# 3.80.1830 SEA-LED Lighting System

SEA-LED
3.80.1813

SEA-LED with
mounting connection

SEA-LED without
mounting connection


SEA-LED Driver
3.80.1816

**Introducing IHC Hytech LED BELL / HABITAT / ROV LIGHTING SYSTEM**

The IHC Hytech SEA-LED 3.80.1830 Lighting system has been designed to use on diving cages, diving bell, habitats, ROV's etc. etc..
It has following advantages on existing submersible lights which use a halogen bulb as light source:

- Lifetime single chip LED source ≥ 20.000 hours against a halogen bulb 1000 hours
- Shockproof
- Low temperature
- Low power consumption - 7 times less than a halogen bulb with the same light output
- Less dependence upon voltage variations and voltage drop due to long cable lengths.
- Cable conductors can be reduced in diameter
- Light colour 5500—6000 °Kelvin (daylight colour)
  A halogen bulb produces light with a colour temperature of ± 3500 °Kelvin, since the red and yellow spectrum shall be absorbed by water first and blue light travels longer distances in water. The red light shall penetrate much more.

**The IHC Hytech Sea-Led 3.80.1830 Lighting system consist of two main components**

1. The LED Driver housing type 3.80.1816
2. The LED light source on SEA-LED type 3.80.1813

# 3.80.1830 SEA-LED Lighting System

### Connecting

The LED driver housing must be connected by a surface power source with a voltage of 110 up to 260 VAC, 50 or 60 cycles.
The driver housing can be fitted with 1, 2 or 3 LED driver electronics.
Also 1, 2 or 3 SEA-LEDs can be connected to the driver housing,
Connection cable with a standard length of 1500 mm are supplied with each SEA-LED.
Longer cables can be ordered as an option. Cable lengths up to 10 meter are possible.
Each SEA-LED light source can be ordered with a single LED chip of 50, 70 or 100 Watt output.

### Technical Specifications

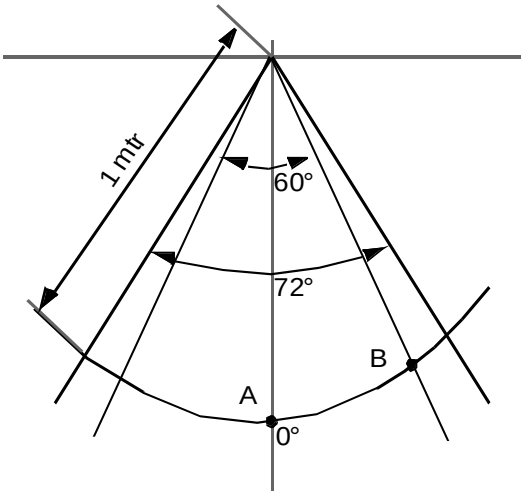
- Depth range up to 1000 msw (up to 4000 on request)
- Power consumption 110-260 VAC, 50/60 cycles, 3.8 Ampere max
- Single LED light source: 50, 70 or 100 Watt fitted with special reflector and collimator lens
- Light angle 72 °
- Light intensity see
- Temperature range –20—+ 50 °C
- Temperature protected by thermal switch 80 °C

### Light Output Measuring Results

- Measured with an Iso-tech 1335 light meter, serial number 090406174.
- Lightsensor with human visual light diffuser (human invisible light spectrum not measured in result).

### SEA-LED 50—70—100 Watt General

- Light output approx. 72° on 2 x 36° from centerline 0°.
- Measured –A- in centerline at 100 cm.
- Measured –B– at 30° angle from centerline
- Light colour—Daylight (5500—6200 °Kelvin)




| Results * | 50 Watt SEA-LED | 70 Watt SEA-LED | 100 Watt SEA-LED |
|---|---|---|---|
| A | 3300 Candela | 5200 Candela | 8200 Candela |
| B | 2100 Candela | 3500 Candela | 5600 Candela |

* = Due to variations in driver electronics and LED output may vary ± 10 %

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