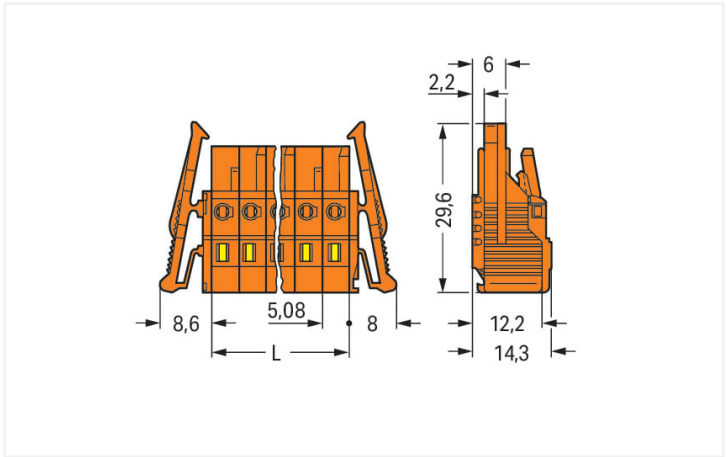




Color: ■ orange



Dimensions in mm
L = pole no. x pin spacing
2- to 3-pole female connectors – one latch only



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

| 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: | 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 | | |
|----------------------|----------------|-------|-------|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 320 V | 320 V | 630 V |
| Rated surge voltage | 4 kV | 4 kV | 4 kV |
| Rated current | 16 A | 16 A | 16 A |

| Approvals per | UL 1059 | | |
|---------------|---------|---|-------|
| Use group | B | C | D |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A | - | 10 A |

| Approvals per | UL 1977 |
|---------------|---------|
| Rated voltage | 600 V |
| Rated current | 15 A |

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

Connection data

| | |
|----------------------------|---|
| Connection points | 6 |
| Total number of potentials | 6 |
| Number of connection types | 1 |
| Number of levels | 1 |

| Connection 1 | |
|---|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Actuation direction 1 | Operation parallel to conductor entry |
| Actuation direction 2 | Operation perpendicular to conductor entry |
| Solid conductor | 0.08 ... 2.5 mm² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm² / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm² |
| Strip length | 8 ... 9 mm / 0.31 ... 0.35 inches |
| Pole number | 6 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|-------------------------|
| Pin spacing | 5.08 mm / 0.2 inches |
| Width | 47.08 mm / 1.854 inches |
| Height | 14.3 mm / 0.563 inches |
| Depth | 29.6 mm / 1.165 inches |

Mechanical data

| | |
|--------------------------|-----|
| Variable coding | Yes |
| Anti-rotation protection | Yes |

Plug-in connection

| | |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type) | for conductor |
| Mismating protection | No |
| Locking of plug-in connection | Locking lever |








| Material data | | |
|-----------------------------|-----------------------------------|--|
| Note (material data) | | Information on material specifications can be found here |
| Color | orange | |
| Material group | I | |
| Insulation material | Polyamide (PA66) | |
| Flammability class per UL94 | V0 | |
| Clamping spring material | Chrome-nickel spring steel (CrNi) | |
| Contact material | Copper alloy | |
| Contact plating | Tin | |
| Fire load | 0.202 MJ | |
| Weight | 12.5 g | |

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

| Commercial data | | |
|-----------------------|------------------------|--|
| Product Group | 3 (Multi Conn. System) | |
| eCl@ss 10.0 | 27-44-03-09 | |
| eCl@ss 9.0 | 27-44-03-09 | |
| ETIM 8.0 | EC002638 | |
| ETIM 7.0 | EC002638 | |
| PU (SPU) | 50 pcs | |
| Packaging type | Box | |
| Country of origin | DE | |
| GTIN | 4044918346948 | |
| Customs tariff number | 85366990990 | |

| Environmental Product Compliance | | |
|----------------------------------|-------------------------|--|
| RoHS Compliance Status | Compliant, No Exemption | |

Approvals / Certificates

| General approvals | | | Declarations of conformity and manufacturer's declarations | | |
|--|---------------------|------------------|---|----------|------------------|
|     | | |  | | |
| Approval | Standard | Certificate Name | Approval | Standard | Certificate Name |
| CB DEKRA Certification B.V. | EN 61984, IEC 61984 | NL-39756/A1 | Railway WAGO GmbH & Co. KG | - | Railway Ready |
| CSA DEKRA Certification B.V. | C22.2 | 1466354 | | | |
| KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-121453 | | | |
| UL UL International Germany GmbH | UL 1977 | E45171 | | | |
| UR Underwriters Laboratories Inc. | UL 1059 | E45172 | | | |



Approvals for marine applications



| Approval | Standard | Certificate Name |
|---|----------|------------------|
| ABS American Bureau of Ship- ping | - | 19-HG1869876-PDA |

