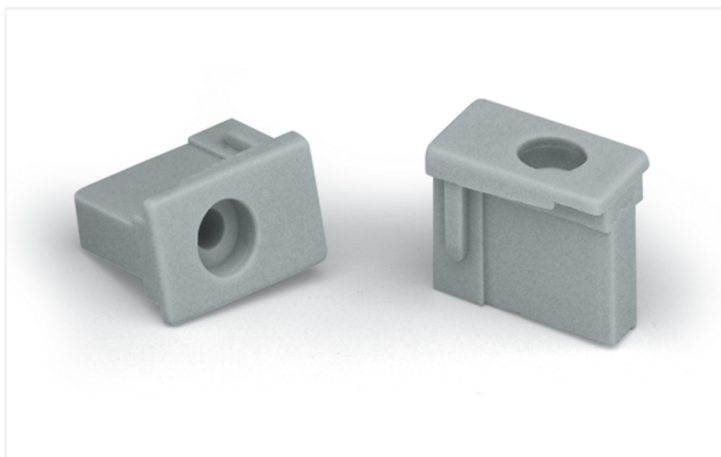


## Data Sheet | Item Number: 231-193

Locking device; for male connectors; 1 part; gray

<https://www.wago.com/231-193>



Color: ■ gray

### Mechanical data

Mounting type	Screw mount
Mounting type	Panel mounting
Suitable	for angled THT male headers

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.011 MJ
Weight	0.4 g

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	100 (25) pcs
Packaging type	Box
Country of origin	DE
GTIN	4017332117975
Customs tariff number	85389099990

**Product Classification**

UNSPSC	39121702
eCl@ss 10.0	27-14-11-92
eCl@ss 9.0	27-14-11-92
ETIM 9.0	EC002848
ETIM 10.0	EC002848
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

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

**General approvals**      **Approvals for marine applications**



Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354

Approval	Standard	Certificate Name
LR Lloyds Register	IEC 61984	96/20035 (E5)

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 231-193	<a href="#">↓</a>

**Documentation**

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data	CAE data
2D/3D Models 231-193 <span style="float: right;"><a href="#">↓</a></span>	ZUKEN Portal 231-193 <span style="float: right;"><a href="#">↓</a></span>

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Installation

##### 1.1.1.1 Mounting accessories



**Item No.: 231-195**

Screw with nut; M2x12; for fixing element

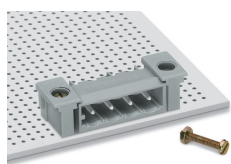


**Item No.: 231-194**

Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

## Installation Notes

### Installation



Locking devices enhance connection reliability between male headers with angled solder pins and the PCB. This substantially reduces mechanical stress on both solder pins and joints, particularly when dealing with small lengths and frequent mating cycles.