

## Data Sheet | Item Number: 2002-554

Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; gray

<https://www.wago.com/2002-554>



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	24 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

#### General information

Wiring direction	Side-entry wiring
------------------	-------------------

### Connection Data

Clamping units	4
Total number of potentials	4

#### Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Nominal cross-section	2.5 mm <sup>2</sup>
Solid conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Solid conductor; push-in termination	0.75 ... 4 mm <sup>2</sup> / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm <sup>2</sup> / 18 ... 14 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	10 ... 12 mm / 0.39 ... 0.47 inches
Pole number	4
Wiring direction	Side-entry wiring

### Physical data

Width	20.8 mm / 0.819 inches
Module width	5.2 mm / 0.205 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	0.204 MJ
Weight	11 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
--	--------

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
--	--------

#### Environmental Testing

Extended testing: Voltage drop measurement before and after each axis	Passed
---	--------

Vibration and shock stress for rolling stock equipment	Passed
--	--------

### Commercial data

Product Group	22 (TOPJOB S)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454178352
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



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61984	NTR NL-7450
CCA DEKRA Certification B.V.	EN 61984	2185079.01

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



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready

### Approvals for marine applications



Approval	Standard	Certificate Name
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23

## Downloads

### Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 2002-554			<a href="#">↓</a>

## Documentation

Bid Text			
2002-554	29.04.2019	xml 3.64 KB	<a href="#">↓</a>
2002-554	29.04.2019	docx 15.21 KB	<a href="#">↓</a>

## CAD/CAE-Data

CAD data	
2D/3D Models 2002-554	<a href="#">↓</a>










CAE data	
WSCAD Universe 2002-554	<a href="#">↓</a>
ZUKEN Portal 2002-554	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule

			
<p><b>Item No.: 216-241</b>                      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</p>	<p><b>Item No.: 216-242</b>                      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</p>	<p><b>Item No.: 216-262</b>                      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</p>	<p><b>Item No.: 216-243</b>                      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</p>
			
<p><b>Item No.: 216-263</b>                      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</p>	<p><b>Item No.: 216-244</b>                      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</p>	<p><b>Item No.: 216-264</b>                      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</p>	<p><b>Item No.: 216-246</b>                      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</p>
			
<p><b>Item No.: 216-266</b>                      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</p>			

1.1.2 Insulation stop

1.1.2.1 Insulation stop



**Item No.: 2002-171**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

**Item No.: 2002-172**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark 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



**Item No.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

**Item No.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

**Item No.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

**Item No.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



**Item No.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

**Item No.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

**Item No.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

**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.: 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.: 734-328**

Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; gray

### 1.1.5 Test and measurement

#### 1.1.5.1 Testing accessories



**Item No.: 210-136**

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

### 1.1.6 Tool

#### 1.1.6.1 Operating tool

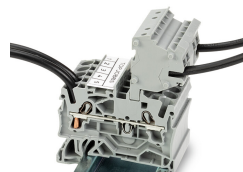
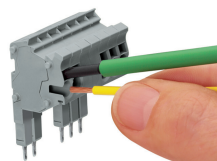


**Item No.: 210-720**

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

## Installation Notes

### Conductor termination



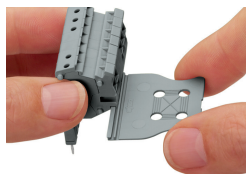
**All conductor types at a glance**

**Conductor termination via:**

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

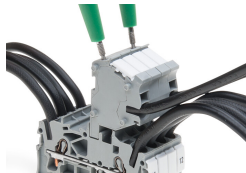
The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.

## 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