



## WE-EF LEUCHTEN

Installation and Maintenance  
Instructions

Projector

**FLC210 LED**

**FLC220 LED**

**FLC230 LED**

**FLC240 LED**

**FLC260 LED**

**FLC210-CC LED**

**FLC220-CC LED**

**FLC230-CC LED**

**FLC240-CC LED**

**FLC260-CC LED**

**FLC210-TW LED**

**FLC220-TW LED**

**FLC230-TW LED**

**FLC240-TW LED**

**FLC260-TW LED**



### **Installation tools**

Mounting hardware used on this product includes fasteners with hexalobular socket heads (ISO 10664). Installation requires the use of matching tools.



### **Surge Protection**

This product features built-in surge protection circuitry in compliance with applicable standards.

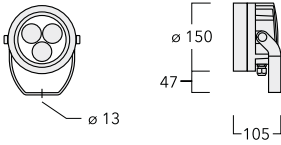
For comprehensive protection of a luminaire installation against lightning and electrical surges, it is essential to cover mains supply and data input lines at the distribution board level, by using respective primary (Type 1) and secondary (Type 2) surge arrestors in compliance with EN61643-11/IEC61643-1.

### **Warning**

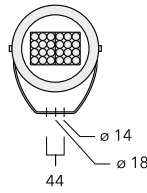
Ensure that all required surge protection measures are in place and activated prior to luminaire installation. Also, disconnect luminaires before operating high-power devices such as, for example, electrical arc welders.

**Projector**

**FLC210**



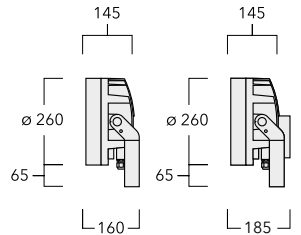
**FLC230 [EES] Version**



**FLC230-CC\***

**FLC230**

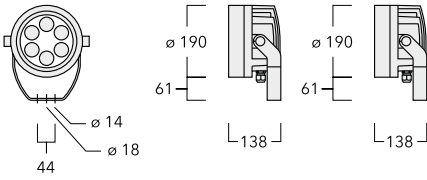
**FLC230-TW**



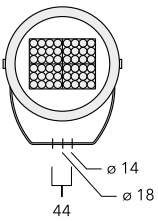
**FLC220-CC\***

**FLC220**

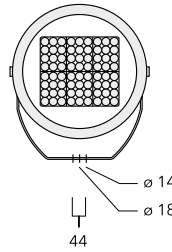
**FLC220-TW**



**FLC240 [EES] Version**



**FLC260 [EES] Version**



**FLC240-CC\***

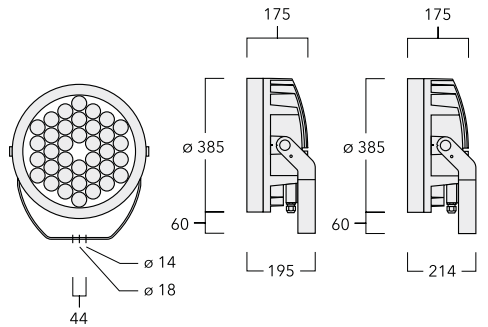
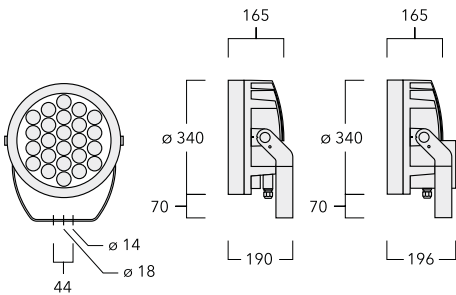
**FLC240**

**FLC240-TW**

**FLC260-CC\***

**FLC260**

**FLC260-TW**



IP66, IK07, Class I, ta = 25°C

<b>Weight</b>	kg
for FLC210	4.0
for FLC220/FLC220-CC/FLC220-TW	4.3/4.3/4.3
for FLC230/FLC230-CC/FLC230-TW	7.6/7.7/7.7
for FLC240/FLC240-CC/FLC240-TW	12.6/13.8/13.8
for FLC260/FLC260-CC/FLC260-TW	17.5/18.0/18.5

<b>Windage area</b>	m <sup>2</sup>
for FLC220	0.030
for FLC230	0.054
for FLC240	0.090
for FLC260	0.116

### Tools required

- Screwdriver T-25 / T-30 (provided by WE-EF)
- Screwdriver with blade 3 x 1

### Light Source

LED

### Maintenance

Apart from cleaning the product's exterior surfaces, no special maintenance work is required.

