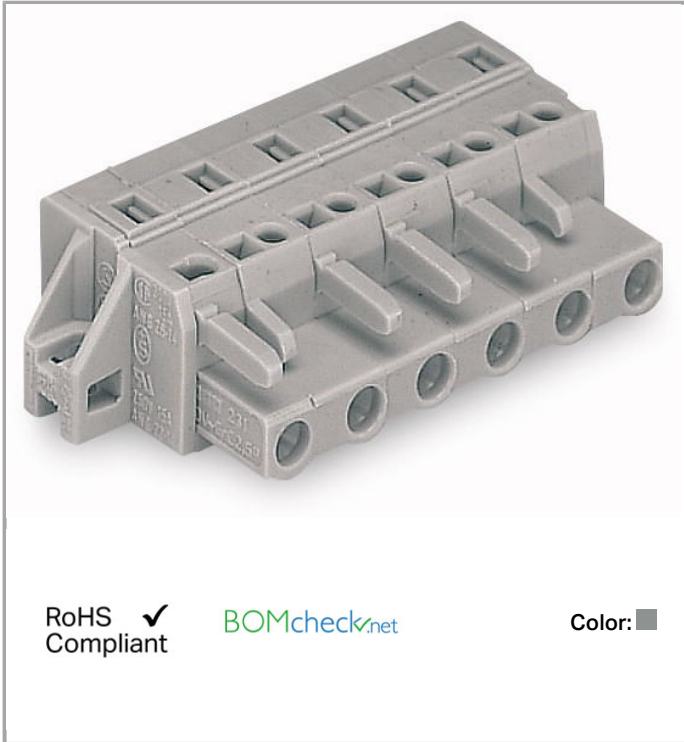


## Data sheet | Item number: 231-213/031-000

1-conductor female plug; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 13-pole



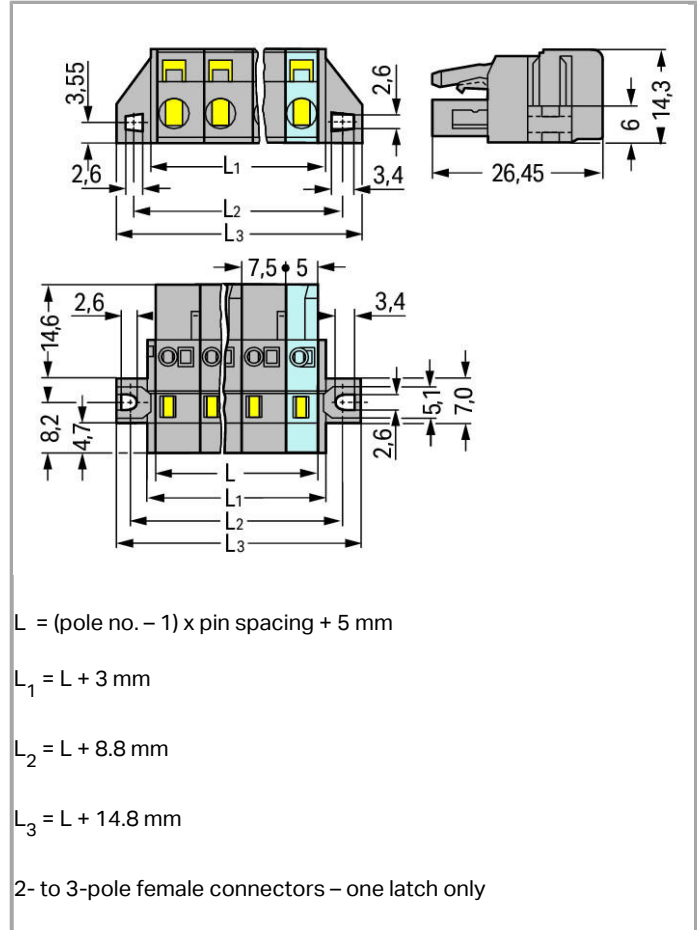
[www.wago.com/231-213/031-000](http://www.wago.com/231-213/031-000)



RoHS  Compliant

BOMcheck.net

Color: ■



### Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP<sup>®</sup> actuation
- Integrated test ports
- With coding fingers

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Gold-plated or partially gold-plated contact surfaces

