

#### ACU Z18 Set

Zhaga Book 18 Ed. 3 receptacle

#### Product description

- Set consisting of receptacle, lock washer and mounting nut (ACU Z18 REP 4PIN)
- Designed for street lighting control
- Compliant with Zhaga Book 18 Ed. 3
- Optional IP66 with sealing cap (ACU Z18 CAP IP66)
- UL UV-f1 rated for outdoor use
- IK09 high impact resistant

#### Housing properties

- Casing receptacle: PBT
- Type of protection IP20

#### Interfaces

- Supplies Zhaga Book 18 Ed. 3 contact system



**Standards**, page 3



ACU Z18 REP 4PIN



ACU Z18 CAP IP66

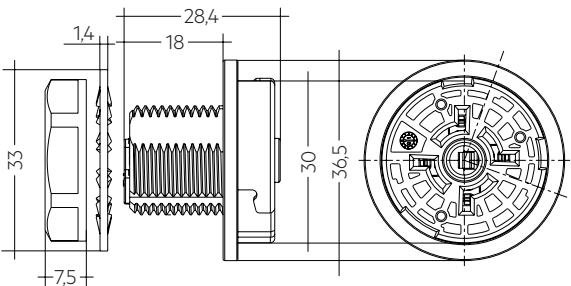


ACU Z18 REP 4PIN + ACU Z18 CAP IP66

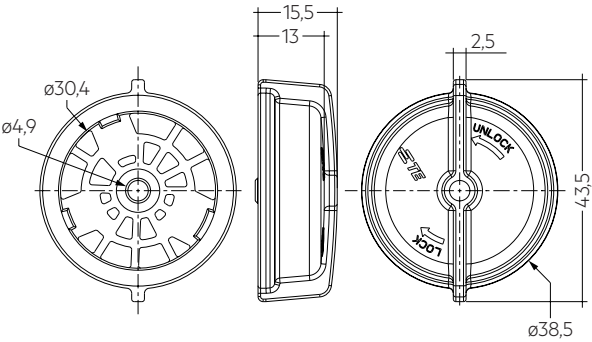


ACU Z18 Set  
Zhaga Book 18 Ed. 3 receptacle

Technical data	
Rated voltage	250 V
Mains frequency	50 / 60 Hz
Max. rated current	1.5 A
Mounting hole	acc. to Zhaga Book 18 Ed. 3
Type of installation	Zhaga Book 18 Ed. 3 socket
Ambient temperature ta	-40 ... +90 °C
Dimensions Ø x H	ø36.5 x 27.4 mm
Housing material receptacle	PBT
UV resistance	f1
Type of protection <sup>①</sup>	IP20
Impact protection rating	≤ IK09



ACU Z18 REP 4PIN



ACU Z18 CAP IP66

Ordering data			
Type	Article number	Packaging bag	Weight per pc.
ACU Z18 REP 4PIN	28003209	100 pc(s).	0.008 kg
ACU Z18 CAP IP66	28003208	100 pc(s).	0.020 kg

① With attached ACU Z18 CAP IP66 will be achieved.

## 1. Standards

UL 94V-0  
 UL UV-f1  
 UL 94V-2 (locking nut)  
 EN 61984:2009

## 2. Common

This connector system is typically used in street light applications, as well as area lighting and IoT network applications.

The receptacle is supplied with a 4 position contact system. All contacts are being pre-installed in the receptacle.

