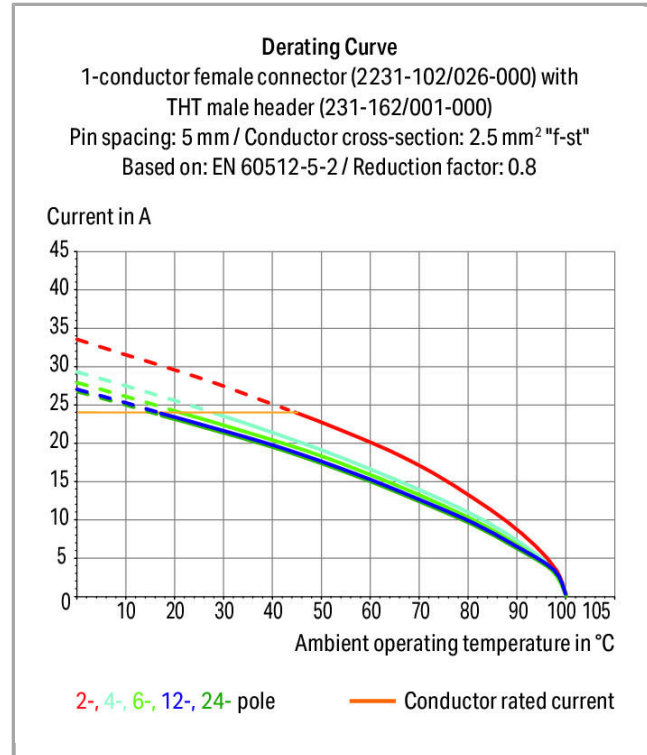
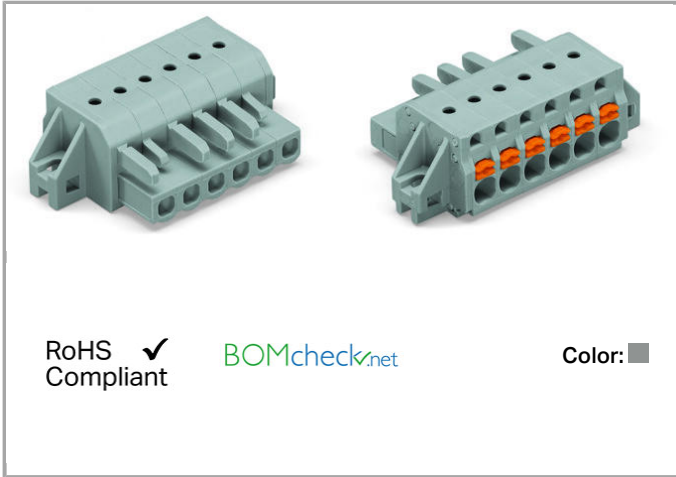


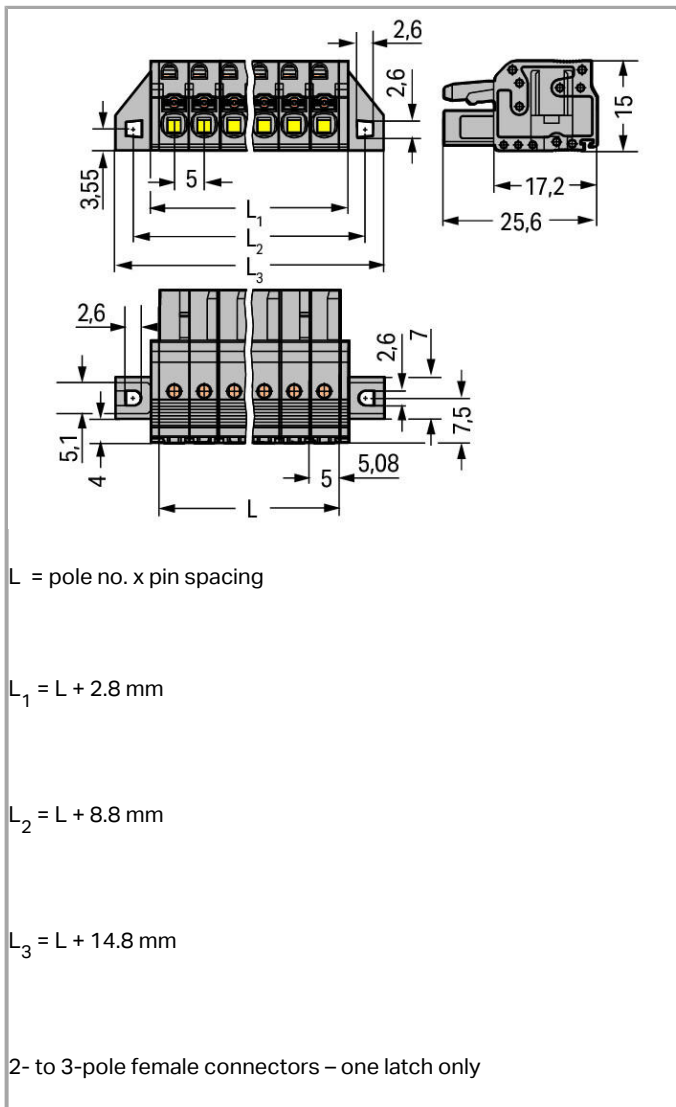
Data sheet | Item number: 2231-102/031-000

