

Data sheet | Item number: 721-602/019-042

1-conductor male connector; 100% protected against mismatching; Preceding ground contact; clamping collar; direct marking; 2.5 mm²; Pin spacing 5 mm; 2-pole; 2,50 mm²; light gray

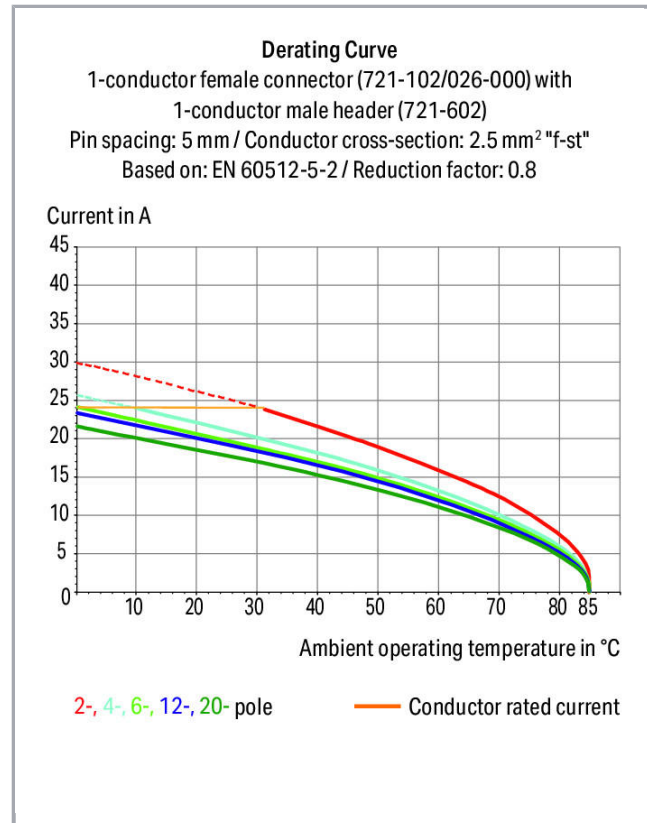
www.wago.com/721-602/019-042



RoHS Compliant

BOMcheck.net

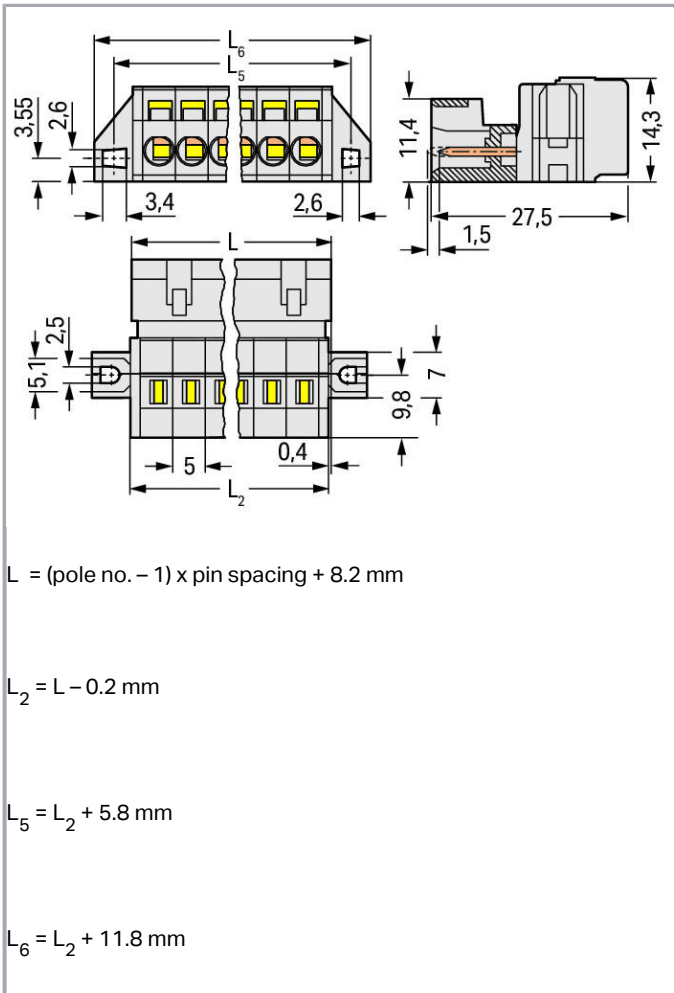
Color: ■



Subject to changes. Please also observe the further product documentation!

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Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- 3- to 5-pole male connectors are also available with preceding ground contact
- 100 % protected against mismatching
- With coding fingers

Safety information 1:

Subject to changes. Please also observe the further product documentation!