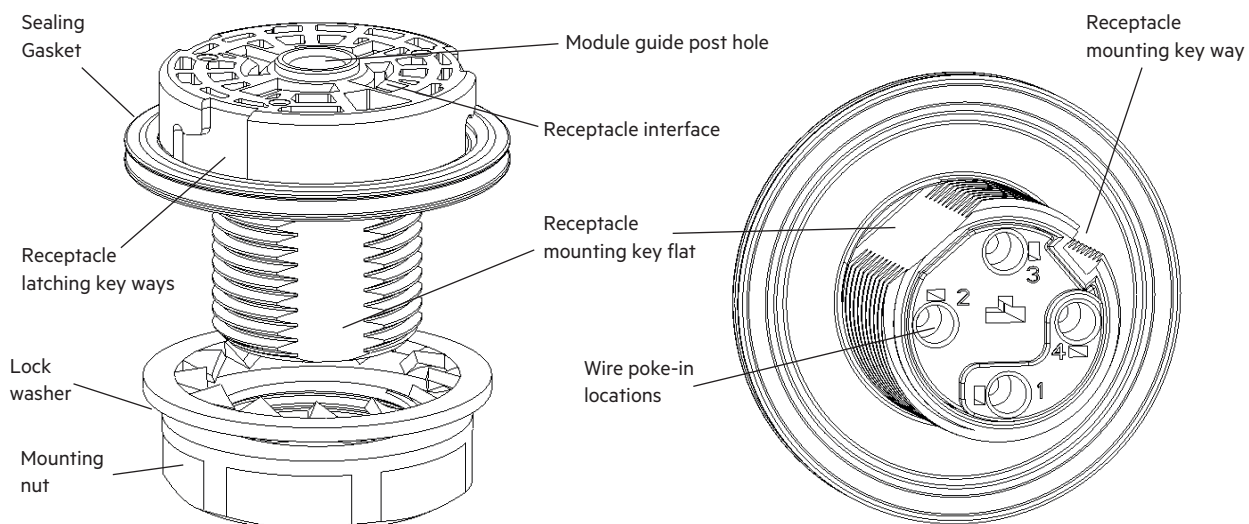
The receptacle contacts are wire poke-in style termination contacts.

The cap is not supplied with the base assembly, but available separately (ACU Z18 CAP IP66, article number: 28003208).

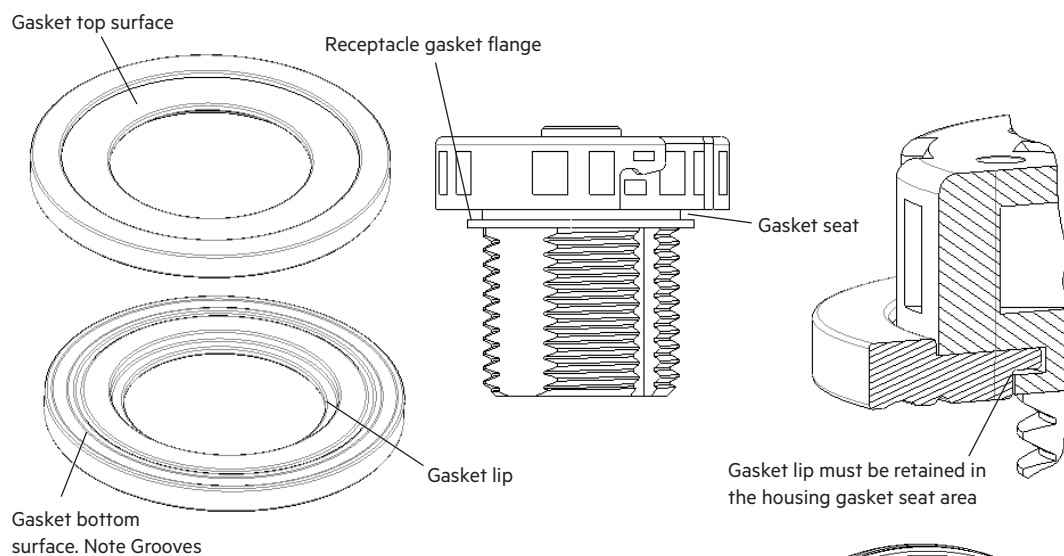
It is the responsibility of the customer to provide and install the light or sensor control electronics.

