



High quality, low energy IP65 LED luminaires for wet, dusty environments

- Quick fit connection, through wiring and BESA box compatibility provides complete installation flexibility
- Highly efficient LEDs reduce energy consumption and total running costs
- Long lifetime LEDs reducing annual maintenance costs
- Emergency lighting and DALI dimming options to meet all project requirements and enhance energy savings
- 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



Tamper proof toggles

Standards



Lamps

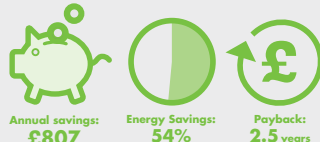


850°C

Energy efficiency

Comparison of 2x58W Switch Start vs. 6400lm LED in a point for point refurbishment of an indoor multistory car park area.

Multistory Car Park: 30m x 20m

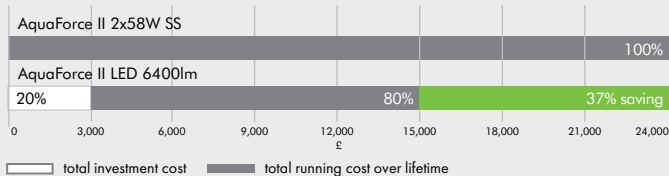


This example is an underground car park which currently uses T8 switch start luminaires. As part of a refurbishment programme the luminaires are being replaced point for point with AquaForce II LED 6400. The lifetime is over a 10-year period and the car park is used between the hours of 7am and 11pm, 7 days a week.

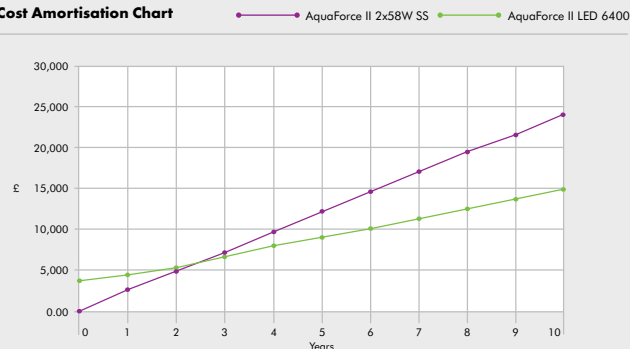
Over the 10-year period there is a 54% energy saving each year.

	Quantity	Luminaire output	Power	Lm/W	Energy consump/yr	Energy saving %	Avg cost saving/yr
Aquaforce II 2x58W SS	16	6900	134	51	12,520kWh	-	-
Aquaforce II LED 6400 HF L840	16	6400	62	103	5,793kWh	54	£807

Investment costs vs. running costs of solution (absolute)



Total Cost Amortisation Chart



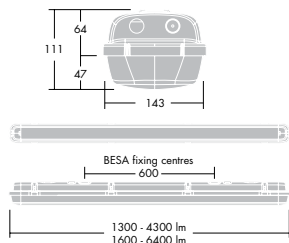
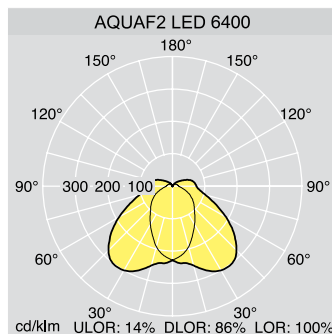
Dimming with lighting controls

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.

Assumptions

- 16hr AquaForce II luminaires installed in each option
- Manual controls -On/Off
- Burning Hours per annum = 7am to 11pm use 7 days a week, 5840hrs

Overview



Ordering Guide

Supplied complete with LEDs

Description	Wt (kg)	SAP Code	Cat No.
AQUAF2 LED 4300 HF L840	2.6	96241869	AQ4300Z
AQUAF2 LED 4300 HF QF CONNECT L840	2.6	96241870	AQ4300ZQF
AQUAF2 LED 4300 HF TW L840	2.8	96241941	AQ4300ZTW
AQUAF2 LED 6400 HF L840	3.1	96241871	AQ6400Z
AQUAF2 LED 6400 HF QF CONNECT L840	3.2	96241872	AQ6400ZQF
AQUAF2 LED 6400 HF TW L840	3.4	96241944	AQ6400ZTW
HF E3 Versions			
AQUAF2 LED 4300 HF E3 L840	3.0	96241939	AQ4300ZE
AQUAF2 LED 6400 HF E3 L840	3.5	96241942	AQ6400ZE
HFI Versions			
AQUAF2 LED 4300 HFI L840	2.6	96241940	AQ4300D
AQUAF2 LED 6400 HFI L840	3.1	96241943	AQ6400D
Accessories			
FORCE2 FIX/CH KIT	0.02	96503167	AQCHS
FORCE2 BESA KIT	0.53	96503168	AQBESA
FORCE2 MRS KIT	0.06	96503169	AQCOND

Luminaire output	Wattage	T8 Equivalent	Energy Saving	Compliance	
				Part L	ECA
4300	42W	2x36W	51%	✓	✓
6400	62W	2x58W	54%	✓	✓

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 end 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

HF	High Frequency
E3	3 hour emergency
TW	Through wired
FIX/CH	Chain suspension
MCA	Catenary suspension
MRS	Rod suspension
QF	Quick Fit connection