1-conductor female plug; push-button; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 2-pole; 2,50 mm<sup>2</sup>; gray



2231-102\_031-000





### Item description

- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire while mated
- Push-in termination of solid and ferruled conductors
- Integrated test ports for testing parallel to the conductor entry
- With coding fingers

### Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	320 V
Rated impulse voltage (III / 3)	4 kV
Rated voltage (III / 2)	320 V
Rated impulse voltage (III / 2)	4 kV
Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	16 A

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 C)	150 V
Rated current UL (Use Group C)	15 A
Rated voltage UL (Use Group D)	300 V

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	15 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 C)	150 V
Rated current CSA (Use Group C)	15 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
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 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	10 11 mm / 0.39 0.43 inch



Total number of connection points	2
Total number of potentials	2
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°
No. of poles	2

### Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	24.8 mm / 0.976 inch
Height	15 mm / 0.591 inch
Depth	25.6 mm / 1.008 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
Mismating 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	0.093 MJ
Weight	4.049 g

### Environmental Requirements

Limit temperature range	-60 +100 °C
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### Commercial data

Product Group	3 (Multi Conn. System)
Country of origin	PL



GTIN	4045454875398
Customs Tariff No.	85366990990

## Approvals / Certificates



### Radio-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-39756
	<b>CSA</b> DEKRA Certification B.V.	C22.2 No. 158	2314554
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	2190761.01

### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-39756
	<b>CSA</b> DEKRA Certification B.V.	C22.2 No. 158	2314554
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	2190761.01

### Other Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc.	UL 1059	E45172
	<b>UR</b> UL International Germany GmbH	UL 1977	E45171

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
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UL  
Underwriters Laboratories Inc.

UL 1059

E45172-  
19911118



UR  
UL International Germany GmbH

UL 1977

E45171

## Compatible products

### Strain relief plate



Item no.: 734-327  
Strain relief plate; gray

734-327

### assembling



Item no.: 209-147  
Self-tapping screw

209-147



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

231-194



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

231-195



Item no.: 231-295  
Screw with nut

231-295

### check



Item no.: 210-136  
Test plug; 2 mm Ø; with 500 mm cable; red

210-136



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

231-661

### tools



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

210-657



Item no.: 210-720  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft
















210-720




















### Marking accessories






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

210-332

210-332

	<b>Item no.: 210-332/500-204</b> 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	1500-204	210-332
	<b>Item no.: 210-332/500-205</b> 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	1500-205	210-332
	<b>Item no.: 210-332/500-206</b> 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	1500-206	210-332
	<b>Item no.: 210-833</b> Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white		210-833
	<b>Item no.: 210-834</b> Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white		210-834
<b>ferrule</b>			
	<b>Item no.: 216-101</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated		216-101
	<b>Item no.: 216-102</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated		216-102
	<b>Item no.: 216-103</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated		216-103
	<b>Item no.: 216-104</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated		216-104
	<b>Item no.: 216-106</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated		216-106
	<b>Item no.: 216-121</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated		216-121
	<b>Item no.: 216-122</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated		216-122
	<b>Item no.: 216-123</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated		216-123
	<b>Item no.: 216-124</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated		216-124
	<b>Item no.: 216-131</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated		216-131
	<b>Item no.: 216-132</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated		216-132
	<b>Item no.: 216-141</b> 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		216-141
	<b>Item no.: 216-142</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92		216-142
	<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	216-143
	<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	216-144
	<b>Item no.: 216-151</b>	
	Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	216-151
	<b>Item no.: 216-152</b>	
	Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	216-152
	<b>Item no.: 216-201</b>	
	Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	216-201
	<b>Item no.: 216-202</b>	
	Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	216-202
	<b>Item no.: 216-203</b>	
	Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	216-203
	<b>Item no.: 216-204</b>	
	Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	216-204
	<b>Item no.: 216-221</b>	
	Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	216-221
	<b>Item no.: 216-222</b>	
	Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	216-222
	<b>Item no.: 216-223</b>	
	Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	216-223
	<b>Item no.: 216-224</b>	
	Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	216-224
	<b>Item no.: 216-241</b>	
	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	216-241
	<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	216-242
	<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	216-243
	<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; black	216-244
	<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	216-262
	<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	216-263
	<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	216-264

	<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	216-284
	<b>Item no.: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	216-301
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	216-302
	<b>Item no.: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	216-321
	<b>Item no.: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	216-322
<b>Insulation stop</b>		
	<b>Item no.: 231-671</b> Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; light gray	231-671
	<b>Item no.: 231-672</b> Insulation stop; 0.75 - 1 mm <sup>2</sup> ; dark gray	231-672

**Downloads**

**Documentation**

**Additional Information**

Technical explanations	Apr 3, 2019	pdf 3.6 MB	Download
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**CAD/CAE - Smart Data**

**CAD data**

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Subject to changes.