## 3. Installation

### 3.1 Receptacle:



### 3.2 Gasket varification:



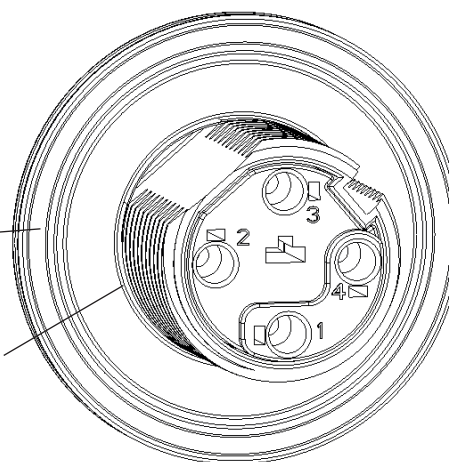
#### Important notice:



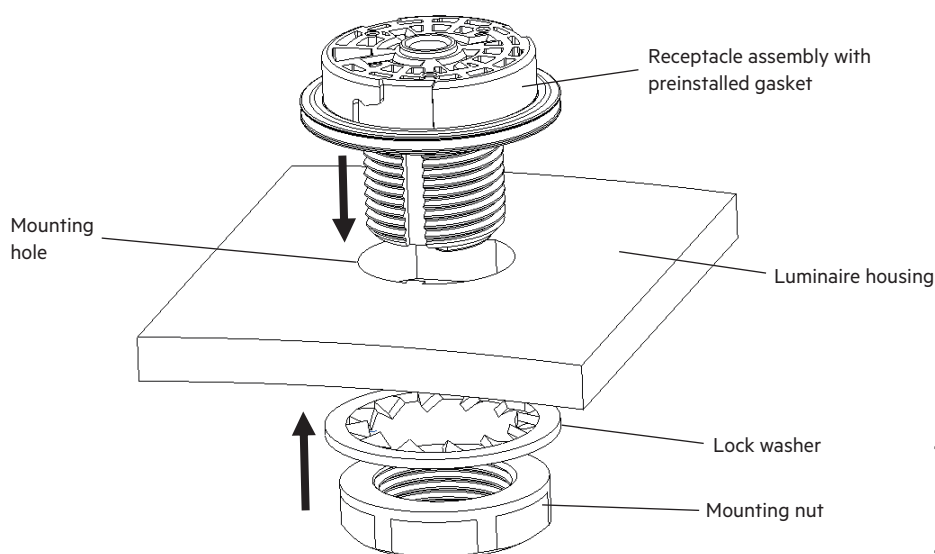
Installation overview of single components for assembling all together (symbol photos).  
Actual product can differ in shape and form slightly due to improvements.

Installed gasket with grooves towards threads

Receptacle threads



### 3.3 Receptacle mounting:



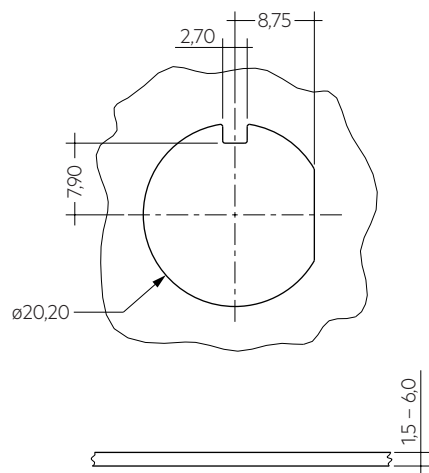
#### Important instruction:



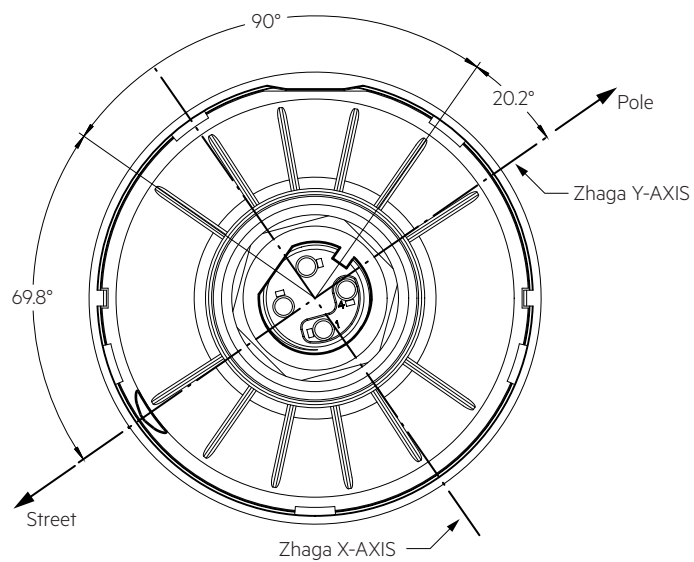
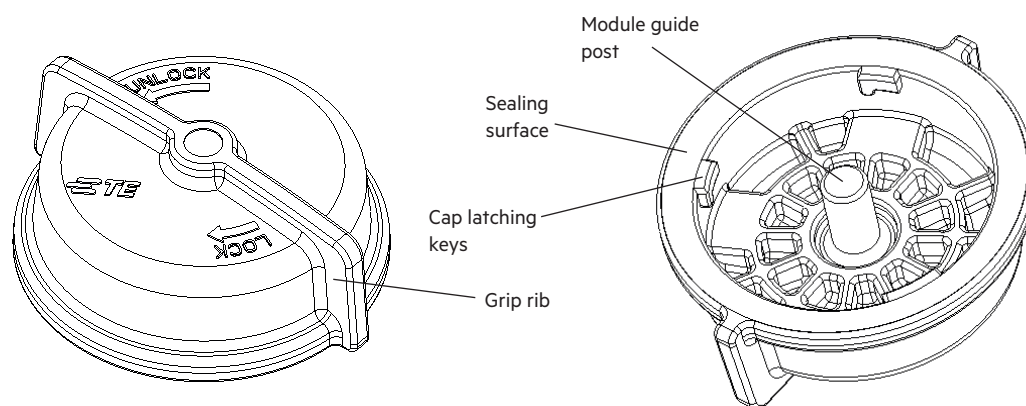
The sharp edges of the lock washer must point in the direction of the luminaire housing.



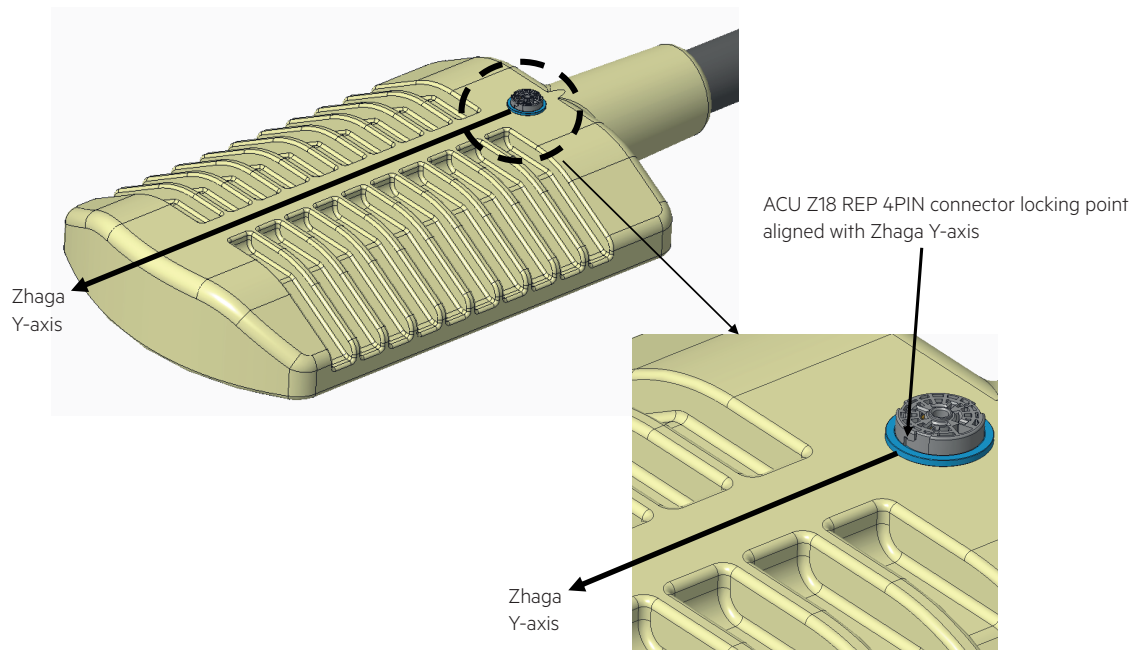
Torque mounting nut within the range of 1.8 to 2.4 Nm using a 27 mm hex socket. Guarantee only if using a torque wrench. Alignment and direction of the mounting nut see graphic.