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

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	12 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	UL 1059

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

Subject to changes. Please also observe the further product documentation!



Connection data

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

Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	24.8 mm / 0.976 inch
Height	14.3 mm / 0.563 inch
Depth	27.5 mm / 1.083 inch

Mechanical data

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

Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for conductors
Mismating protection	Yes

Material Data

Color	light gray
Material group	I

Subject to changes. Please also observe the further product documentation!



Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.09 MJ
Weight	4.3 g

Environmental Requirements


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


Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4044918284882
Customs Tariff No.	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2	1466354

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	20190731- E45172

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Counterpart



Item no. 721-102/026-000

1-conductor female plug; 100% protected against mismatching; 2.5 mm²; Pin spacing 5 mm; 2-pole; 2,50 mm²; light gray

www.wago.com/721-102/026-000



Item no. 722-132

THT female header; 0.6 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 5 mm; 2-pole; light gray

www.wago.com/722-132



Item no. 722-232

THT female header; 0.6 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 5 mm; 2-pole; light gray

www.wago.com/722-232

Compatible products

Jumper

Item no.: 231-902

Comb-style jumper bar; for 5 mm and 5.08 mm pin spacing; reduces conductor size to 1.5 mm; gray

www.wago.com/231-902



Item no.: 231-903

Comb-style jumper bar; 3-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray

www.wago.com/231-903



Item no.: 231-905

Comb-style jumper bar; 5-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray

www.wago.com/231-905



Item no.: 231-907

Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray

www.wago.com/231-907



Item no.: 231-910

Comb-style jumper bar; 10-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray

www.wago.com/231-910

Strain relief plate



Item no.: 232-602

Strain relief housing; gray

www.wago.com/232-602

General accessories

Subject to changes. Please also observe the further product documentation!

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	<p>Item no.: 231-668 Lockout caps; for covering unused clamping units; gray</p>	www.wago.com/231-668
Marking accessories		
	<p>Item no.: 210-833 Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white</p>	www.wago.com/210-833
	<p>Item no.: 210-834 Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white</p>	www.wago.com/210-834
tools		
	<p>Item no.: 209-130 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material</p>	www.wago.com/209-130
	<p>Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short</p>	www.wago.com/210-657
	<p>Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft</p>	www.wago.com/210-720
	<p>Item no.: 231-131 Push-button; loose</p>	www.wago.com/231-131
	<p>Item no.: 231-159 Operating tool; natural</p>	www.wago.com/231-159
	<p>Item no.: 231-231 Combination operating tool; red</p>	www.wago.com/231-231
	<p>Item no.: 231-291 Operating tool; loose; red</p>	www.wago.com/231-291
	<p>Item no.: 280-432 Operating tool; made of insulating material; 2-way</p>	www.wago.com/280-432
	<p>Item no.: 280-433 Operating tool; made of insulating material; 3-way</p>	www.wago.com/280-433
	<p>Item no.: 280-434 Operating tool; made of insulating material; 4-way</p>	www.wago.com/280-434
	<p>Item no.: 280-435 Operating tool; made of insulating material; 5-way; gray</p>	www.wago.com/280-435
	<p>Item no.: 280-436 Operating tool; made of insulating material; 6-way</p>	www.wago.com/280-436
	<p>Item no.: 280-437 Operating tool; made of insulating material; 7-way</p>	www.wago.com/280-437
	<p>Item no.: 280-438 Operating tool; made of insulating material; 8-way</p>	www.wago.com/280-438

Subject to changes. Please also observe the further product documentation!



Item no.: 280-440
Operating tool; made of insulating material; 10-way

www.wago.com/280-440

Coding



Item no.: 231-129
Coding key; snap-on type; light gray

www.wago.com/231-129

assembling

Item no.: 209-147
Self-tapping screw

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

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

www.wago.com/231-195

Item no.: 231-295
Screw with nut

www.wago.com/231-295

Insulation stop

Item no.: 231-670
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white

www.wago.com/231-670



Item no.: 231-671
Insulation stop; 0.25 - 0.5 mm²; light gray

www.wago.com/231-671

Item no.: 231-672
Insulation stop; 0.75 - 1 mm²; dark gray

www.wago.com/231-672

ferrule

Item no.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated

www.wago.com/216-101



Item no.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated

www.wago.com/216-102

Item no.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

www.wago.com/216-103



Item no.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

www.wago.com/216-104

Item no.: 216-106
Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated

www.wago.com/216-106



Item no.: 216-121
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated



www.wago.com/216-121



Item no.: 216-122
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated

www.wago.com/216-122

Subject to changes. Please also observe the further product documentation!

