209/033-000



Item no.733-209

1-conductor male connector; 100% protected against mismatching; 0.5 mm²; Pin spacing 2.5 mm; 9-pole; 2,50 mm²; light gray

www.wago.com/733-209



Item no.733-339

THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 9-pole; light gray

www.wago.com/733-339



Item no.733-339/105-604

THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 9-pole; black

www.wago.com/733-339/105-604



Item no.733-339/105-604/997-446

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; 9-pole; black

www.wago.com/733-339/105-604/997-446



Item no.733-369/105-604

THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 9-pole; black

www.wago.com/733-369/105-604



Item no.733-369

THT male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 9-pole; light gray

www.wago.com/733-369



Item no.733-369/105-604/997-406

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; 9-pole; black

www.wago.com/733-369/105-604/997-406

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

Compatible products

Marking accessories

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	www.wago.com/210-331/250-202
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	www.wago.com/210-331/250-204
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	www.wago.com/210-331/250-206
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	www.wago.com/210-331/250-207

check


Item no.: 735-500

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

www.wago.com/735-500

ferrule


Item no.: 216-131

 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored

www.wago.com/216-131

Item no.: 216-132

 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

www.wago.com/216-132

Item no.: 216-151

 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated

www.wago.com/216-151

Item no.: 216-152

 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

www.wago.com/216-152
Item no.: 216-301

 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-301

Item no.: 216-302

 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

www.wago.com/216-302
Item no.: 216-321

 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-321

Item no.: 216-322

 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

www.wago.com/216-322

tools


Item no.: 210-251

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

www.wago.com/210-251

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

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	Item no.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719
	Item no.: 233-331 Operating tool; insulated; yellow	www.wago.com/233-331
	Item no.: 233-332 Operating tool; made of insulating material; white	www.wago.com/233-332
	Item no.: 233-335 Operating tool; yellow	www.wago.com/233-335
	Item no.: 733-130 Operating tool; loose; natural	www.wago.com/733-130
	Item no.: 733-191 Operating tool; loose; yellow	www.wago.com/733-191
Strain relief plate		
	Item no.: 734-128 Strain relief plate; 12.5 mm wide; light gray	www.wago.com/734-128

Downloads

Documentation

Additional Information

Technical explanations	3. 4. 2019	pdf 2.0 MB	Download
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CAD/CAE-Data

CAE data

ZUKEN Portal 733-109	URL	Download
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CAD data

2D/3D Models 733-109	URL	Download
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Environmental Product Compliance

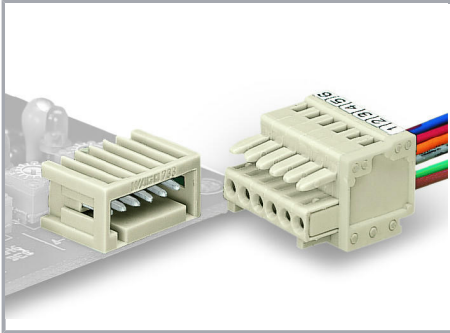
Compliance Search

Environmental Product Compliance 733-109 1-conductor female plug; 100% protected against mismatching; 0.5 mm ² ; Pin spacing 2.5 mm; 9-pole; light gray	URL	Download
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Installation Notes

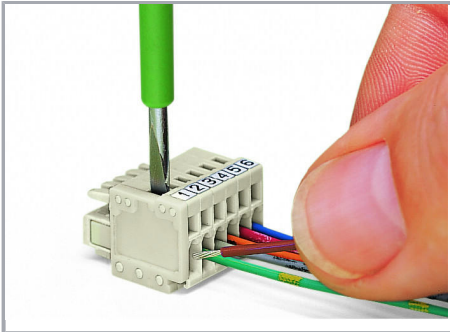
Mismating protection



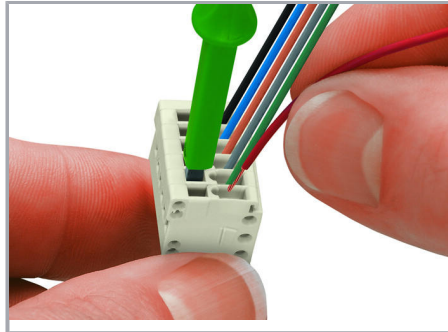
Male headers and female connectors are 100% protected against mismating.

