

# Data Sheet | Item Number: 2000-559

Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; gray

<https://www.wago.com/2000-559>



Color: ■ gray

Similar to illustration

## 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	13.5 A
Legend (ratings)	(III / 3) $\triangleq$ Overvoltage category III / Pollution degree 3

### Ratings per UL

Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group C)	300 V
Rated current UL (Use Group C)	10 A

## Approvals per

### CSA 22.2 No 158

Use group	B	C	D
Rated voltage	300 V	300 V	-
Rated current	10 A	10 A	-

## General information

Wiring direction	Side-entry wiring
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## Connection data

Clamping units	9
Total number of potentials	9

### Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	1 mm <sup>2</sup>
Solid conductor	0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG

### Connection 1

Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm <sup>2</sup> / 20 ... 18 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	9 ... 11 mm / 0.35 ... 0.43 inches
Pole number	9
Wiring direction	Side-entry wiring

### Physical data

Width	33 mm / 1.3 inches
Module width	3.5 mm / 0.138 inches

### Mechanical data

Marking level	Center/side marking
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### 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	0.338 MJ
Weight	17.4 g

### Environmental requirements

#### Environmental Testing

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

#### Environmental Testing

Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data	
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143394628
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 10.0	EC002021
ECCN	NO US CLASSIFICATION

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
CSA DEKRA Certification B.V.	C22.2	2130762	Railway WAGO GmbH & Co. KG	-	Railway Ready

### Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2000-559	↓

### Documentation

Bid Text			
2000-559	19.02.2019	xml 3.43 KB	↓
2000-559	07.08.2018	docx 14.97 KB	↓

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2000-559	EPLAN Data Portal 2000-559
	ZUKEN Portal 2000-559

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



**Item No.: 216-241**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

**Item No.: 216-242**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

**Item No.: 216-243**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

1.1.2 Marking

1.1.2.1 Marker



**Item No.: 793-3501**  
 WMB marking card; as card; plain; snap-on type; white

**Item No.: 2009-113/000-006**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue

**Item No.: 2009-113/000-007**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray

**Item No.: 2009-113/000-023**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green



**Item No.: 2009-113/000-017**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green

**Item No.: 2009-113/000-012**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange

**Item No.: 2009-113/000-005**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red

**Item No.: 2009-113/000-024**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet



**Item No.: 2009-113**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

**Item No.: 2009-113/000-002**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow

1.1.2.2 Marking strip



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

### 1.1.3 Strain relief

#### 1.1.3.1 Strain relief plate

**Item No.: 734-329**

Strain relief plate; for female and male connectors; 25 mm wide; 1 part; gray

### 1.1.4 Test and measurement

#### 1.1.4.1 Testing accessories



**Item No.: 210-136**

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

### 1.1.5 Tool

#### 1.1.5.1 Operating tool



**Item No.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



**Item No.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



**Item No.: 210-647**

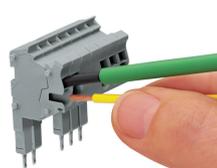
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### 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