

## Data Sheet | Item Number: 2231-119/026-000

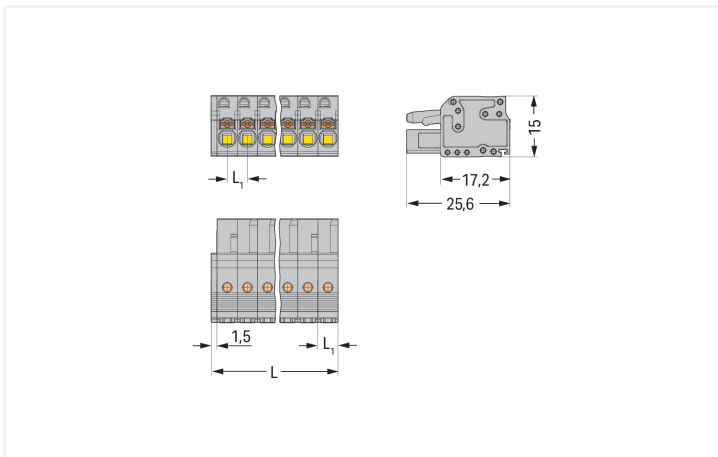
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 19-pole; 2,50 mm<sup>2</sup>; gray

<https://www.wago.com/2231-119/026-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$   
L1 = 5 mm  
2- to 3-pole female connectors – one latch only

Female connector, 2231 Series, push-button

Our female connector (item number 2231-119/026-000) is designed for seamless electrical installations. Conductors can only be connected to this female connector if their strip length is between 10 and 11 mm. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The dimensions are (96.5 x 15 x 25.6) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces.

## 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:

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		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	16 A	16 A	16 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	150 V	300 V
Rated current	15 A	15 A	10 A

Approvals per	UL 1977
Rated voltage	600 V
Rated current	15 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	150 V	300 V
Rated current	15 A	15 A	10 A

## Connection Data

Clamping units	19
Total number of potentials	19
Number of connection types	1
Number of levels	1

## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Actuation direction 1	Operation parallel to conductor entry
Solid conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup>
Strip length	10 ... 11 mm / 0.39 ... 0.43 inches
Pole number	19
Conductor entry direction to mating direction	0°

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	96.5 mm / 3.799 inches
Height	15 mm / 0.591 inches
Depth	25.6 mm / 1.008 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)	<a href="#">Information on material specifications can be found here</a>
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	0.611 MJ
Weight	29.8 g

### Environmental requirements

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

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454720506
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 10.0	EC002638
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

## Downloads

### Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2231-119/026-000	<a href="#">↓</a>

## Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

## CAD/CAE-Data

CAD data	
2D/3D Models 2231-119/026-000	<a href="#">↓</a>

CAE data	
ZUKEN Portal 2231-119/026-000	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Male connector/plug



[Item No.: 231-619](#)  
1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 19-pole; gray

[Item No.: 231-449/001-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 19-pole; gray

[Item No.: 231-149/001-000](#)  
THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 19-pole; gray

## 1.2 Optional Accessories

### 1.2.1 Ferrule

#### 1.2.1.1 Ferrule



[Item No.: 216-241](#)  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

[Item No.: 216-141](#)  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

[Item No.: 216-242](#)  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

[Item No.: 216-262](#)  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



[Item No.: 216-142](#)  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

[Item No.: 216-243](#)  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

[Item No.: 216-263](#)  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

[Item No.: 216-143](#)  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

1.2.1.1 Ferrule



**Item No.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

**Item No.: 216-264**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

**Item No.: 216-144**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



**Item No.: 216-106**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored

1.2.2 Insulation stop

1.2.2.1 Insulation stop



**Item No.: 231-671**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; light gray

**Item No.: 231-672**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray

1.2.3 Marking

1.2.3.1 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

1.2.4 Strain relief

1.2.4.1 Strain relief plate



**Item No.: 734-431**

Strain relief plate; for female and male connectors; 75 mm wide; 1 part; gray

1.2.5 Test and measurement

1.2.5.1 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 mm<sup>2</sup>; light gray

## 1.2.6 Tool

### 1.2.6.1 Operating tool



**Item No.: 210-720**

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

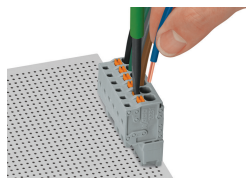


**Item No.: 210-657**

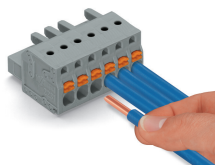
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes

### Conductor termination

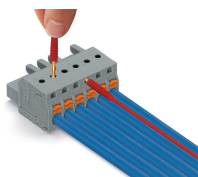


Inserting fine-stranded conductors into Push-in CAGE CLAMP® unit via push-buttons.



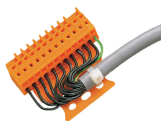
Push-in termination of solid conductors or fine-stranded conductors with ferrule

## Testing



Testing parallel to conductor entry via integrated test ports – female connector with push-buttons and Push-in CAGE CLAMP® connection – touch contact perpendicular to conductor entry.

## Installation



Male connector with strain relief plate



Strain relief housing shown with a male connector equipped with CAGE CLAMP®

## Marking



Labeling via direct marking or self-adhesive strips.