

**Data Sheet | Item Number: 221-420**

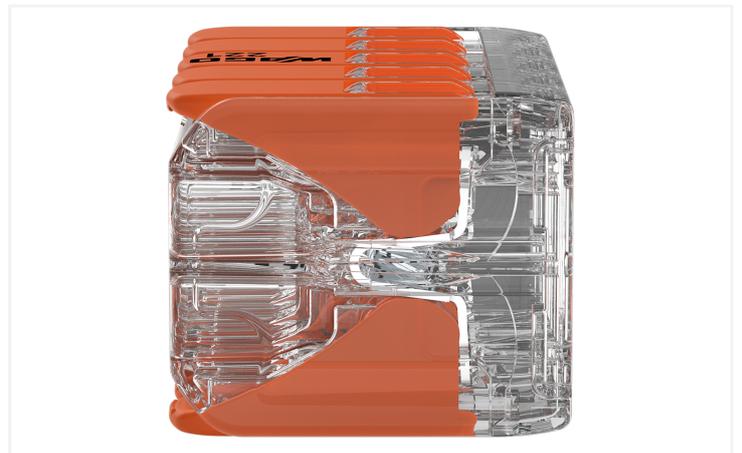
Splicing connector with levers; for all conductor types; max. 4 mm<sup>2</sup>; 10-conductor; transparent housing; Surrounding air temperature: max 85°C (T85); 4,00 mm<sup>2</sup>; transparent

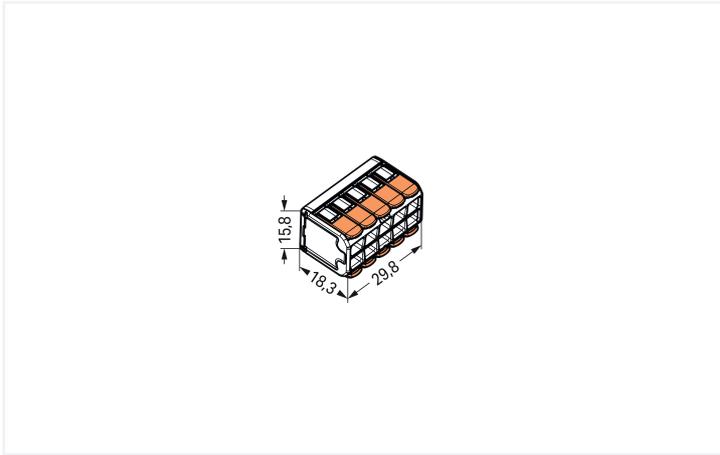


<https://www.wago.com/221-420>



Color:  transparent





Dimensions in mm

Splicing connector with levers, 221 Series, lever

Enjoy effortless electrical installations with splicing connector with levers (item number 221-420). From wiring intercom systems to installing electrical ovens, connecting different conductor types is quick and hassle-free with WAGO's compact 221 Series splicing connector, which allows you to quickly and safely connect different types of conductors. Ensure that the strip lengths are 11 mm when connecting conductors to splicing connector with levers. Our splicing connector is rated for 450 V and is designed for use with a rated current of up to 32 A. It is therefore suitable for high-load applications. This product features conductor terminals and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. Dimensions: (29.8 x 15.8 x 18.3) mm (width x height x depth). Splicing connector with levers is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 4 mm<sup>2</sup>.

WAGO's 221 Series Splicing Connector with levers impresses with its innovative design for different conductor cross-sections. That's why WAGO's lever-equipped splicing connector holds a unique trademark within electrical interconnection technology. The flat levers, which fit seamlessly into the 221's base, act like a cast when closed and can be positioned neatly in any housing without disturbing edges. Due to the wide design of each lever, they can all be operated perfectly without tools for convenient conductor terminations. The transparent housing displays robust technology and enables immediate visual inspection for the correct contact of solid, stranded and fine-stranded conductors. Resembling piano keys, the levers' design perfectly combines the functional and aesthetic connection technology "Made by WAGO." This product is designed for specific Ex applications (please refer to the product datasheet).

Notes	
General safety information	<p><b>NOTICE: Observe installation and safety instructions!</b></p> <ul style="list-style-type: none"> <li>• Only to be used by electricians!</li> <li>• Do not work under voltage/load!</li> <li>• Use only for proper use!</li> <li>• Observe national regulations/standards/guidelines!</li> <li>• Observe technical specifications for the products!</li> <li>• Observe the number of permissible potentials!</li> <li>• Do not use damaged/dirty components!</li> <li>• Observe conductor types, cross-sections and strip lengths!</li> <li>• Insert conductor until it hits the product's backstop!</li> <li>• Use original accessories!</li> </ul> <p><b>To be sold only with installation instructions!</b></p>
Safety Information	in grounded power lines

Electrical data			
Ratings per IEC/EN		Ratings per UL	
Ratings per	EN 60664	Approvals per	UL 486C
Nominal voltage (II/2)	450 V	Rated voltage UL (Use Group C)	600 V
Rated impulse withstand voltage (II/2)	4 kV	Rated current UL (Use Group C)	20 A
Rated current	32 A		
Legend (ratings)	(II / 2) ± Overvoltage category II / Pollution degree 2		

### General information

Wiring direction	Side-entry wiring
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### Connection Data

Clamping units	10
Total number of potentials	1

### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Lever
Connectable conductor materials	Copper
Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
Solid conductor	0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG
Stranded conductor	0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG
Fine-stranded conductor	0.14 ... 4 mm <sup>2</sup> / 24 ... 12 AWG
Strip length	11 mm / 0.43 inches
Wiring direction	Side-entry wiring

### Physical data

Width	29.8 mm / 1.173 inches
Height	15.8 mm / 0.62 inches
Depth	18.3 mm / 0.72 inches