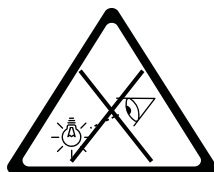
Do not use high-pressure cleaners.

In case of component failure due to abnormal circumstances or at end of life, replacement must be carried out by a suitably qualified and trained professional.

**Warning:** Do not open luminaire while mains supply is switched on.

For operation as colour changer the floodlights of the FLC200-CC series require a DMX control signal (DALI on request). The operation without control signal may lead to error.

For operation with Tunable White, a DALI DT8 controller is required.



### Do not stare at the operating light source.

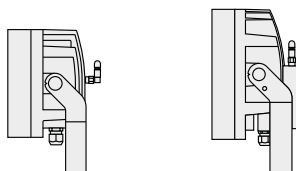
For eye safety, the following requirement applies to luminaires with a colour temperature of 4000K in combination with light beam [EE] / [EES]:

The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 2.8 m / 3.4 m is not expected.

### Accessories:

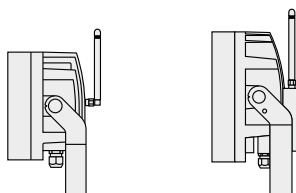
#### Wireless version\*

RF for FLC220/230/240/260-CC **430-0018**



for FLC220-CC for FLC230/240/260-CC

RF for FLC220/230/240/260-CC **430-0036**



for FLC220-CC for FLC230/240/260-CC



For further information refer to separate TO9267W instruction for wireless DMX.

## Installation

The product must be installed and maintained by a suitably qualified professional in compliance with latest building/construction and/or electrical regulations and relevant legislation.

**Warning:** Switch off mains electrical supply prior to installing and connecting the luminaire.

### Do not stare at the operating light source.

For eye safety, the following requirement applies to luminaires with a colour temperature of 4000 K in combination with light beam [EE] / [EES]:

The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 2.8 m / 3.4 m is not expected.

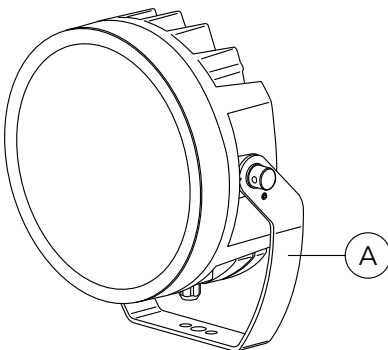
**Notice:** If the luminaire is modified by anybody other than the original manufacturer, then the warranty will no longer be valid and shall become the full responsibility of the modifying person/organisation. Claims based on defects attributable to improper installation and/or application, and the consequences thereof, are excluded.

The installation on site must comply with local and/or national health and safety regulations.

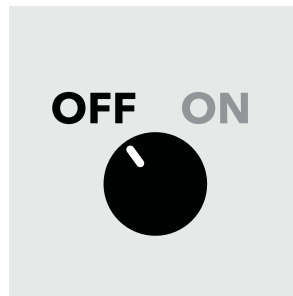
## Installation Procedure

- 1) Prior to electrical connection, proceed with mechanical installation by securing stirrup **A** to optional mounting accessory or directly to a suitable surface. Aim luminaire in the desired direction.

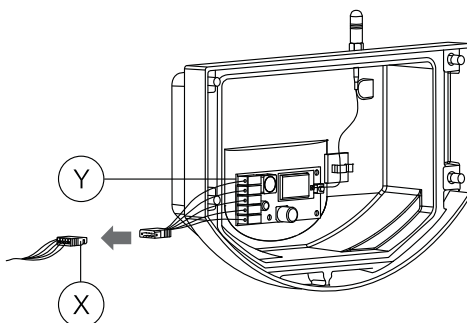
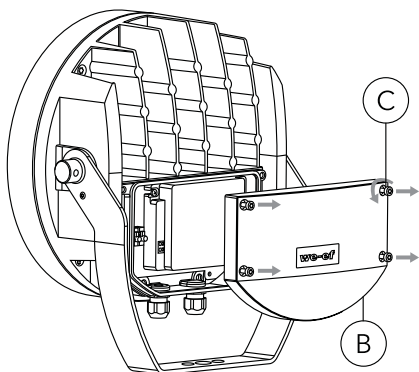
**Warning:** Ensure not to damage any electric cable, water pipe or other devices while drilling holes.



