# THORN

## AquaForce II LED™





## A range of IP65 rated LED luminaires for high quality low energy lighting in wet, dusty environments

- Installation features include quick fix with Connect options, through wiring and BESA box compatibility (600mm spacing)
- Highly efficient LEDs (103 Llm/W) reduce energy consumption and costs, and provide further savings arising from longer maintenance lifecycles (50,000 hours @L70, Ta 25°C)
- Choice of emergency lighting and DALI dimming control
- The traditional design gives an aesthetically pleasing appearance ideal for point for point replacement on refurbishment projects

## **Applications**

- Cold storage
- Industrial plants
- Loading bays
- Warehouses
- Multistory car parks
- Storage areas

## **Lamp Information**

- Lifetime 50,000 hours (@L70, Ta 25°C)
- 6400 Llm (62W), 4300 Llm (42W)
- 103 Llm/W
- Colour temperature 4000K
- CRI 80
- 5 MacAdams



Electrical Quick Fit Connection



Captive stainless steel toggles









## **Energy efficiency**

The example below compares the performance and lifetime cost of 2x58W HF luminaires against AquaForce II LED

## Multistory Car Park: 30m x 20m



This example is an underground car park which uses 2x58W HF luminaires. As part of a refurbishment programme the luminaires are being replaced point for point with AquaForce II LED 6000. The lifetime is over a 10-year period and the car park is used 24-hours a day, 7 days a week

Over the 10-year period there is a 42%energy saving each year.

	Quantity	Luminaire output	Power	Llm/W	Energy consump/yr	Energy saving %	Avg cost saving/yr
Aquaforce II 2x58W HF	16	6900	107	65	2,334 kWh	-	-
Aquaforce II LED 6400 HF L840	16	6400	62	102	1,344 kWh	42	224 EUR

### Investment costs vs. running costs of solution (absolute)



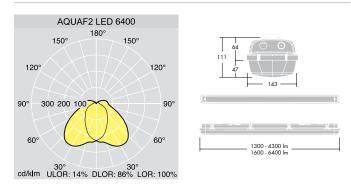
## **Total Cost Amortisation Chart** AquaForce II 2x58W • 9,000 8,000 7,000 6,000 5,000 4.000 3,000 2 000

#### **Dimming with lighting controls**

0.00

In most waterproof applications there is not always a need to operate the luminaires 100% at all times. Users tend to come in and out of the task space so by combing lighting controls with our standard dimming solution you can still provide good light levels as and when required but also maximise any energy saving potential within the space

#### **Overview**



## **Ordering Guide**

## Supplied complete with LEDs

Description	Wt (kg)	SAP Code
AQUAF2 LED 4300 HF L840	2.6	96241869
AQUAF2 LED 4300 HF E3 L840	3.0	96241939
AQUAF2 LED 4300 HFI L840	2.6	96241940
AQUAF2 LED 4300 HF TW L840	2.8	96241941
AQUAF2 LED 4300 HF QF CONNECT L840	2.6	96241870
AQUAF2 LED 6400 HF L840	3.1	96241871
AQUAF2 LED 6400 HF E3 L840	3.5	96241942
AQUAF2 LED 6400 HFI L840	3.1	96241943
AQUAF2 LED 6400 HF TW L840	3.4	96241944
AQUAF2 LED 6400 HF QF CONNECT L840	3.2	96241872
Accessories		
FORCE2 FIX/CH KIT	0.02	96503167
FORCE2 MCA KIT	0.10	96233817
FORCE2 MRS KIT	0.06	96503169

HE High Feauency ЕЗ 3 hour emergency TW Through wired FIX/CH Chain suspension Catenary suspension MRS Rod suspension

### Materials/Finish

Canopy: polycarbonate

Diffuser: polycarbonate with linear prisms

Gasket: expanded polyurethane

Toggles: stainless steel

Gear tray: steel, white enamelled finish

## Installation/Mounting

Cable entry positions at the back and each of the fitting. Supplied with IP65 grommet. Stainless steel quick fix brackets supplied with each luminaire. Stainless steel toggles are captive in the canopy to prevent loss during maintenance. Steel gear tray is retained and suspended by spring latches. Conduit mounting, chain suspension and catenary suspension kits are all available as accessories. Suitable for all indoor plus external under cover only applications.

## **Specification**

To specify state:

High performance LED IP65, dust and moisture proof luminaire with polycarbonate canopy, polycarbonate diffusers and steel toggles, 4300 lumens/6400 lumens options, Ra80, 4000K, long service life of 50,000 hours with 70% light output.

As Thorn Aquaforce II LED