### Data

#### Electrical data



### Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	500 V
Rated impulse voltage (III / 3)	6 kV
Rated voltage (III / 2)	630 V
Rated impulse voltage (III / 2)	6 kV
Rated voltage (II / 2)	1000 V
Rated impulse voltage (II / 2)	6 kV
Rated current	16 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### Approvals per UL 1059

Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

### Approvals per CSA

Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	15 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

### Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor with ferrule with plastic collar	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 2.5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 Inch
No. of poles	13
Total number of connection points	13
Total number of potentials	13
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°

## Geometrical Data

Pin spacing	7.5 mm (0.295 inch)
Width	104.8 mm / 4.126 inch
Height	14.3 mm / 0.563 inch
Depth	26.45 mm / 1.041 inch

## Mechanical data

Mounting type	Mounting flange
Type of mounting	Feed-through mounting Panel mounting

## Plug connection

Contact type (pluggable connector)	Female connector/socket
Connector connection type	for conductors
Mismatching protection	No

## Material Data

Color	gray
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.47 MJ
Weight	27.801 g

## Environmental Requirements


Limit temperature range	-60 ... +85 °C
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## Commercial data



Country of origin	DE
GTIN	4044918367578
Customs Tariff No.	85366990990
Product Group	3 (Multi Conn. System)

## Approvals / Certificates



### Country specific Approvals

Logo	Approval	Certificate name
	<b>CB</b> DEKRA Certification B.V.	NL-39756
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	2190761.01

## Ship Approvals


Logo	Approval	Certificate name
	<b>ABS</b> American Bureau of Shipping	14-HG1241537-PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	TAE000016Z

## UL-Approvals



Logo	Approval	Certificate name
	<b>UR</b> Underwriters Laboratories Inc.	E45171
	<b>UR</b> Underwriters Laboratories Inc.	E45172

## Compatible products

## Insulation stop

	<b>Item no.: 231-673</b> Insulation stop; 0.08-0.2 mm <sup>2</sup> / 0.2 mm <sup>2</sup> "s"	<a href="http://www.wago.com/231-673">www.wago.com/231-673</a>
	<b>Item no.: 231-674</b> Insulation stop; 0.25 - 0.5 mm <sup>2</sup>	<a href="http://www.wago.com/231-674">www.wago.com/231-674</a>
	<b>Item no.: 231-675</b> Insulation stop; 0.75 - 1 mm <sup>2</sup>	<a href="http://www.wago.com/231-675">www.wago.com/231-675</a>

## check

	<b>Item no.: 210-136</b> Test plug; 2 mm Ø; with 500 mm cable	<a href="http://www.wago.com/210-136">www.wago.com/210-136</a>
	<b>Item no.: 210-137</b> Test plug; 2.3 mm Ø; with 500 mm cable	<a href="http://www.wago.com/210-137">www.wago.com/210-137</a>



**Item no.: 231-662**  
Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing

[www.wago.com/231-662](http://www.wago.com/231-662)

#### General accessories



**Item no.: 231-668**  
Lockout caps; for covering unused clamping units

[www.wago.com/231-668](http://www.wago.com/231-668)

#### assembling



**Item no.: 209-147**  
Self-tapping screw

[www.wago.com/209-147](http://www.wago.com/209-147)



**Item no.: 231-194**  
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

[www.wago.com/231-194](http://www.wago.com/231-194)



**Item no.: 231-195**  
Screw with nut; M2x12; for fixing element

[www.wago.com/231-195](http://www.wago.com/231-195)

#### tools



**Item no.: 210-657**  
Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short

[www.wago.com/210-657](http://www.wago.com/210-657)



**Item no.: 210-720**  
Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

[www.wago.com/210-720](http://www.wago.com/210-720)



**Item no.: 231-131**  
Push-button; for female and male connectors; loose

[www.wago.com/231-131](http://www.wago.com/231-131)



**Item no.: 231-159**  
Operating tool; for male and female connectors with CAGE CLAMP®; of Series 231, 232, 721, 722, 723, 731, 732

[www.wago.com/231-159](http://www.wago.com/231-159)



**Item no.: 231-231**  
Combination operating tool; for male and female connectors with CAGE CLAMP®

[www.wago.com/231-231](http://www.wago.com/231-231)



