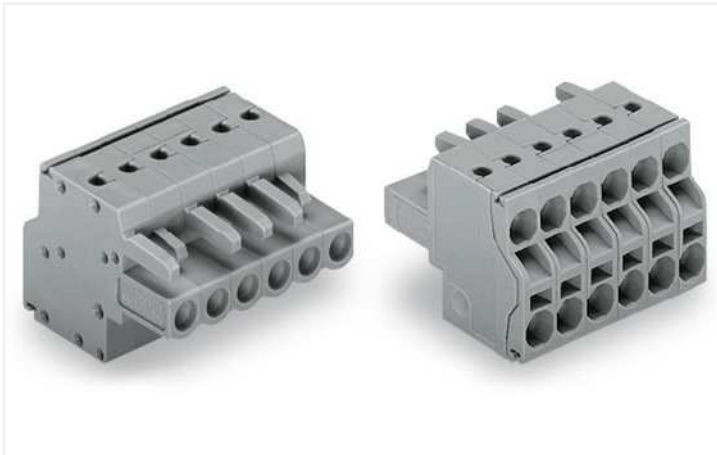


## Data Sheet | Item Number: 231-2112/026-000

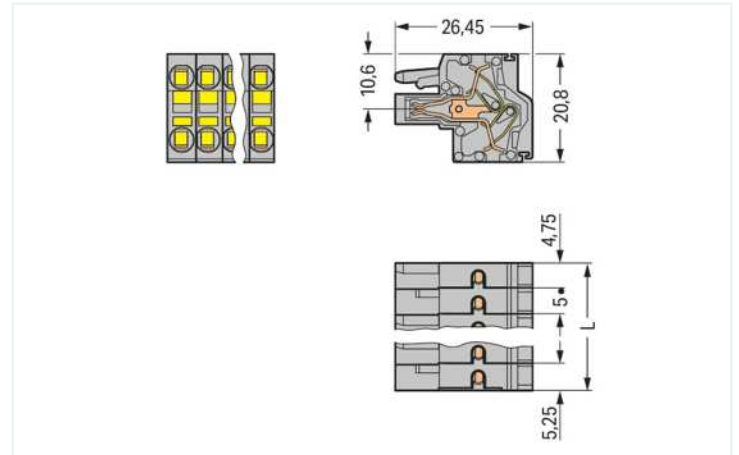
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 12-pole; with integrated end plate; 2,50 mm<sup>2</sup>; gray

<https://www.wago.com/231-2112/026-000>



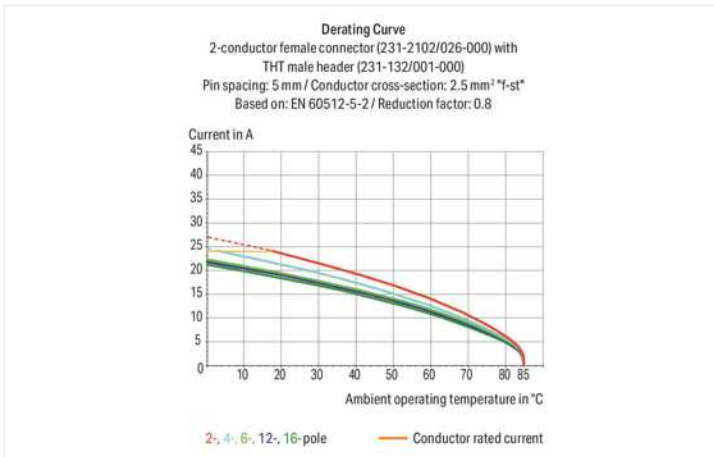
Color: ■ gray

Similar to illustration



Dimensions in mm

L = (pole no. - 2) x pin spacing + 10 mm



- Universal connection for all conductor types
- Two conductor entries per pole
- For looping through power or data buses
- Bus connection is retained, even when unmated
- Push-in termination of solid and ferruled conductors
- With coding fingers

### 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 surge 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	-	300 V
Rated current	20 A	-	10 A

Approvals per	UL 1977
Rated voltage	600 V
Rated current	20 A

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

## Connection data

Connection points	24
Total number of potentials	12
Number of connection types	1
Number of levels	1

## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
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	9 ... 10 mm / 0.35 ... 0.39 inches
Pole number	12
Conductor entry direction to mating direction	0°

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	60 mm / 2.362 inches
Height	20.8 mm / 0.819 inches
Depth	26.45 mm / 1.041 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
Mismatching protection	No
Plugging without loss of pin spacing	Yes

### Material data

Note (material data)	<a href="https://www.wago.com/us/material-specifications" href="_blank">Information on material specifications can be found here</a>
Color	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	0.517 MJ
Weight	26.5 g

