

# Data Sheet | Item Number: 2006-511

Modular TOPJOB®S connector; modular; for jumper contact slot; 1-pole; gray

<https://www.wago.com/2006-511>



Color: ■ gray

## Notes

### Safety Information

According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.

## Electrical data

### Ratings per IEC/EN

|   |  |
|---|--|
| Nominal voltage (III/3)                   | 500 V  |
| Rated impulse withstand voltage (III / 3) | 6 kV   |
| Rated current                             | 32 A   |
| Legend (ratings)                          | (III / 3) $\Delta$ Overvoltage category III / Pollution degree 3 |

## Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 1 |
| Total number of potentials | 1 |

### Connection 1

|  |   |
|--|---|
| Connection technology                                      | Push-in CAGE CLAMP®   |
| Actuation type   | Operating tool  |
| Connectable conductor materials                            | Copper  |
| Nominal cross-section                                      | 4 mm <sup>2</sup>   |
| Solid conductor  | 0.5 ... 6 mm <sup>2</sup> / 20 ... 10 AWG   |
| Solid conductor; push-in termination                       | 2.5 ... 6 mm <sup>2</sup> / 14 ... 10 AWG   |
| Fine-stranded conductor                                    | 0.5 ... 6 mm <sup>2</sup> / 20 ... 10 AWG   |
| Fine-stranded conductor; with insulated ferrule            | 0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG   |
| Fine-stranded conductor; with ferrule; push-in termination | 1.5 ... 4 mm <sup>2</sup> / 18 ... 12 AWG   |
| Note (conductor cross-section)                             | Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination. |
| Strip length   | 11 ... 13 mm / 0.43 ... 0.51 inches   |
| Pole number  | 1   |
| Wiring direction   | Side-entry wiring   |

## Physical data

|              |                       |
|--------------|-----------------------|
| Width        | 7.5 mm / 0.295 inches |
| Module width | 7.5 mm / 0.295 inches |

## Mechanical data

|               |                     |
|---------------|---------------------|
| Marking level | Center/side marking |
|---------------|---------------------|

## Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray   |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Fire load                          | 0.079 MJ   |
| Weight                             | 4.3 g  |

## Environmental requirements

### Environmental Testing (Environmental Conditions)

|  |   |
|--|---|
| Test specification<br>Railway applications –<br>Rolling stock –<br>Electronic equipment            | DIN EN 50155 (VDE 0115-200):2022-06   |
| Test procedure<br>Railway applications –<br>Rolling stock equipment –<br>Shock and vibration tests | DIN EN 61373 (VDE 0115-0106):2011-04  |
| Spectrum/Installation location   | Service life test, Category 1, Class A/B  |
| Function test with noise-like vibration  | Test passed according to Section 8 of the standard  |
| Frequency  | $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$<br>$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$  |
| Acceleration   | 0.101g (highest test level used for all axes)<br>0.572g (highest test level used for all axes)<br>5g (highest test level used for all axes) |
| Test duration per axis   | 10 min.<br>5 h  |
| Test directions  | X, Y and Z axes<br>X, Y and Z axes<br>X, Y and Z axes   |
| Monitoring for contact faults/interruptions  | Passed  |
| Voltage drop measurement before and after each axis  | Passed  |
| Simulated service life test through increased levels of noise-like vibration                       | Test passed according to Section 9 of the standard  |
| Extended test scope: Monitoring for contact faults/interruptions                                   | Passed<br>Passed  |
| Extended test scope: Voltage drop measurement before and after each axis                           | Passed<br>Passed  |
| Shock test   | Test passed according to Section 10 of the standard   |
| Shock form   | Half sine   |
| Shock duration   | 30 ms   |
| Number of shocks per axis  | 3 pos. und 3 neg.   |
| Vibration and shock stress for rolling stock equipment   | Passed  |

**Commercial data**

|                       |               |
|-----------------------|---------------|
| Product Group         | 22 (TOPJOB S) |
| PU (SPU)              | 50 (25) pcs   |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4050821263715 |
| Customs tariff number | 85366990990   |

**Product classification**

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-14-11-51          |
| eCl@ss 9.0  | 27-14-11-51          |
| ETIM 9.0    | EC002021             |
| ETIM 8.0    | EC002021             |
| ECCN        | NO US CLASSIFICATION |