**Item no.: 231-291**  
Operating tool; for male and female connectors with CAGE CLAMP®; loose

[www.wago.com/231-291](http://www.wago.com/231-291)

#### ferrule



**Item no.: 216-101**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated

[www.wago.com/216-101](http://www.wago.com/216-101)



**Item no.: 216-102**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated

[www.wago.com/216-102](http://www.wago.com/216-102)



**Item no.: 216-103**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

[www.wago.com/216-103](http://www.wago.com/216-103)



**Item no.: 216-104**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

[www.wago.com/216-104](http://www.wago.com/216-104)






















**Item no.: 216-106**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated













[www.wago.com/216-106](http://www.wago.com/216-106)



**Item no.: 216-121**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated

[www.wago.com/216-121](http://www.wago.com/216-121)

	<b>Item no.: 216-122</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-122">www.wago.com/216-122</a>
	<b>Item no.: 216-123</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-123">www.wago.com/216-123</a>
	<b>Item no.: 216-124</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-124">www.wago.com/216-124</a>
	<b>Item no.: 216-131</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-131">www.wago.com/216-131</a>
	<b>Item no.: 216-132</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-132">www.wago.com/216-132</a>
	<b>Item no.: 216-141</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-141">www.wago.com/216-141</a>
	<b>Item no.: 216-142</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-142">www.wago.com/216-142</a>
	<b>Item no.: 216-143</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-143">www.wago.com/216-143</a>
	<b>Item no.: 216-144</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-144">www.wago.com/216-144</a>
	<b>Item no.: 216-151</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-151">www.wago.com/216-151</a>
	<b>Item no.: 216-152</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-152">www.wago.com/216-152</a>
	<b>Item no.: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; insulated; electro-tin plated	<a href="http://www.wago.com/216-201">www.wago.com/216-201</a>
	<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; insulated; electro-tin plated	<a href="http://www.wago.com/216-202">www.wago.com/216-202</a>
	<b>Item no.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated	<a href="http://www.wago.com/216-203">www.wago.com/216-203</a>
	<b>Item no.: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated	<a href="http://www.wago.com/216-204">www.wago.com/216-204</a>
	<b>Item no.: 216-221</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; insulated; electro-tin plated	<a href="http://www.wago.com/216-221">www.wago.com/216-221</a>
	<b>Item no.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; insulated; electro-tin plated	<a href="http://www.wago.com/216-222">www.wago.com/216-222</a>
	<b>Item no.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated	<a href="http://www.wago.com/216-223">www.wago.com/216-223</a>
	<b>Item no.: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated	<a href="http://www.wago.com/216-224">www.wago.com/216-224</a>

	<p><b>Item no.: 216-241</b>                  Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90</p>	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
	<p><b>Item no.: 216-242</b>                  Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90</p>	<a href="http://www.wago.com/216-242">www.wago.com/216-242</a>
	<p><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</p>	<a href="http://www.wago.com/216-243">www.wago.com/216-243</a>
	<p><b>Item no.: 216-244</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</p>	<a href="http://www.wago.com/216-244">www.wago.com/216-244</a>
	<p><b>Item no.: 216-262</b>                  Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90</p>	<a href="http://www.wago.com/216-262">www.wago.com/216-262</a>
	<p><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</p>	<a href="http://www.wago.com/216-263">www.wago.com/216-263</a>
	<p><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</p>	<a href="http://www.wago.com/216-264">www.wago.com/216-264</a>
	<p><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</p>	<a href="http://www.wago.com/216-284">www.wago.com/216-284</a>
	<p><b>Item no.: 216-301</b>                  Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated</p>	<a href="http://www.wago.com/216-301">www.wago.com/216-301</a>
	<p><b>Item no.: 216-302</b>                  Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated</p>	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>
	<p><b>Item no.: 216-321</b>                  Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated</p>	<a href="http://www.wago.com/216-321">www.wago.com/216-321</a>
	<p><b>Item no.: 216-322</b>                  Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated</p>	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>

Downloads

smartDATA

CAD data

3D Download 231-213/031-000	<a href="#">URL</a>	<a href="#">Download</a>
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Subject to changes.

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