- 2) Switch off mains electrical supply.



- 3) Remove gear box cover **B** by releasing screws **C** using a Torx T-25 / T-30 tool (provided by WE-EF).  
For wireless version: Pull off connector **X** of receiver **Y**. Do not stress the cables.



For wireless version

- 4) Check that rating shown on luminaire label conforms with mains electrical supply.

**we-ef**

11/18 IP66 CE

**FLC230-LED** → 220-240V/50-60 Hz

139-XXXX

SOE XXXXXXXX

LED 3000K 12W item no. XXX

(example)

- 5) Feed mains supply cable **D** through cable gland **E**. See Fig I.

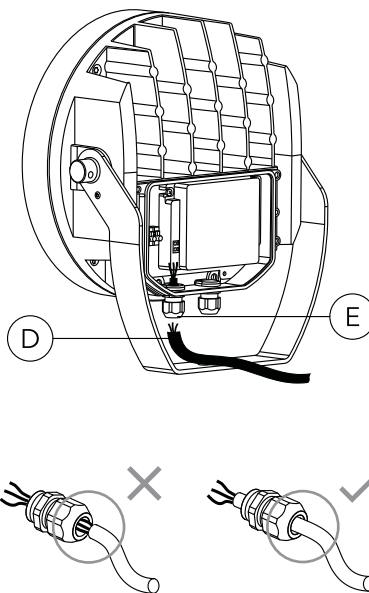
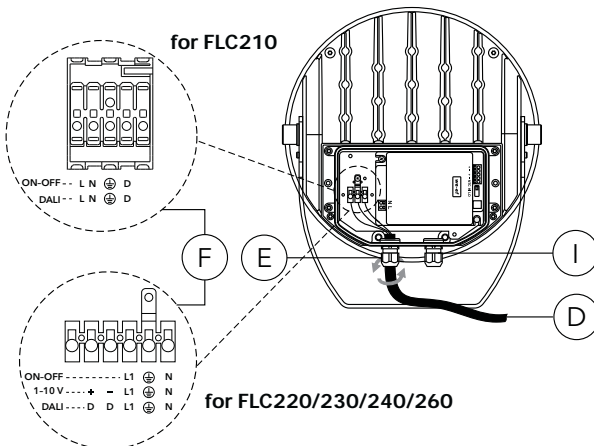


Fig I. Feed mains supply cable through cable gland

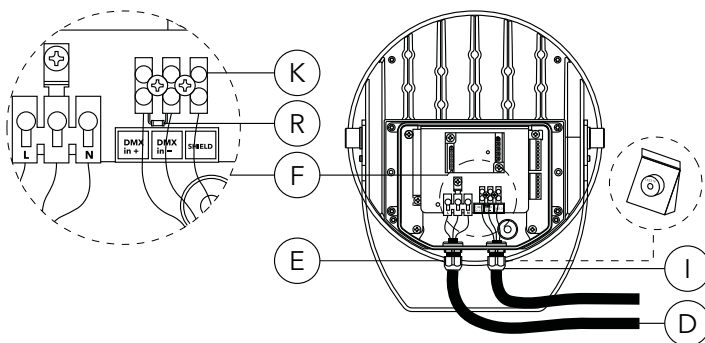
- 6) Connect leads of mains supply cable **D** (and second cable **I** for through wiring, if required) to respective terminals in terminal block **F**:
- a) ON/OFF or wireless version (L = Phase, N = Neutral, ⊕ = Earthing)
  - b) 1-10 V/DALI (L = Phase, N = Neutral, ⊕ = Earthing,  
DA/DA = DALI control line, D-/D+ = 1-10 V control line).
  - c) DMX (L = Phase, N = Neutral, ⊕ = Earthing, -/+ = DMX control line, S = Shield).
- Tighten cable gland **E**.

For FLC210-CC, refer to separate instruction TO9144W.