### Environmental requirements

Limit temperature range	-60 ... +85 °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)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918563222
Customs tariff number	85366990990

### 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-39756/A1
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453
UL UL International Germany GmbH	UL 1977	E45171
UL Underwriters Laboratories Inc.	UL 1059	E45172

#### Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	19-HG1869876-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

### Downloads

#### Environmental Product Compliance

Compliance Search	
Environmental Product Compliance	↓
231-2112/026-000	

## Documentation

Additional Information			
Technical Section	03.04.2019	pdf 1949.09 KB	↓

## CAD/CAE-Data

CAD data	
2D/3D Models	↓
231-2112/026-000	

CAE data	
EPLAN Data Portal	↓
231-2112/026-000	
ZUKEN Portal	↓
231-2112/026-000	

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Male connector/plug



**Item No.: 231-612**  
1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 12-pole; 2,50 mm<sup>2</sup>; gray

**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

### 1.2 Optional Accessories

#### 1.2.1 Ferrule

##### 1.2.1.1 Ferrule



**Item No.: 216-301**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-321**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-151**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

**Item No.: 216-131**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-302**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-322**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-132**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

**Item No.: 216-152**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated




























**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.: 216-201**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

**Item No.: 216-221**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white




**Item No.: 216-141**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

1.2.1.1 Ferrule

 <b>Item No.: 216-101</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-121</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-242</b> 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	 <b>Item No.: 216-262</b> 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
 <b>Item No.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	 <b>Item No.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	 <b>Item No.: 216-142</b> 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	 <b>Item No.: 216-102</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored
 <b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-243</b> 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	 <b>Item No.: 216-263</b> 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	 <b>Item No.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red
 <b>Item No.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated; red	 <b>Item No.: 216-103</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated	 <b>Item No.: 216-143</b> 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	 <b>Item No.: 216-123</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated; silver-colored
 <b>Item No.: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	 <b>Item No.: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	 <b>Item No.: 216-244</b> 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 4/09.90; black	 <b>Item No.: 216-264</b> 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
 <b>Item No.: 216-284</b> 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	 <b>Item No.: 216-124</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; un-insulated; electro-tin plated	 <b>Item No.: 216-144</b> 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	 <b>Item No.: 216-104</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored
 <b>Item No.: 216-106</b> 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

 <b>Item No.: 231-670</b> Insulation stop; 0.08-0.2 mm <sup>2</sup> / 0.2 mm <sup>2</sup> "s"; white	 <b>Item No.: 231-671</b> Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; light gray	 <b>Item No.: 231-672</b> Insulation stop; 0.75 - 1 mm <sup>2</sup> ; dark gray
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1.2.3 Marking

### 1.2.3.1 Marking strip



**Item No.: 210-331/500-103**

Marking strips; as a DIN A4 sheet; MARKED; 1-12 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**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.: 210-331/500-104**

Marking strips; as a DIN A4 sheet; MARKED; 13-24 (300x); Height of marker strip: 2.3 mm/0.091 in; 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.: 734-430**

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

### 1.2.5 Test and measurement

#### 1.2.5.1 Testing accessories



**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



**Item No.: 280-440**

Operating tool; made of insulating material; 10-way



**Item No.: 209-130**

Operating tool; made of insulating material; 1-way; for 264 Series (1-1/2-way), 280, 281 Series (up to 3-way); natural



**Item No.: 280-432**

Operating tool; made of insulating material; 2-way; white



**Item No.: 280-433**

Operating tool; made of insulating material; 3-way



**Item No.: 280-434**

Operating tool; made of insulating material; 4-way



**Item No.: 280-435**

Operating tool; made of insulating material; 5-way; gray



**Item No.: 280-436**

Operating tool; made of insulating material; 6-way



**Item No.: 280-437**

Operating tool; made of insulating material; 7-way



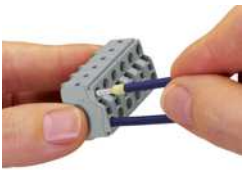
**Item No.: 280-438**

Operating tool; made of insulating material; 8-way

### Installation Notes

**Conductor termination**

Operating Push-in CAGE CLAMP® is easy, fast and identical to that of CAGE CLAMP®. The screwdriver is fully inserted into the operating slot, holding Push-in CAGE CLAMP® open. After the conductor has been inserted into the clamping unit and the screwdriver been withdrawn, the conductor is clamped safely. Solid and fine-stranded conductors  $< 0.5 \text{ mm}^2$  (20 AWG) are terminated and removed using a screwdriver.

**Conductor termination**

Solid conductors  $\geq 0.5 \text{ mm}^2$  (20 AWG), as well as ferruled, fine-stranded conductors can be terminated by simply pushing them into unit. Integrated test ports allow touch contact with current bar via test probes in both horizontal and vertical directions.