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	transparent
Cover color	transparent
Material group	IIIa
Insulation material (main housing)	Polycarbonate (PC)
Flammability class per UL94	V2
Fire load	0.132 MJ
Actuator color	orange
Weight	7 g

### Environmental requirements

Ambient temperature (operation)	+85 °C
Temperature marking per EN 60998	T85

### Commercial data

PU (SPU)	150 (15) pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966611663
Customs tariff number	85369010000

**Product Classification**

UNSPSC	39121409
ETIM 9.0	EC000446
ETIM 10.0	EC000446
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

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



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL-8062
cULus_Listed_667F Underwriters Laboratories Inc.	UL 486C	E69654
ENEC 05 DEKRA Certification B.V.	IEC 60998	71-152248
UL Underwriters Laboratories Inc.	UL 467	E201573

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

**Downloads**

**Environmental Product Compliance**

Compliance Search
Environmental Product Compliance 221-420

**CAD/CAE-Data**

CAD data
2D/3D Models 221-420

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 Jumper**

**1.1.1.1 Jumper**



**Item No.: 221-941/000-006**

Jumper; for conductor entry; 2-way; insulated; blue

**Item No.: 221-942/000-006**

Jumper; for conductor entry; 2-way; insulated; blue

**Item No.: 221-941**

Jumper; for conductor entry; 2-way; insulated; dark gray

**Item No.: 221-942**

Jumper; for conductor entry; 2-way; insulated; dark gray

**1.1.2 Mounting adapter**

**1.1.2.1 Mounting accessories**



**Item No.: 221-539/000-004**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; black

**Item No.: 221-539/000-006**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; blue

**Item No.: 221-539/000-053**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; dark gray-yellow

**Item No.: 221-539/1000-000**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; for Ex applications; light gray



**Item No.: 221-539/000-005**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; red

**Item No.: 221-539**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; white

**Item No.: 221-549/000-004**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; black

**Item No.: 221-549/000-006**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; blue



**Item No.: 221-549/000-053**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; dark gray-yellow

**Item No.: 221-549/1000-000**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; for Ex applications; light gray

**Item No.: 221-549/000-005**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; red

**Item No.: 221-549**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; white



**Item No.: 221-509/000-004**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; black

**Item No.: 221-509/000-006**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; blue

**Item No.: 221-509/000-053**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; dark gray-yellow

**Item No.: 221-509/000-005**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; red



**Item No.: 221-509**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; white

**Item No.: 221-519/000-006**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for side screw mounting; blue

**Item No.: 221-519/000-053**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for side screw mounting; dark gray-yellow

**Item No.: 221-519**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for side screw mounting; white



**Item No.: 221-529/000-006**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot; blue

**Item No.: 221-529/000-053**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot; dark gray-yellow

**Item No.: 221-529**

Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot; white

**Item No.: 221-539/002-004**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; black



**Item No.: 221-539/002-006**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; blue

**Item No.: 221-539/002-053**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; dark gray-yellow

**Item No.: 221-539/1002-000**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; for Ex applications; light gray

**Item No.: 221-539/002-005**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; red



**Item No.: 221-539/002-000**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-15 rail; white

**Item No.: 221-549/002-004**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; black

**Item No.: 221-549/002-006**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; blue

**Item No.: 221-549/002-053**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; dark gray-yellow

### 1.1.2.1 Mounting accessories



**Item No.: 221-549/1002-000**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; for Ex applications; light gray



**Item No.: 221-549/002-005**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; red



**Item No.: 221-549/002-000**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for DIN-35 rail; white



**Item No.: 221-509/002-004**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; black



**Item No.: 221-509/002-006**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; blue



**Item No.: 221-509/002-053**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; dark gray-yellow



**Item No.: 221-509/002-005**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; red



**Item No.: 221-509/002-000**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for screw mounting; white



**Item No.: 221-519/002-006**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for side screw mounting; blue



**Item No.: 221-519/002-053**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for side screw mounting; dark gray-yellow



**Item No.: 221-519/002-000**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; for side screw mounting; white



**Item No.: 221-529/002-006**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot; blue



**Item No.: 221-529/002-053**

Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot; dark gray-yellow

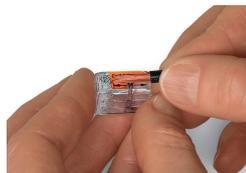


**Item No.: 221-529/002-000**

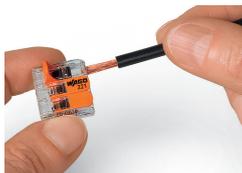
Mounting carrier; for 10-wire connectors; 221 Series - 4 mm<sup>2</sup>; with snap-in mounting foot; white

## Installation Notes

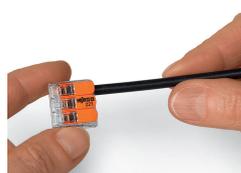
### Conductor termination



Strip conductor to 11 mm (0.43 inch).



Pull up an orange lever to open the clamping unit.



Then insert the conductor and push the lever back down, flush with the connector housing.



**Compact, lever-operated splicing connectors:**

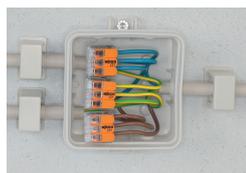
Tool-free connection of fine-stranded conductors from 0.14 ... 4 mm<sup>2</sup>, as well as solid or stranded conductors from 0.2 ... 4 mm<sup>2</sup> (24 ... 12 AWG).

**Safety:**

The lever's specially designed rest position reliably prevents accidental unclamping of a connected conductor.

Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC or UL.

## Application



Wiring fine-stranded conductors in junction boxes.



Custom low-voltage lighting system



Lighting distribution in a ceiling canopy



Pendant light connection in a suspended ceiling