Only mating halves with the same pole number can be connected.

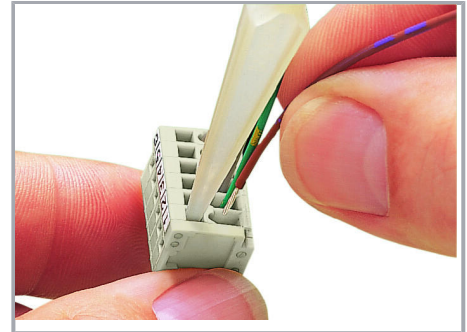
Conductor termination



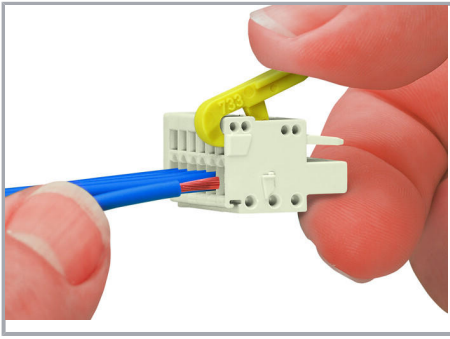
Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



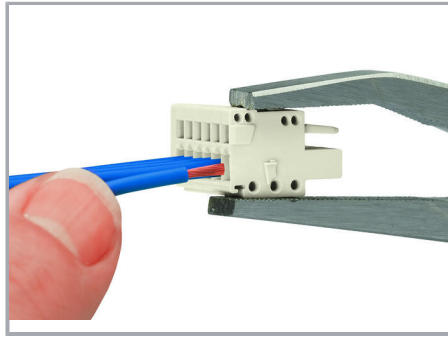
Conductor termination via screwdriver (233-335) – parallel to CAGE CLAMP® actuation



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

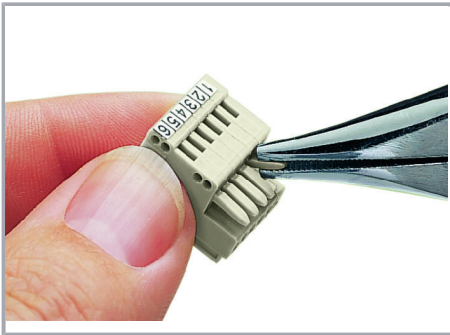


Conductor termination via operating tool (210-251)



Conductor termination via operating tool (210-251)

Coding

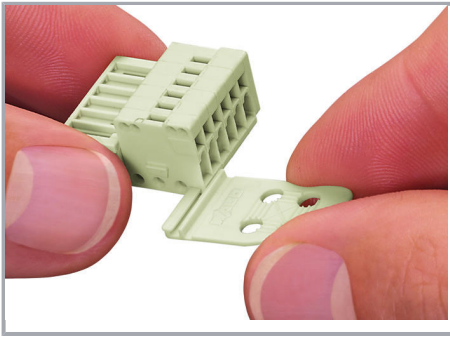


Coding a female connector – removing coding finger(s).



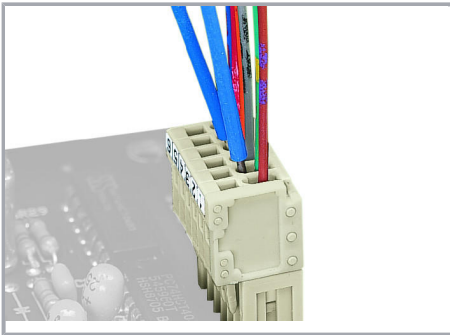
Installation

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

Testing



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

Product family

[*MCS* MICRO](#)

[Show all products from the family](#)

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