**3.4 Mounting hole:**

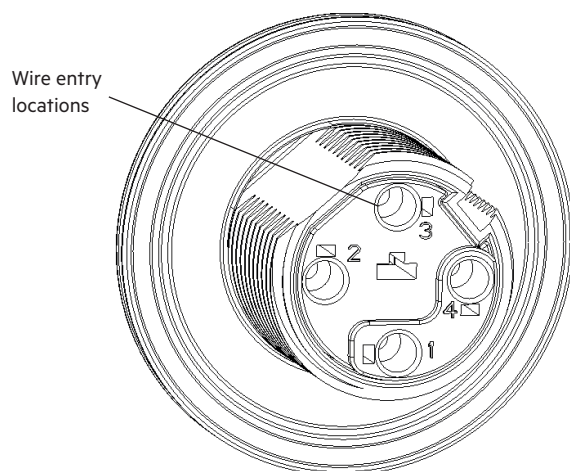
Zhaga Book 18 Ed. 3 axis description:

**3.5 Cap:**

### 3.6 Lighting fixture with ACU Z18 REP 4PIN connector:



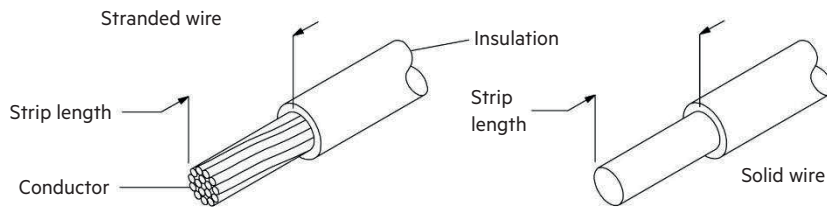
### 3.7 Wire connection receptacle:



Pin number	Function
1	+24 V power supply
2	Negative pole for DALI / shared ground for 24 V power supply
3	Positive pole for DALI
4	Not connected this refers to Zhaga Book 18 Ed. 3 standard

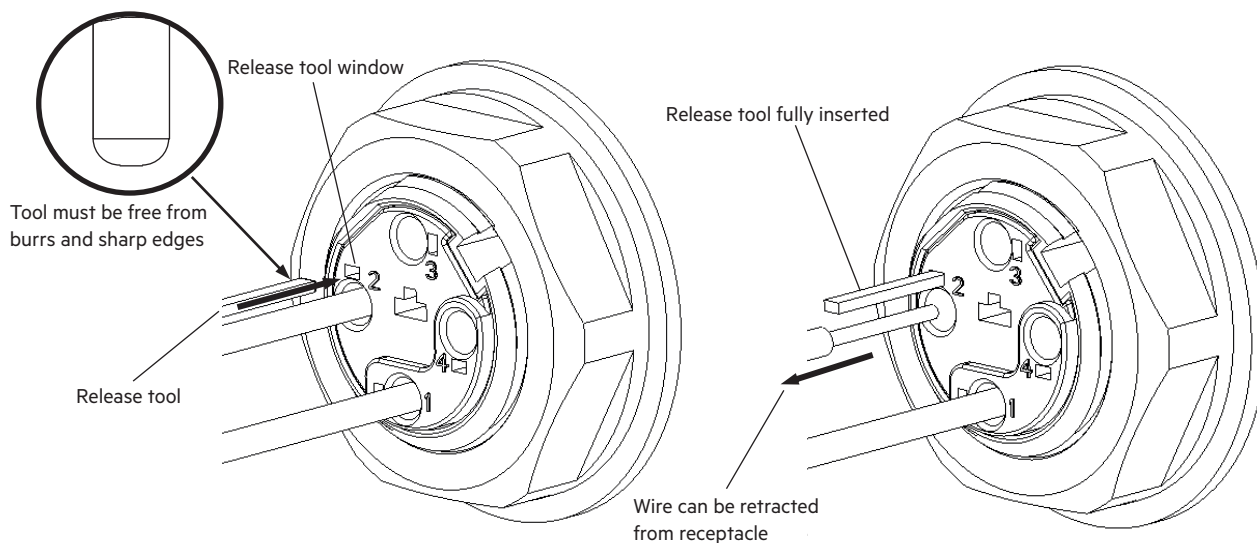
### 3.8 Wire type and cross section:

