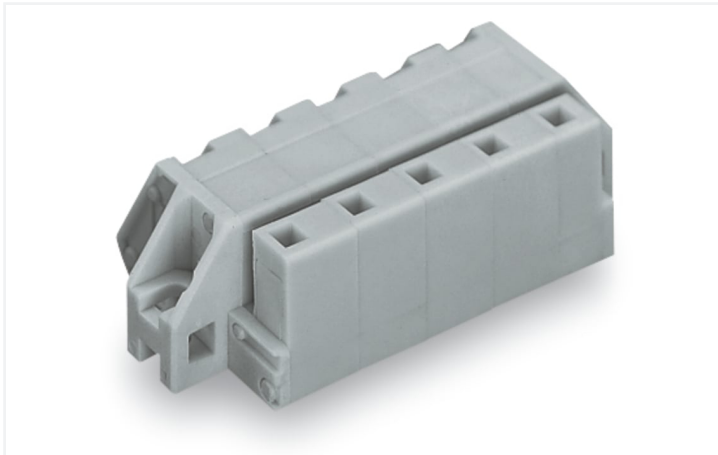


Data Sheet | Item Number: 731-533/031-000

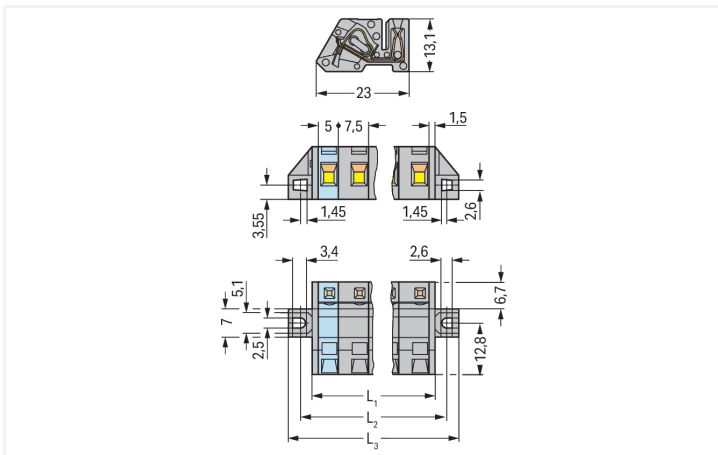
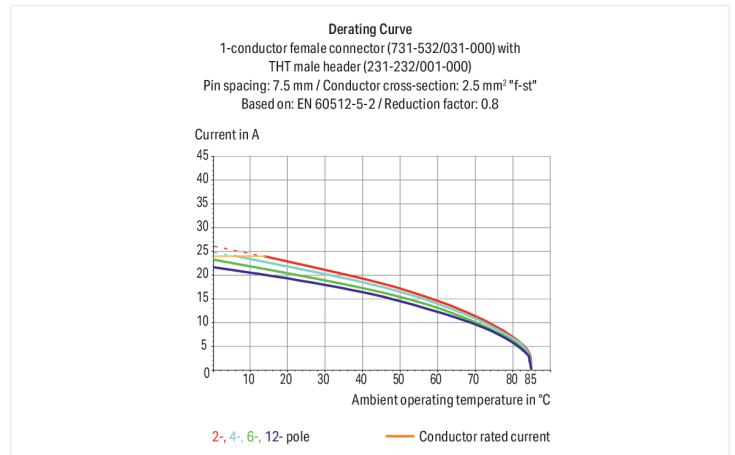
1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 3-pole; clamping collar; DIN-35 rail/panel mounting; 2,50 mm²; gray

<https://www.wago.com/731-533/031-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

$L1 = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 3 \text{ mm}$
 $L2 = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 8.8 \text{ mm}$
 $L3 = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 14.8 \text{ mm}$

Female connector, 731 Series, CAGE CLAMP®

Our female connector (item number 731-533/031-000) simplifies electrical installations. Ensure that the strip lengths are between 7 and 8 mm when connecting conductors to this female connector. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Dimensions: (34.8 x 13.1 x 23) mm (width x height x depth). Depending on the type of conductor, this female connector is designed for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

Tin is used for coating the contact surfaces.

