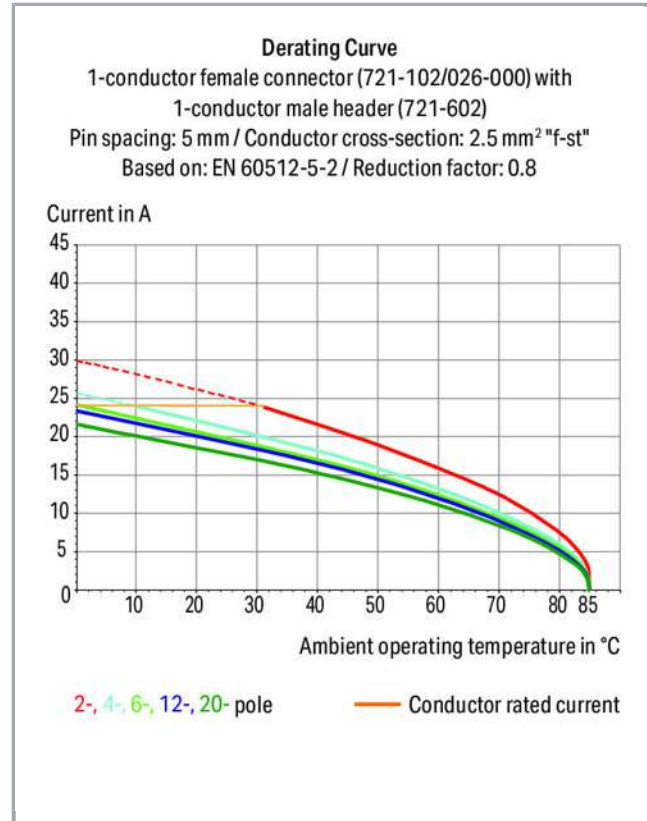


Data sheet | Item number: 721-602/019-042

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

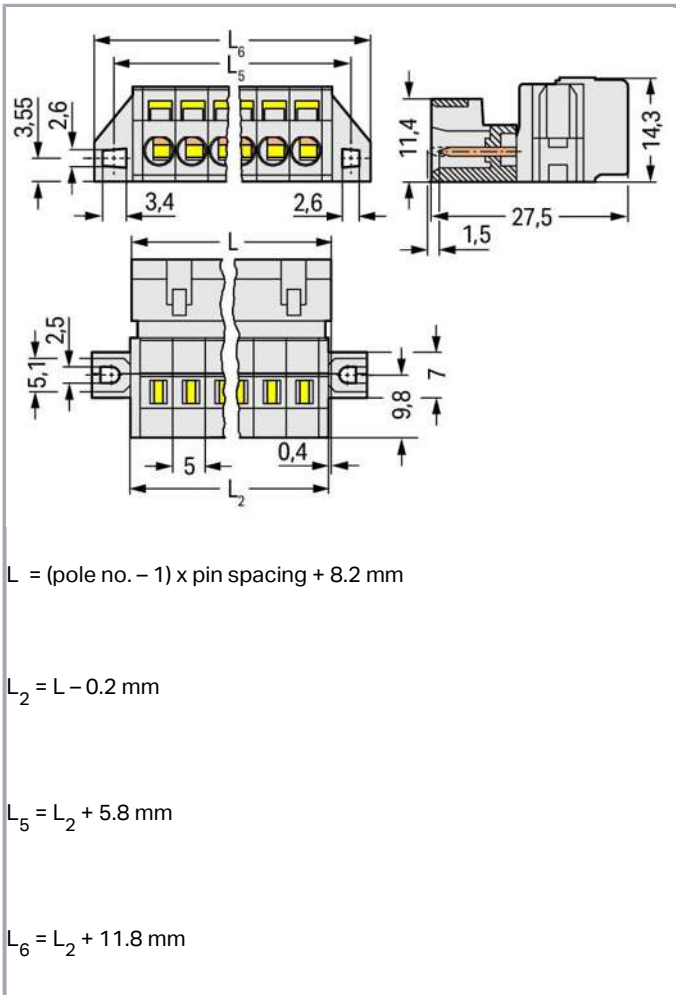
www.wago.com/721-602_019-042



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

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Do you have any questions about our products?
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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 |
|-------------------------|-----------------|