For operation with Tunable White, a DALI DT8 controller is required.



6.1) For DMX only: If through wiring (daisy-chain) for the DMX signal is required, remove resistor **R** between DMX in + and DMX in - of terminal **K** and connect outgoing DMX wires instead. Do not remove resistor **R**, if no through wiring for the DMX signal is required. Might change packing ring in cable gland in order to be suitable for single DMX cable



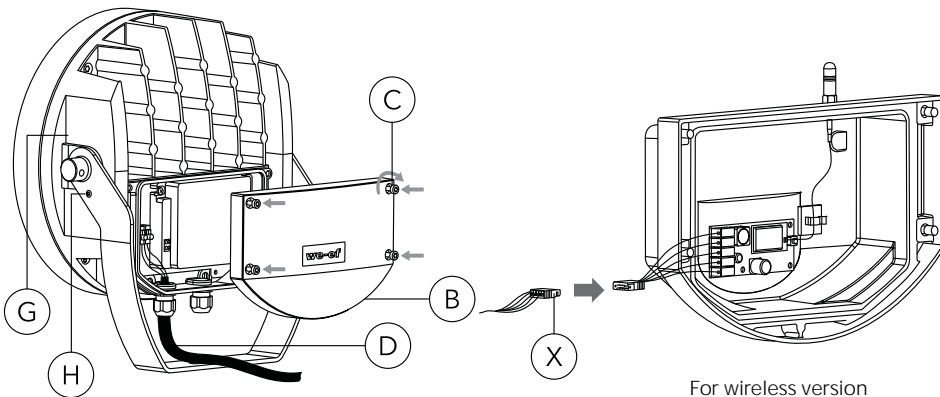
**Maximum gear boxes per DMX bus:** max. 32  
 FLC210-CC  
 each gear box can have max. 4 luminaires

**Maximum luminaires per DMX bus:** max. 32  
 FLC220-CC  
 FLC230-CC  
 FLC240-CC  
 FLC260-CC

If in any case more luminaires are required, the booster box (on request) has to be used.

7) Reposition gear box cover **B** and retighten screws **C**.

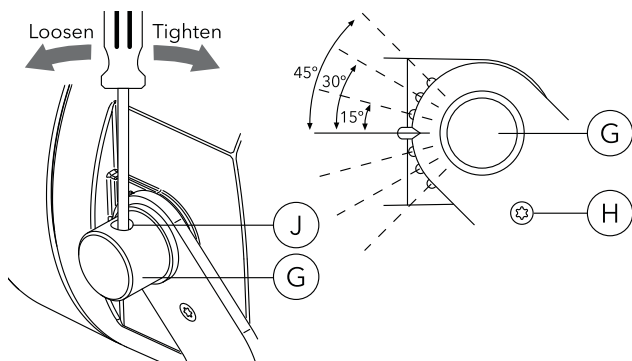
For wireless version: Reconnect connector **X**. Ensure that the connection is tightly snapped into place. When closing the cover, do not jam any cables.



For wireless version

8) Loosen two screws **G** by insert screw driver into hole **J**. Aim luminaire (see illustration), tighten screws **G** firmly (**max. 100 Nm**).

In addition, tighten screw **H** (**max. 6 Nm**) using a Torx T-30 tool (provided by WE-EF) to secure orientation of luminaire (not necessary for FLC210/220).



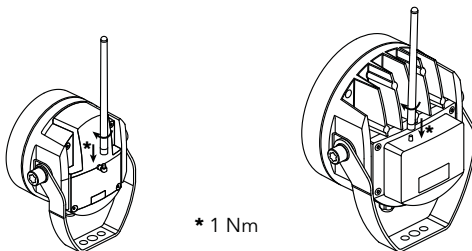
**Torque**

Screw	Torque
M4	max. 2.0 Nm
M5	max. 4.0 Nm
M6	max. 6.0 Nm
M8	max. 15.0 Nm
M10	max. 23.0 Nm
M16	max. 100.0 Nm

**Cable gland Torque**

M16	max. 1.5 Nm
M20	max. 3.0 Nm

9) For wireless DMX solution with 5dB antenna: Attach antenna to luminaire and tighten with **max. 1 Nm**.



\* 1 Nm

For FLC220-CC

For FLC230/240/260-CC

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Technical specifications are  
subject to change.