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

Subject to changes. Please also observe the further product documentation!

**Item no.: 216-241**

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

www.wago.com/216-241

**Item no.: 216-242**

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

www.wago.com/216-242

**Item no.: 216-243**

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

www.wago.com/216-243

**Item no.: 216-244**

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

www.wago.com/216-244

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

www.wago.com/216-262

**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

www.wago.com/216-263

**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

www.wago.com/216-264

**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

www.wago.com/216-284

Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-301

**Item no.: 216-302**

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

www.wago.com/216-302

Item no.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-321

Item no.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

www.wago.com/216-322

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

pdf
3.6 MB

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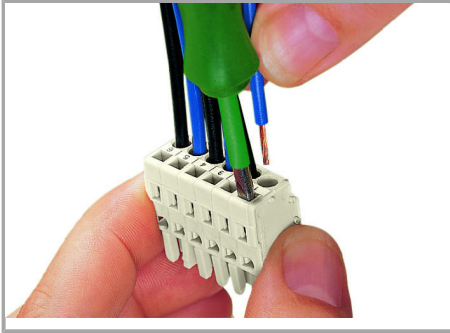
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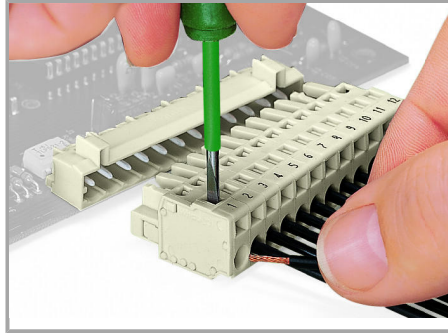
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Installation Notes

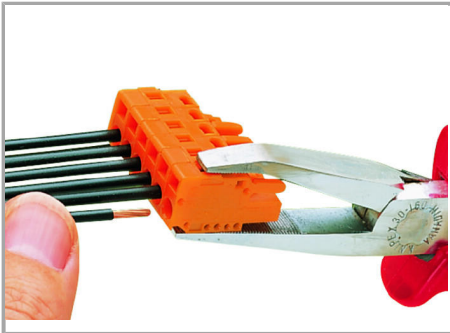
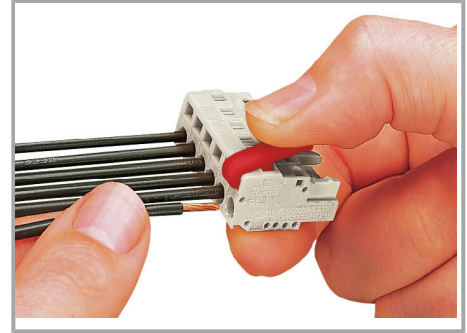
Inserting a conductor



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



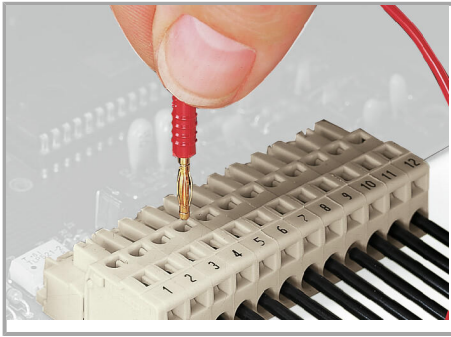
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor via operating tool.

Testing

Subject to changes. Please also observe the further product documentation!

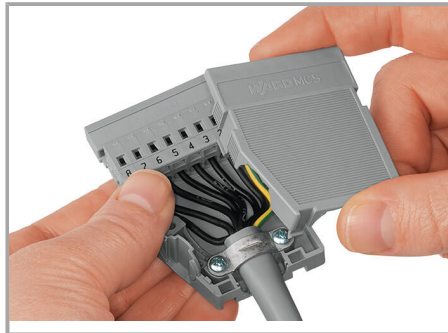


Testing perpendicular to conductor entry with 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP® – via integrated test ports

Assembly

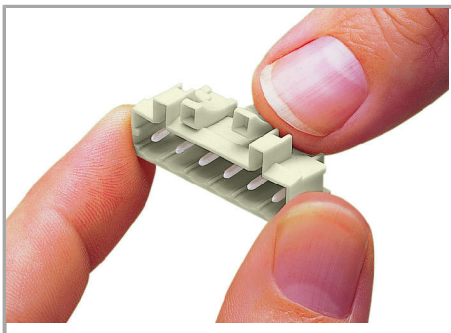


Male connector with strain relief plate



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

Coding



Coding a male header – fitting coding key(s).

Product family

Subject to changes. Please also observe the further product documentation!



MCS MIDI

[Learn more about the product family.](#)

[Show all products from the family](#)

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