

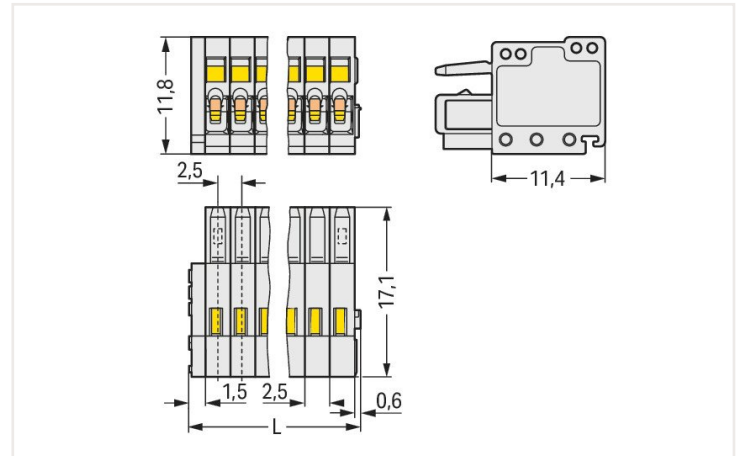
|: 733-110

1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 10-pole; 100% protected against mismatching; 0,50 mm²; light gray

<https://www.wago.com/733-110>

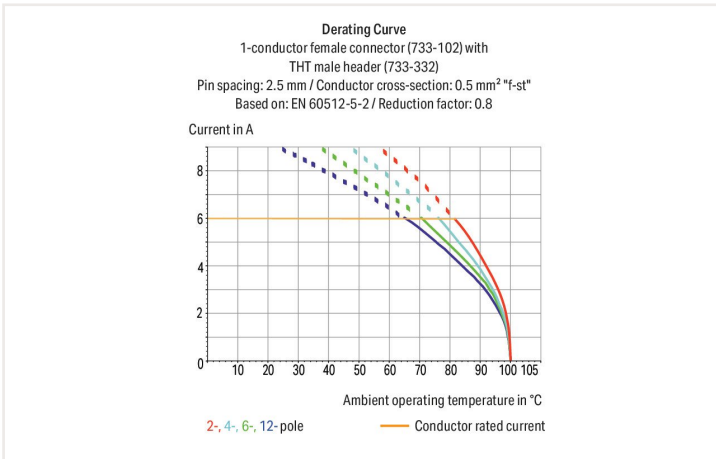


: ■ light gray



Dimensions in mm

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



- 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
- 100% protected against mismatching
- Coding option available

Notes

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. 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

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	100 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse 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) \triangleq Overvoltage category III / Pollution degree 2

Ratings per CSA

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

Ratings per UL

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

Connection data

Total number of connection points	10
Total number of potentials	10
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG
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 inches
Pole number	10
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	2.5 mm / 0.098 inches
Width	27.1 mm / 1.067 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
Locking of plug-in connection	none

Material data

Note (material data)	Information on material data can be found here
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
Fire load	0.076 MJ
Weight	4.3 g

Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

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 8.0	EC002638
ETIM 7.0	EC002638
PU (SPU)	100 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4044918294201
Customs tariff number VKOrg Germany	85366990990

Approvals and certificates

Country specific Approvals



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



ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)

UL-Approvals



UL UL International Germany GmbH	UL 1977	E45171
UR Underwriters Laboratories Inc.	UL 1059	E45172

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance 733-110



Documentation

Additional Information

Technical Section 03.04.2019 pdf
1949.09 KB



CAD/CAE-Data

CAD data

2D/3D Models 733-110



CAE data

EPLAN Data Portal
733-110



ZUKEN Portal 733-110



1 Compatible products

1.1 System counterpart

1.1.1 Male connector/plug



[: 733-210](#)

1-conductor male connector; CAGE CLAMP®; 0,5 mm²; Pin spacing 2.5 mm; 10-pole; 100% protected against mismatching; 0,50 mm²; light gray



[: 733-210/034-000](#)

1-conductor male connector; CAGE CLAMP®; 0,5 mm²; Pin spacing 2.5 mm; 10-pole; 100% protected against mismatching; Strain relief plate; 0,50 mm²; light gray



[: 733-370/105-604/997-406](#)

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; 10-pole; black



[: 733-370/105-604](#)

THR male header; 0,8 x 0,8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 10-pole; black



[: 733-340/105-604/997-446](#)

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; 10-pole; black



[: 733-340/105-604](#)

THR male header; 0,8 x 0,8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 10-pole; black



[: 733-370](#)

THR male header; 0,8 x 0,8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 10-pole; light gray



[: 733-340](#)

THR male header; 0,8 x 0,8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 10-pole; light gray

1.2 Optional accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



[:216-301](#)

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



[:216-321](#)

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



[:216-151](#)

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



[:216-131](#)

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



[:216-302](#)

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



[:216-322](#)

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



[:216-132](#)

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



[:216-152](#)

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

1.2.2 Marking

1.2.2.1 Marking strip



[: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



[: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



[: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



[: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



[:734-129](#)

Strain relief plate; light gray

1.2.4 Test and measurement

1.2.4.1 Testing accessories



[: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



:210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



:210-251
Operating tool; for MCS MICRO & MINI with CAGE CLAMP® connection; yellow



:233-335
Operating tool; green



:233-331
Operating tool; insulated; yellow



:733-130
Operating tool; made of insulating material; 1-way; loose; white



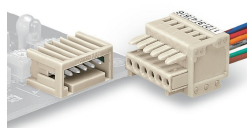
:733-191
Operating tool; made of insulating material; 1-way; loose; yellow



:233-332
Operating tool; made of insulating material; white

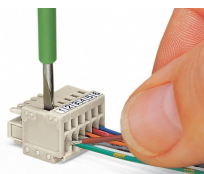
Installation notes

Mismatching protection

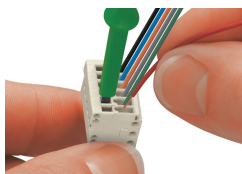


Male headers and female connectors are 100% protected against mismatching. Only mating halves with the same pole number can be connected.

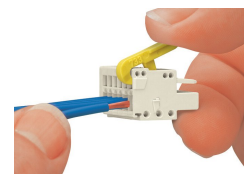
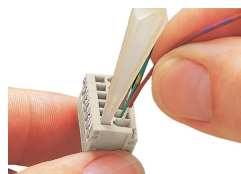
Conductor termination



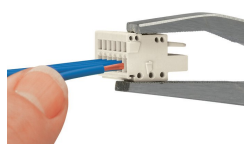
Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



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

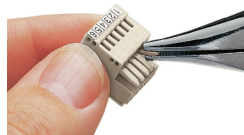


Conductor termination via operating tool (733-191)



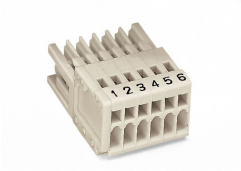
Conductor termination via operating tool (210-251)

Coding

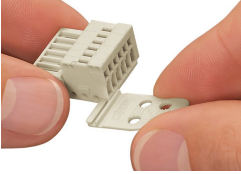


Coding a female connector – removing coding finger(s).

Marking

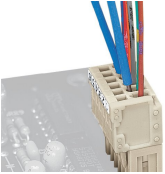


Installation



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

Testing



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