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:

Other pole numbers
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 | | | Approvals per | UL 1059 | | |
|---------------------------------|----------------|-------|--------|---------------|---------|---|-------|
| | III | III | II | | B | C | D |
| Overvoltage category | III | III | II | Use group | B | C | D |
| Pollution degree | 3 | 2 | 2 | Rated voltage | 300 V | - | 300 V |
| Nominal voltage | 500 V | 630 V | 1000 V | Rated current | 15 A | - | 10 A |
| Rated impulse withstand voltage | 6 kV | 6 kV | 6 kV | | | | |
| Rated current | 12 A | 12 A | 12 A | | | | |

| Approvals per | UL 1977 | | Approvals per | CSA | | |
|---------------|---------------|---------------|---------------|-------|---|-------|
| | Rated voltage | Rated current | | B | C | D |
| Rated voltage | 600 V | | Use group | B | C | D |
| Rated current | 15 A | | Rated voltage | 300 V | - | 300 V |
| | | | Rated current | 15 A | - | 10 A |

Connection Data

| | | | |
|----------------------------|---|---|--|
| Clamping units | 3 | Connection 1 | |
| Total number of potentials | 3 | Connection technology | CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Operating tool |
| Number of levels | 1 | Actuation direction 1 | Operation parallel to conductor entry |
| | | 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 insulated ferrule | 0.25 ... 1.5 mm ² |
| | | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| | | Strip length | 7 ... 8 mm / 0.28 ... 0.31 inches |
| | | Pole number | 3 |
| | | Conductor entry direction to mating direction | 90 ° |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 7.5 mm / 0.295 inches |
| Width | 34.8 mm / 1.37 inches |
| Height | 13.1 mm / 0.516 inches |
| Depth | 23 mm / 0.906 inches |

Mechanical data

| | |
|--|---|
| Variable coding | No |
| Direct ground contact to DIN-rail/drilled hole/housing | No |
| Design | angled; mountable |
| Mounting type | Mounting flange |
| Mounting type | Feed-through mounting Panel mounting |
| Anti-rotation protection | Yes |

Plug-in connection

| | |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type) | for conductor |
| Mismating protection | No |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Copper alloy |
| Contact Plating | Tin |
| Fire load | 0.125 MJ |
| Weight | 5.8 g |

Environmental requirements

| | |
|-------------------------|----------------|
| Limit temperature range | -60 ... +85 °C |
| Processing temperature | -35 ... +60 °C |

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4044918575690 |
| Customs tariff number | 85366990990 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-44-03-09 |
| eCl@ss 9.0 | 27-44-03-09 |
| ETIM 9.0 | EC002638 |
| ETIM 10.0 | EC002638 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

RoHS Compliance Status Compliant, No Exemption

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---------------------------------------|-----------|------------------|
| CB DEKRA Certification B.V. | IEC 61984 | NL-113351 |
| KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-130478 REV.1 |
| UR Underwriters Laboratories Inc. | UL 1977 | E 45171 |
| UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Approvals for marine applications



| Approval | Standard | Certificate Name |
|-------------------------------|-----------|-------------------|
| BV Bureau Veritas S.A. | IEC 60998 | 11915/E0 BV |
| DNV DNV GL SE | - | TAE000016Z |
| PRS Polski Rejestr Statków | - | TE/1095/880590/23 |

Downloads

Environmental Product Compliance

| Compliance Search | |
|---|-------------------|
| Environmental Product Compliance 731-533/031-000 | ↓ |

Documentation

| Additional Information | | | |
|------------------------|------------|-------------------|-------------------|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |

CAD/CAE-Data

| CAD data | |
|---------------------------------|-------------------|
| 2D/3D Models 731-533/031-000 | ↓ |

| CAE data | |
|--------------------------------------|-------------------|
| EPLAN Data Portal 731-533/031-000 | ↓ |
| ZUKEN Portal 731-533/031-000 | ↓ |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 731-603
 1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 3-pole; 2,50 mm²; gray

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



Item No.: 216-131
 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item No.: 216-132
 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated



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



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



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



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



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



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



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



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



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



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



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



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; silver-colored



Item No.: 216-246
 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



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

1.2.2 Installation

1.2.2.1 Mounting accessories



Item No.: 231-295
 Screw with nut



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



Item No.: 209-147
 Self-tapping screw



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

1.2.3 Marking

1.2.3.1 Marking strip



Item No.: 210-331/750-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/750-020

Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); 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 housing



Item No.: 232-663

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 7.5 mm; 3-pole; gray

1.2.5 Test and measurement

1.2.5.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red



Item No.: 231-662

Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm²; light gray

1.2.6 Tool

1.2.6.1 Operating tool



Item No.: 231-231

Combination operating tool; red



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; white



Item No.: 209-130

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



Item No.: 231-291

Operating tool; made of insulating material; 1-way; loose; red



Item No.: 231-131

Operating tool; made of insulating material; 1-way; loose; white



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; white



Item No.: 280-434

Operating tool; made of insulating material; 4-way; white



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; white



Item No.: 280-437

Operating tool; made of insulating material; 7-way; white



Item No.: 280-438

Operating tool; made of insulating material; 8-way; white



Item No.: 231-159

Operating tool; natural

Installation Notes

Application



Angled female connector – used as through-panel connector; termination ports and operating slots are located outside the housing – panel thickness up to 2 mm.

Application



Angled female connector – a male header with straight solder pins is used for horizontal PCB mounting in narrow housings.