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 |

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

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

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

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

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

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 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


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


 **Item no.: 216-123**
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated www.wago.com/216-123


 **Item no.: 216-124**
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated www.wago.com/216-124


 **Item no.: 216-131**
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated www.wago.com/216-131

 **Item no.: 216-132**
Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated www.wago.com/216-132


















 **Item no.: 216-141**
Ferrule; Sleeve for 0.5 mm² / 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 mm² / 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 mm² / 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 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 www.wago.com/216-144













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

| | | |
|--|--|--|
|  | 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 |
|  | Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 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 mm ² / 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 mm ² / 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 mm ² / 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 mm ² / 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 mm ² / 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 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-264 |

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

| | | |
|--|--|--|
|  | <p>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</p> | www.wago.com/216-284 |
| | <p>Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p> | www.wago.com/216-301 |
|  | <p>Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green</p> | www.wago.com/216-302 |
| | <p>Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p> | www.wago.com/216-321 |
|  | <p>Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green</p> | www.wago.com/216-322 |
| 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 |

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

| | | |
|--|---|--|
|  | Item no.: 280-437 Operating tool; made of insulating material; 7-way | www.wago.com/280-437 |
|  | Item no.: 280-438 Operating tool; made of insulating material; 8-way | www.wago.com/280-438 |
|  | 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 |
| Strain relief plate | | |
|  | Item no.: 232-602 Strain relief housing; gray | www.wago.com/232-602 |
| General accessories | | |
|  | Item no.: 231-668 Lockout caps; for covering unused clamping units; gray | www.wago.com/231-668 |
| 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 |
| Marking accessories | | |
|  | Item no.: 210-833 Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white | www.wago.com/210-833 |
|  | Item no.: 210-834 Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white | www.wago.com/210-834 |

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

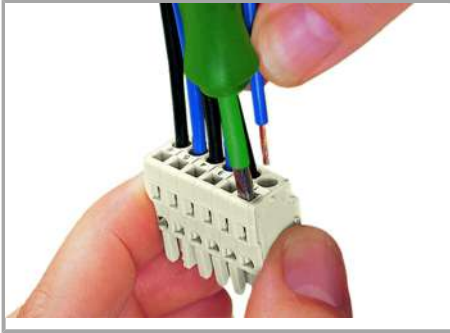
pdf
3.6 MB

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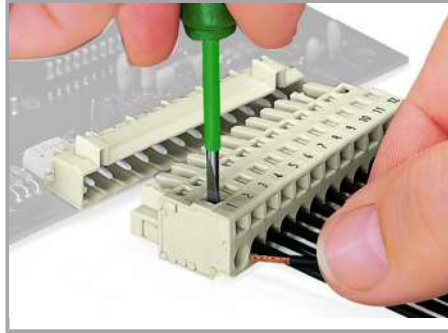
Subject to changes. Please also observe the further product documentation!

Installation Notes

Inserting a conductor



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



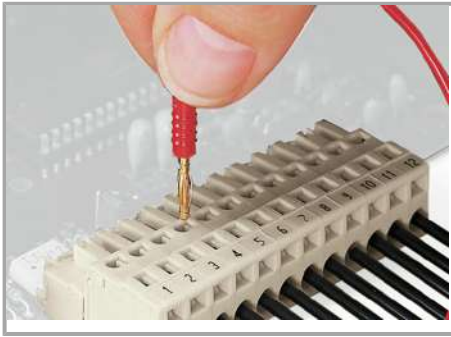
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



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

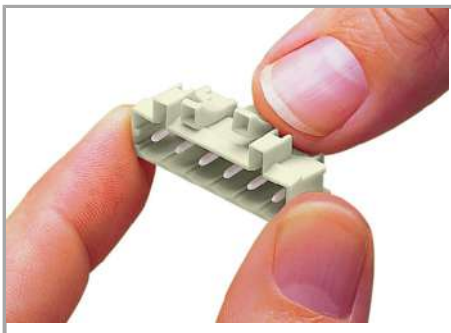


Male connector with strain relief plate



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!

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MCS MIDI

Show all products from the family

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

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