Downloads

Environmental Product Compliance

| Compliance Search |
|--|
| Environmental Product Compliance 231-306/037-000 |



Documentation

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



CAD/CAE-Data

| CAD data |
|---------------------------------|
| 2D/3D Models 231-306/037-000 |



| CAE data |
|--------------------------------------|
| EPLAN Data Portal 231-306/037-000 |
| ZUKEN Portal 231-306/037-000 |



1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug




































Item No.: 231-636
1-conductor male connector; CAGE
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;
6-pole; 2,50 mm²; orange

Item No.: 231-536/001-000
THT male header; 1.0 x 1.0 mm solder pin;
angled; Pin spacing 5.08 mm; 6-pole;
orange

Item No.: 231-336/001-000
THT male header; 1.0 x 1.0 mm solder pin;
straight; Pin spacing 5.08 mm; 6-pole;
orange



| 1.2 Optional Accessories | | | |
|--|--|--|--|
| 1.2.1 Cover | | | |
| 1.2.1.1 Cover | | | |
|  | | | |
| <p>Item No.: 231-669 Lockout caps; for covering unused clamping units; orange</p> | | | |
| 1.2.2 Ferrule | | | |
| 1.2.2.1 Ferrule | | | |
|  |  |  |  |
| <p>Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p> | <p>Item No.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p> | <p>Item No.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated</p> | <p>Item No.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored</p> |
|  |  |  |  |
| <p>Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</p> | <p>Item No.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</p> | <p>Item No.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated</p> | <p>Item No.: 216-152 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated</p> |
|  |  |  |  |
| <p>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</p> | <p>Item No.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</p> | <p>Item No.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</p> | <p>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</p> |
|  |  |  |  |
| <p>Item No.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored</p> | <p>Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored</p> | <p>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</p> | <p>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</p> |
|  |  |  |  |
| <p>Item No.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray</p> | <p>Item No.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray</p> | <p>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</p> | <p>Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored</p> |
|  |  |  |  |
| <p>Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored</p> | <p>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</p> | <p>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</p> | <p>Item No.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red</p> |
|  |  |  |  |
| <p>Item No.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red</p> | <p>Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated</p> | <p>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</p> | <p>Item No.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored</p> |
|  |  |  |  |
| <p>Item No.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black</p> | <p>Item No.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black</p> | <p>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</p> | <p>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</p> |



1.2.2.1 Ferrule



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.: 216-124
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated



Item No.: 216-144
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored



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

1.2.3 Insulation stop

1.2.3.1 Insulation stop



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



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



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

1.2.4 Jumper

1.2.4.1 Jumper



Item No.: 231-902
Jumper; for conductor entry; 2-way; insulated; gray



Item No.: 231-903
Jumper; for conductor entry; 3-way; insulated; gray



Item No.: 231-905
Jumper; for conductor entry; 5-way; insulated; gray

1.2.5 Marking

1.2.5.1 Marking strip



Item No.: 210-331/508-103
Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-202
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



Item No.: 210-332/508-205
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



Item No.: 210-331/508-104
Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-204
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



Item No.: 210-332/508-206
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

1.2.6 Strain relief

1.2.6.1 Strain relief housing



Item No.: 232-636
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5.08 mm; 6-pole; orange

1.2.7 Test and measurement

1.2.7.1 Testing accessories



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



Item No.: 231-661
Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

1.2.8 Tool

1.2.8.1 Operating tool



Item No.: 231-231
Combination operating tool; red



Item No.: 209-132
Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



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



Item No.: 280-434
Operating tool; made of insulating material; 4-way



Item No.: 280-435
Operating tool; made of insulating material; 5-way; gray



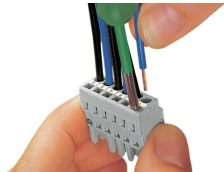
Item No.: 280-436
Operating tool; made of insulating material; 6-way



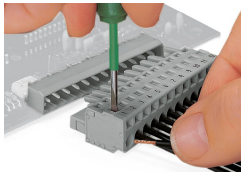
Item No.: 231-159
Operating tool; natural

Installation Notes

Conductor termination



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 into CAGE CLAMP® unit via operating tool (231-291).



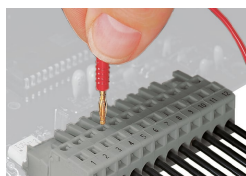
Inserting a conductor via operating tool.

Coding



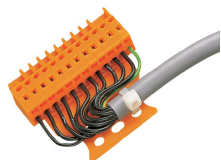
Coding a female connector by removing coding finger(s).

Testing



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

Installation

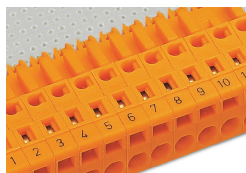


Male connector with strain relief plate



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

Marking



Labeling via direct marking or self-adhesive strips.