












UL Ti MATE 80- 20W- LED

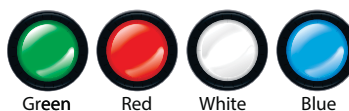
- *The **UL Ti MATE 80-20 LED** is a “Screwed Thru-Hull” underwater light which features all in one driver technology.
- *Never feel trapped by this fixture, the internal LED heat Sink can be easily removed for servicing and upgrades without the hassle of hauling your boat..
- *With 1,400 lumens of light power and it’s 60 degree beam angle, the **UL Ti MATE 80-20 LED** is recommended for GRP/Fiberglass and Wooden hull boats up to 20 meter.
- *The light must be installed below the waterline and the boat must be hauled out for installation.
- *Distance between lights can vary from 1m (transom) to 3 meters (port & starboard) apart for the best illumination.
- *With complete Lloyd’s Register Approval on all components, the **UL Ti MATE 80** has been installed on a large number of smaller boats in the world.

-  **Maintenance**
Inside the hull
-  **Control Option**
On/Off switched
-  **Driver**
Integral
-  **Lens**
Borosilicate Glass
-  **Power**
12-24 vdc
-  **Installation**
Thru- Hull



- Hull Material** 
Fiberglass/Wood
- Boat Size** 
Up to 20m
- Lumens** 
1,400
- Kelvin** 
7,200K
- Beam Angle** 
60 Degree

IPX8
Underwater



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THE UL Ti MATE RANGE IS DESIGNED AND MANUFACTURED BY UNDERWATER LIGHTS LTD IN THE U.K.

Type-80 LED, Date-12-02-2018



UL Ti MATE 80 - 20w

Mounting

Hull Material	GRP / Fiberglass / Wooden
Boat size	up to 20 meter
Spacing	1 up to 3m (Port & Starboard)
Beam Angle	60°+ degree
Installation Angles	Flush

Technical

Lumens	1,400
Kelvin	7,200
Typical LED Life Expectancy	30,000 hrs
Min-Max Operating Voltage	12 - 24V DC
Current / Amp draw	1.6 - 0.8 amps
Driver Type	Integral
Driver Output	N/A
Control Options	On / Off witch

Physical

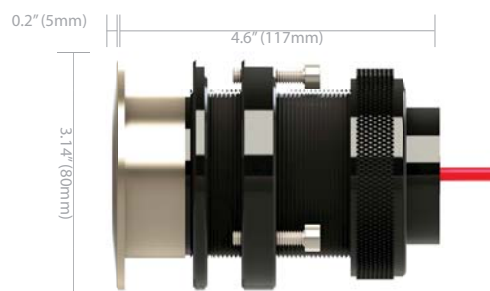
Length of fixture	117mm/4.6"
Diameter of fixture	80mm/3.14"
Profile (height) of fixture	5mm/0.2"
Removal Space Required	160mm/6.5"
Total weight	1kg/2.2 lbs
Cable Length	Custom
Hole Cut-out	61mm/2.5"
Material	5083 Aluminium / Nickel Coated AB2 Bronze
Lens	Borosilicate Glass
Max Hull thickness	65mm

Color

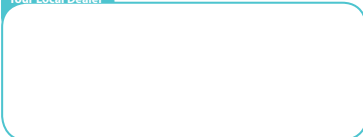
- Green 
- Red 
- White 
- Blue 

Part Number

- S02860G
- S02860R
- S02860W
- S02860B



Your Local Dealer



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The Great Dunton Forge, London Road
Dunton Green, Sevenoaks, Kent TN13 2TD UK
T: +44 (0) 1732 455753 • F: +44 (0) 1732 743233
E: uwl@underwaterlights.com

www.underwaterlights.com

VAT NO: 556 4425 31

Registered in England No: 2348038

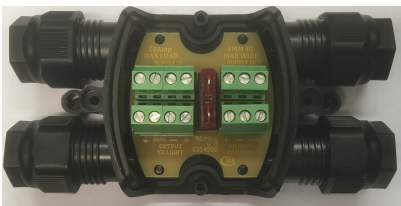
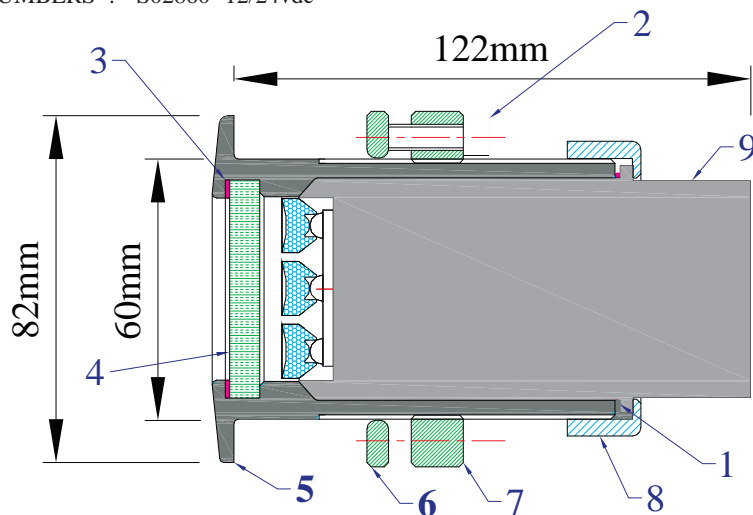
UL Ti MATE