**Environmental Product Compliance**

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

**Approvals / Certificates**

**Declarations of conformity and manufacturer's declarations**



| Approval                      | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway<br>WAGO GmbH & Co. KG | -        | Railway Ready    |

**Downloads**

**Environmental Product Compliance**

|   |                   |
|---|-------------------|
| Compliance Search                         |                   |
| Environmental Product Compliance 2006-511 | <a href="#">↓</a> |

**Documentation**

| Bid Text |            |                  |                   |
|----------|------------|------------------|-------------------|
| 2006-511 | 19.02.2019 | xml<br>3.47 KB   | <a href="#">↓</a> |
| 2006-511 | 07.08.2018 | docx<br>15.03 KB | <a href="#">↓</a> |

## CAD/CAE-Data

| CAD data                              | CAE data                                   |
|---------------------------------------|--|
| <a href="#">2D/3D Models 2006-511</a> | <a href="#">EPLAN Data Portal 2006-511</a> |
|                                       | <a href="#">WSCAD Universe 2006-511</a>    |
|                                       | <a href="#">ZUKEN Portal 2006-511</a>      |

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 End plate

##### 1.1.1.1 Testing accessories



**Item No.: 2004-541**  
End plate; for modular TOPJOB®S connector; 1.5 mm thick; gray

#### 1.1.2 Ferrule

##### 1.1.2.1 Ferrule



**Item No.: 216-264**  
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



**Item No.: 216-284**  
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



**Item No.: 216-266**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-286**  
Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-267**  
Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-287**  
Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

#### 1.1.3 Marking

##### 1.1.3.1 Marker



**Item No.: 2009-145/000-006**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-145/000-007**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-145/000-023**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-145/000-012**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-145/000-005**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 2009-145/000-024**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-145**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-145/000-002**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.3.1 Marker



**Item No.: 793-5501/000-006**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 793-5501/000-014**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown



**Item No.: 793-5501/000-007**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 793-5501/000-023**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 793-5501/000-017**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 793-5501/000-012**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 793-5501/000-005**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 793-5501/000-024**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 793-5501**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 793-5501/000-002**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



**Item No.: 793-501/000-006**  
WMB marking card; as card; not stretchable; plain; snap-on type; blue



**Item No.: 793-501/000-007**  
WMB marking card; as card; not stretchable; plain; snap-on type; gray



**Item No.: 793-501/000-023**  
WMB marking card; as card; not stretchable; plain; snap-on type; green



**Item No.: 793-501/000-017**  
WMB marking card; as card; not stretchable; plain; snap-on type; light green



**Item No.: 793-501/000-012**  
WMB marking card; as card; not stretchable; plain; snap-on type; orange



**Item No.: 793-501/000-005**  
WMB marking card; as card; not stretchable; plain; snap-on type; red



**Item No.: 793-501/000-024**  
WMB marking card; as card; not stretchable; plain; snap-on type; violet



**Item No.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 793-501/000-002**  
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 2009-115/000-006**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-115/000-007**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-115/000-023**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-115/000-017**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 2009-115/000-012**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-115/000-024**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-115**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.3.2 Marking strip



**Item No.: 2009-110**  
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.4 Strain relief

1.1.4.1 Strain relief plate



**Item No.: 734-327**  
Strain relief plate; for female and male connectors; 6 mm wide; 1 part; gray

## 1.1.5 Test and measurement

### 1.1.5.1 Testing accessories



**Item No.: 2006-549**

Spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**Item No.: 210-136**

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

## 1.1.6 Tool

### 1.1.6.1 Operating tool



**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### Installation



Snapping connectors and spacers together to assemble a multipole connector.

## Conductor termination



**All conductor types at a glance**



**Conductor termination via:**

- Operating tool for fine-stranded conductors without ferrules
- Push-in connection of solid conductors



The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.

## Strain relief



Snapping on a strain relief plate.

## Testing



TOPJOB® S Connectors with a 2 mm Ø test socket for testing voltage via 2-pole voltage tester

## Application



Rail-mount terminal block assembly for electric motor wiring



Rail-mount terminal block assembly for electric motor wiring