The receptacle assembly will accept 16 – 20 AWG solid and 18 – 20 AWG stranded tin-dipped copper wire only.  
The table in Figure below provides wire selection for the poke-in connectors.



Recommended wire			
Wire size	Wire type	Insulation diameter	Strip length
16 AWG	Solid	$\varnothing$ 2.95 max. $\varnothing$ 1.90 min.	11.0 $\pm$ 1.0
18 AWG	Solid		
	Stranded (tin-dipped)		
20 AWG	Solid		
	Stranded (tin-dipped)		

### 3.9 Wire release:



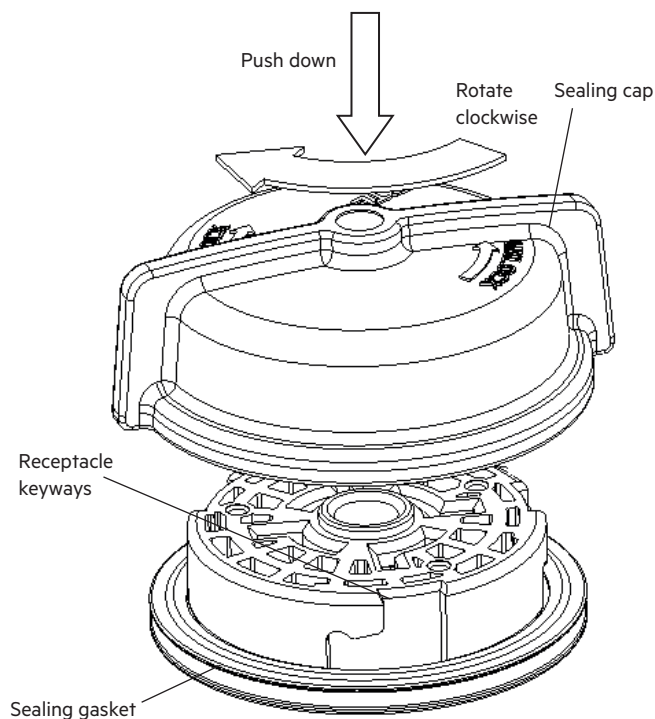
### 3.10 Cap release:

Align the sealing cap over the mounted receptacle. Based on polarizing features on each, the sealing cap can only be installed in one position.

Lightly rotate the sealing cap until you feel the alignment keys and the blades align to the proper location. After alignment, push downward until the sealing cap is bottomed on the receptacles mating face.

Then complete mating by rotating sealing cap with downward pressure while twisting in a clockwise direction. The sealing cap will lock into position with an audible 'click'.

To un-mate, gently push down and reverse the process.



### 3.11 Commissioning and humidity:

When using the ACU Z18 CAP, make sure that the contact connections are dry during following installation.

Each time the connector (ACU Z18 REP 4PIN) is assembled or disassembled using an ACU Z18 CAP / communication module / sensor, the connector (ACU Z18 REP 4PIN) must be checked again for moisture damage.

The use of the ACU Z18 REP 4PIN without the ACU Z18 CAP / communication module / sensor is not permitted.

## 4. Miscellaneous

### 4.1 Additional information

Additional technical information at [www.tridonic.com](http://www.tridonic.com) → Technical Data

Guarantee conditions at [www.tridonic.com](http://www.tridonic.com) → Services

Lifetime declarations are informative and represent no warranty claim.

No warranty if device was opened.