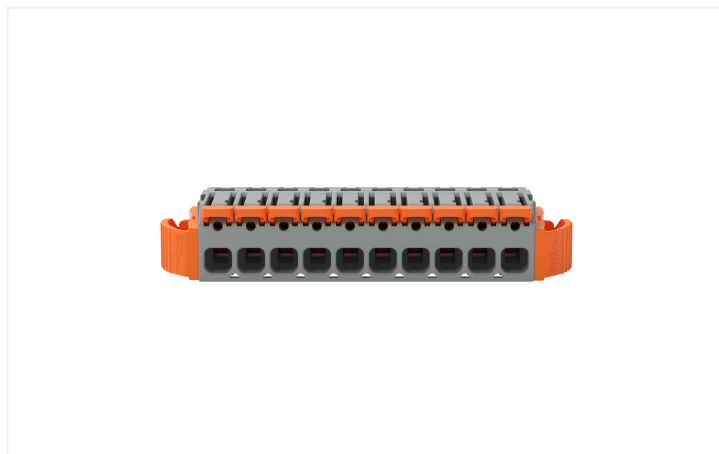


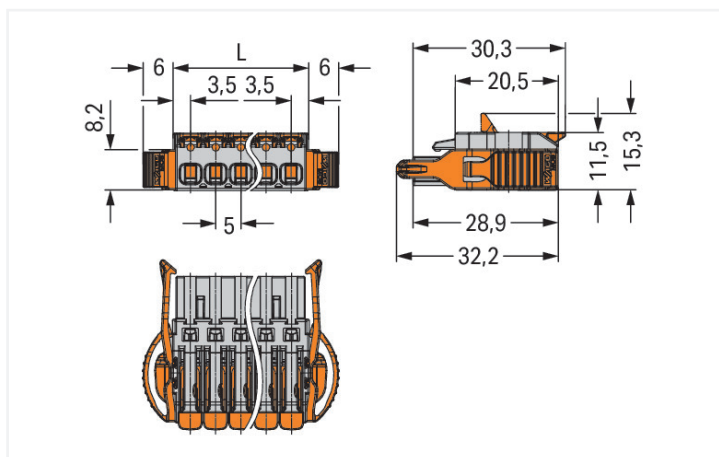
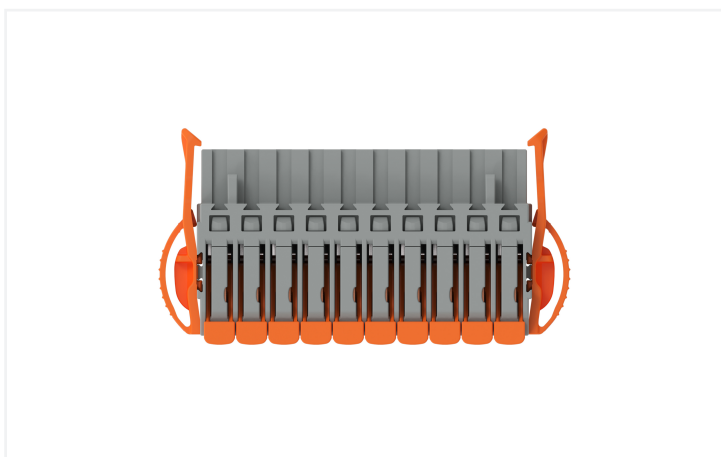
Data Sheet | Item Number: 2231-1110/038-000

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray

<https://www.wago.com/2231-1110/038-000>



Color: ■ gray



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

Female connector, 2231 Series, gray

Effortless electrical installations are guaranteed with this female connector (item number 2231-1110/038-000). Strip lengths must be between 11 and 12 mm when connecting conductors to this female connector. This product incorporates one conductor terminal and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: both solid and fine-

stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. Dimensions: (64 x 11.5 x 33.6) mm (width x height x depth). Depending on the conductor type, this female connector is ideal for conductor cross sections ranging from 0.2 mm² to 2.5 mm².

The contact surface is coated with tin.

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 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	320 V	320 V	630 V	Rated current	20 A	-	10 A
Rated impulse withstand voltage	4 kV	4 kV	4 kV				
Rated current	16 A	16 A	16 A				
Approvals per	CSA						
Use group	B	C	D				
Rated voltage	300 V	-	300 V				
Rated current	20 A	-	10 A				

Connection Data		Connection 1	
Clamping units	10	Connection technology	Push-in CAGE CLAMP®
Total number of potentials	10	Actuation type	Lever
Number of connection types	1	Solid conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Number of levels	1	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	10
		Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5 mm / 0.197 inches
Width	64 mm / 2.52 inches
Height	11.5 mm / 0.453 inches
Depth	33.6 mm / 1.323 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
Locking of plug-in connection	Lateral locking lever

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	0.383 MJ
Actuator color	orange
Weight of insulation material	3.81 g
Weight	17.3 g

Environmental requirements

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

Commercial data

PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4066966498196
Customs tariff number	85366990990

Product Classification

UNSPSC	39121409
ETIM 9.0	EC002638
ETIM 10.0	EC002638
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351
CSA CSA Group	C22.2 No. 158	2314554
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2231-1110/038-000	↓

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 2231-1110/038-000	↓

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 231-610

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; gray



Item No.: 2231-1610

1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 2,50 mm²; gray



Item No.: 2231-1610/000-044

1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; direct marking; 2,50 mm²; gray



Item No.: 2231-1610/000-9034

1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; direct marking; 2,50 mm²; gray



Item No.: 2231-1610/335-000

1-conductor male connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; Strain relief plate; 2,50 mm²; gray



Item No.: 231-440/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 10-pole; gray



Item No.: 231-140/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 10-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 Marking

1.2.4.1 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

1.2.5 Strain relief

1.2.5.1 Strain relief plate



Item No.: 2231-535

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

1.2.6 Test and measurement

1.2.6.1 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

1.2.7 Tool

1.2.7.1 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.