

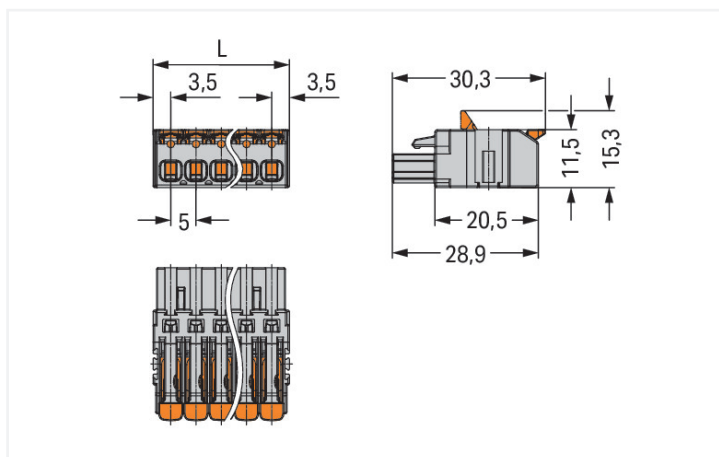
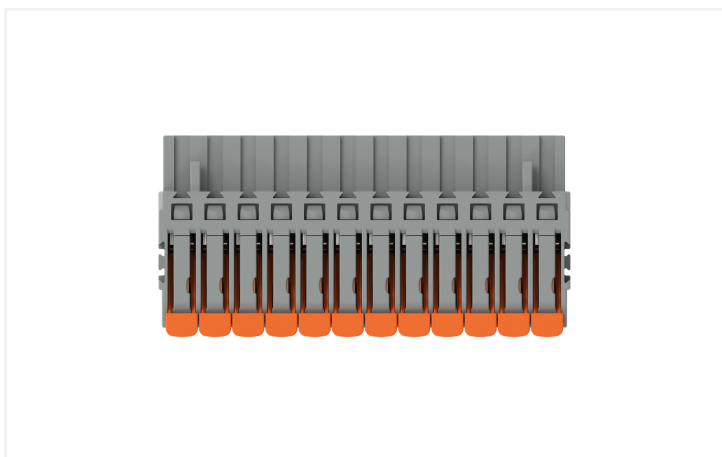
Data Sheet | Item Number: 2231-1112/327-047

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; direct marking; 2,50 mm²; gray

<https://www.wago.com/2231-1112/327-047>



Color: ■ gray



L = (pole no. x pin spacing) + 2 mm2- and 3-pole female connectors – one latch only

- Intuitive and tool-free lever actuation
- Universal connection for all conductor types
- Push-in termination of solid and ferruled conductors
- Just 11.5 mm tall

- Test slot 0° and 90° to conductor entry
- Codable

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
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)	320 V
Rated impulse withstand voltage (III / 3)	4 kV
Rated voltage (III/2)	320 V
Rated impulse withstand voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated impulse withstand voltage (II/2)	4 kV
Rated current	16 A
Legend (ratings)	(III / 2) \triangle Overvoltage category III / Pollution degree 2

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	20 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	20 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection Data

Clamping units	12
Total number of potentials	12
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Lever
Solid conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ²
Strip length	11 ... 12 mm / 0.43 ... 0.47 inches
Pole number	12
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5 mm / 0.197 inches
Width	47 mm / 2.441 inches
Height	11.5 mm / 0.453 inches
Depth	30.3 mm / 1.193 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	No

Material data

Note (material data)	Information on material specifications can be found here
Color	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	0.307 MJ
Actuator color	orange
Weight of insulation material	3.81 g
Weight	19.6 g

Environmental requirements

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

Commercial data

PU (SPU)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966742428
Customs tariff number	85366990990

Product Classification

ETIM 9.0	EC002638
ETIM 10.0	EC002638
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Downloads

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug

 Item No.: 231-612 1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; gray	 Item No.: 2231-1612 1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; 2,50 mm²; gray	 Item No.: 2231-1612/000-044 1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; direct marking; 2,50 mm²; gray	 Item No.: 2231-1612/000-9034 1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; direct marking; 2,50 mm²; gray
 Item No.: 2231-1612/336-000 1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; Strain relief plate; 2,50 mm²; gray	 Item No.: 231-442/001-000/105-604/997-409 THR male header; 1.0 x 1.0 mm solder pin; angled; in tape-and-reel packaging; Pin spacing 5 mm; 12-pole; black	 Item No.: 231-442/001-000/105-604 THR male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 12-pole; black	 Item No.: 231-142/001-000/105-604/997-409 THR male header; 1.0 x 1.0 mm solder pin; straight; in tape-and-reel packaging; Pin spacing 5 mm; 12-pole; black
 Item No.: 231-142/001-000/105-604 THR male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 12-pole; black	 Item No.: 231-472/001-000/105-604/997-409 THR male header; 1.2 x 1.2 mm solder pin; angled; in tape-and-reel packaging; Pin spacing 5 mm; 12-pole; black	 Item No.: 231-472/001-000/105-604 THR male header; 1.2 x 1.2 mm solder pin; angled; Pin spacing 5 mm; 12-pole; black	 Item No.: 231-172/001-000/105-604/997-409 THR male header; 1.2 x 1.2 mm solder pin; straight; in tape-and-reel packaging; Pin spacing 5 mm; 12-pole; black
 Item No.: 231-172/001-000/105-604 THT male header; 1.2 x 1.2 mm solder pin; straight; Pin spacing 5 mm; 12-pole; black	 Item No.: 231-442/001-000 THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 12-pole; gray	 Item No.: 231-142/001-000 THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 12-pole; gray	 Item No.: 231-472/001-000 THT male header; 1.2 x 1.2 mm solder pin; angled; Pin spacing 5 mm; 12-pole; gray
 Item No.: 231-172/001-000 THT male header; 1.2 x 1.2 mm solder pin; straight; Pin spacing 5 mm; 12-pole; gray			

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 2231-505

Coding pin carrier; 5 coding keys; for female connectors; orange

1.2.2 Ferrule

1.2.2.1 Ferrule



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

1.2.3 Insulation stop

1.2.3.1 Insulation stop



Item No.: 231-671

Insulation stop; 0.25 - 0.5 mm²; light gray



Item No.: 231-672

Insulation stop; 0.75 - 1 mm²; dark gray

1.2.4 Locking system

1.2.4.1 Locking system



Item No.: 2231-515

center locking; for female connectors; For Push-in CAGE CLAMP® connection; lever; Pin spacing 5 mm; 5-pole; orange



Item No.: 2231-510

Locking lever; for female connectors; 1 part; For Push-in CAGE CLAMP® connection; lever; orange

1.2.5 Marking

1.2.5.1 Marking strip



Item No.: 210-332/500-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-205

Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.6 Strain relief

1.2.6.1 Strain relief plate



Item No.: 2231-536

Strain relief plate; for female and male connectors; 1 part; lever; Pin spacing 5 mm; gray

1.2.7 Test and measurement

1.2.7.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red



Item No.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

1.2.8 Tool

1.2.8.1 Operating tool



Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-657

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Conductor termination

Inserting solid conductor via push-in termination.

Insert fine-stranded conductors – and remove all conductors – via operating tool.

Conductor removal

Removing a conductor via lever.

Testing



Coding

Coding a 1-conductor female connector by inserting a coding pin.