80-20W LED- INSTALL

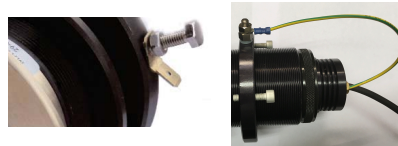
- **UL Ti MATE 80 Installation (Maximum hull thickness of 65mm) and Operation.**
- Qualified/Approved personnel must be used to carry out installation.
- Before cutting a hole in the hull, check the hull wall thickness is not greater than 65mm and that the location of the holes are below the waterline. After cutting and finishing the hole surface, check the 'body'(5) can be inserted into the 60mm diameter hole. You are now ready for installation.
- Note for cored hulls - After cutting, the exposed surfaces of the hole must be finished to form a solid surface through it. Thus protecting the internal core of the hull. The wall thickness of the hole should not to less than 5mm-0.25inch. Apply 3M-4200FC sealant to the 'body' (5) flange. Slide the body into the hole and from inside the hull put the 'compensating ring' (6) on and screw the 'securing ring' (7) up hand tight. Gently tighten the adjustment adjustment screws (2) so the compensating ring is flush to the hull and the sealant has flowed completely around the flange and hull. Do **NOT** overtighten the screws as this will squeeze the sealant from the surfaces. Allow the sealant to solidify and remove surplus. Finally tighten the bolts to 4Nm. / 3ft. lbs. Fit the lamp and assemble the remaining parts to the UL Ti MATE 80. Lightly grease the 'O' ring and gasket.
- **Cautionary Label-"Caution: do not operate lights unless totally submerged" must be located by the main switch.**
- After completing the installation procedure it is highly recommended to coat the face of the 'through-hull' submersible marine light with antifouling and bond them to the anodes or a cathodic protection system.
- **EARTHING LIGHT FOR CATHODIC PROTECTION-tighten the earth screw on the securing ring so that it bites into the screwed barrel. Check there is continuity to the front face. Connect the exposed green cable on the light to the earth screw on the securing ring. Further wiring instructions can seen on-
ULTIMATE 80-20W LED WIRING**
- **Power Supply and CONNECTION**
20 Watt **12 Volt** LED unit requires 1.60 Amps - 20 Watt 24 Volt LED unit requires 0.80 Amps
- **Ensure the the polarity of the positive and the negative is correct so that the integral driver is not damaged**

ORDERING NUMBERS : -S02860- 12/24vdc

Part Description	Part No
1. 'O' Ring (50mm dia)	02008
2. Adjustment screws	93306
3. Gasket	02009
4. Glass lens	02010
5. Ultimate 80 Body	S02650
6. Compensating Ring	02602-A
7. Securing Ring	02603
8. LED tube	S02605-LED
9: Lamp holder securing ring	02608-B



TWO WAY FUSED ENCLOSURE



EARTH SCREW AND CABLE



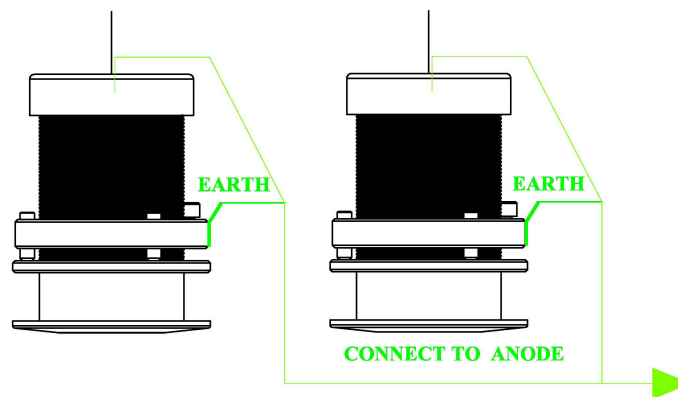
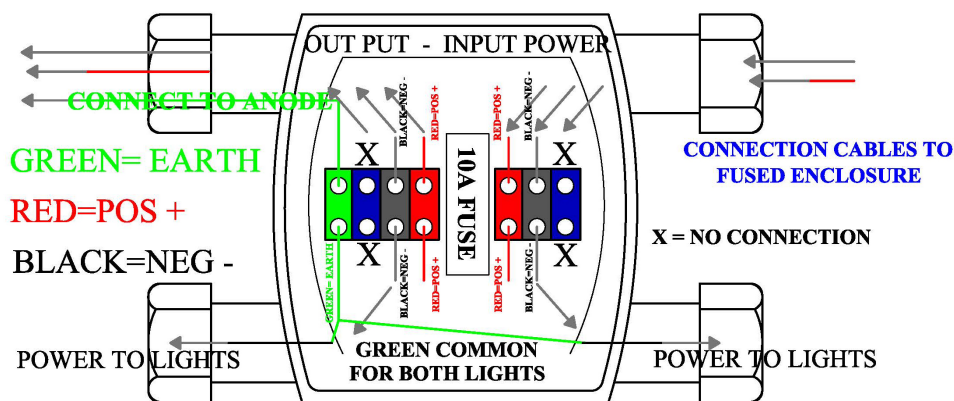
UL Ti MATE 80-20W LED- WIRING

*ULTi MATE 80 CABLE CONNECTION

Below is a wiring installation the BLUE connection terminal (Data Connection) is not used.

The light comes with a three core cable Red=Positive, Black Negative and Green for connecting to the ANODE through the two way fused connection enclosure. There is also an exposed green cable which must be connected to the earth on the securing ring. Note the green cables are connected together in the enclosure as shown on diagram below.

Using this system it is possible to use one light which is connected from the earth on the securing ring to the ANODE to earth all lights. To use the earth output connection in the enclosure connect a single core cable from enclosure to the ANODE and this will connect the lights to the ANODE



*The picture below shows a very important procedure in checking that the light is connected to the insert.

*Using an OHM meter, connect the light bezel to the anode. The ohm value should be less than 1 ohm.

