

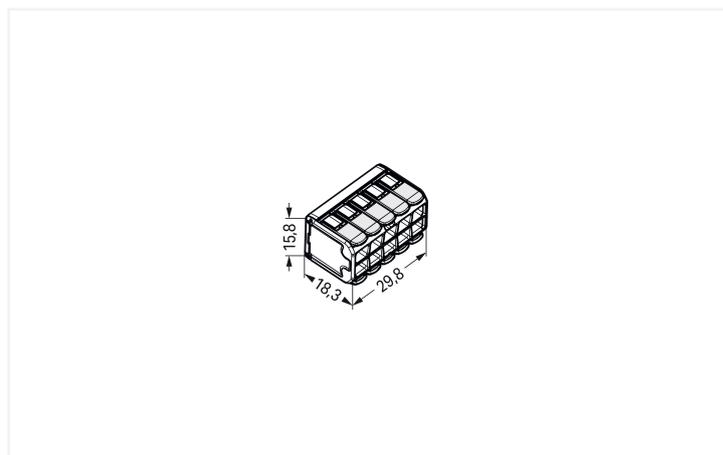
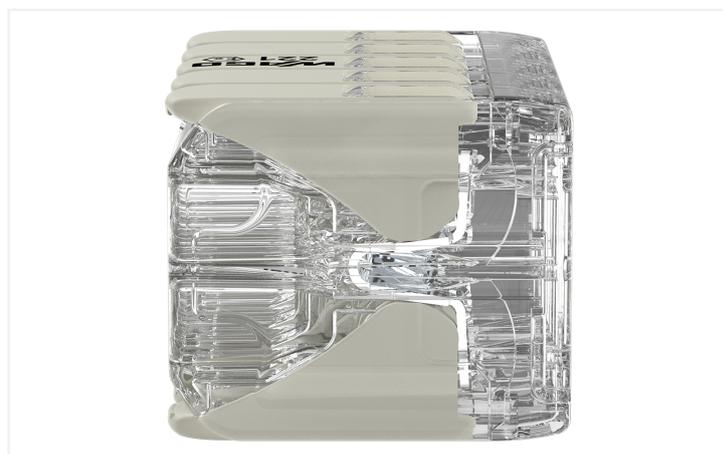
Data Sheet | Item Number: 221-490

Splicing connector with levers; for all conductor types; for Ex e applications; max. 4 mm²; 10-conductor; transparent housing; Operating temperature (max.): 105 °C; 4,00 mm²; transparent

<https://www.wago.com/221-490>



Color: transparent



Dimensions in mm

Splicing connector with levers, 221 Series, lever

Our splicing connector with levers (item number 221-490) is designed for seamless electrical installations. From intercom system wiring to electric ovens—connecting various conductor types is quick and easy with WAGO's practical 221 Series splicing connector. Strip lengths must be between 10



and 12 mm when connecting conductors to splicing connector with levers. Featuring conductor terminals along with CAGE CLAMP®, this product is highly versatile. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (29.8 x 15.8 x 18.3) mm (width x height x depth). Depending on the type of conductor, splicing connector with levers is designed for conductor cross sections ranging from 0.2 mm² to 4 mm².

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

Electrical data			
Approvals per	UL 60079		
Use group	B	C	D
Rated voltage	-	440 V	-
Rated current	-	20 A	-
Ex information			
Ratings per	ATEX: PTB 18 ATEX 1019 U / IECEx: PTB 18.0045U (Ex eb IIC Gb)		
Rated voltage EN (Ex e II)	440 V		
Rated current (Ex e II)	32 A		

General information	
Wiring direction	Side-entry wiring

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 ² / 12 AWG
Solid conductor	0.2 ... 4 mm ² / 24 ... 12 AWG
Stranded conductor	0.2 ... 4 mm ² / 24 ... 12 AWG
Fine-stranded conductor	0.14 ... 4 mm ² / 24 ... 12 AWG
Strip length	10 ... 12 mm / 0.39 ... 0.47 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)	Information on material specifications can be found here
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	light gray
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	4066966668087
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



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL-8062
ENEC 05 DEKRA Certification B.V.	IEC 60998	71-152248

Declarations of conformity and manufacturer's declarations

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

Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX Physikalisch Technische Bundesanstalt	EN IEC 60079-0	PTB 18 ATEX 1019 U (II 2 G Ex eb IIC Gb, I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000184 (Ex eb IIC Gb, Ex eb I Mb)
IECEX Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEX PTB 18.0045U (Ex eb IIC Gb, Ex eb I Mb)

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 221-490	↓

CAD/CAE-Data

CAD data	
2D/3D Models 221-490	↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Mounting adapter

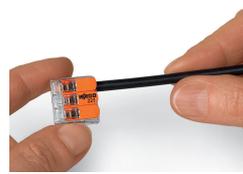
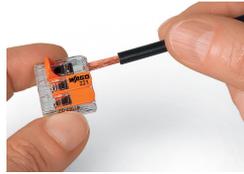
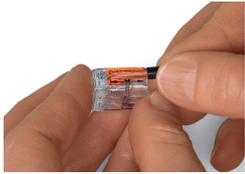
1.1.1.1 Mounting accessories



<p>Item No.: 221-539/1000-000 Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm²; for DIN-15 rail; for Ex applications; light gray</p>	<p>Item No.: 221-549/1000-000 Mounting carrier with strain relief; for 10-wire connectors; 221 Series - 4 mm²; for DIN-35 rail; for Ex applications; light gray</p>	<p>Item No.: 221-539/1002-000 Mounting carrier; for 10-wire connectors; 221 Series - 4 mm²; for DIN-15 rail; for Ex applications; light gray</p>	<p>Item No.: 221-549/1002-000 Mounting carrier; for 10-wire connectors; 221 Series - 4 mm²; for DIN-35 rail; for Ex applications; light gray</p>
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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:

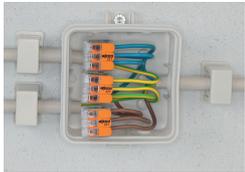
Tool-free connection of fine-stranded conductors from 0.14 ... 4 mm², as well as solid or stranded conductors from 0.2 ... 4 mm² (24 ... 12 AWG).

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



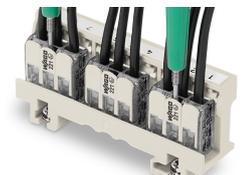
Wiring fine-stranded conductors in junction boxes.

Custom low-voltage lighting system

Lighting distribution in a ceiling canopy

Pendant light connection in a suspended ceiling

Testing



Easily test inserted connectors in the carrier – however they are mounted.