



# Technical Manual for the Steady Light – FB15UL

Please note that every care has been taken to ensure the accuracy of our technical manual. We do not, however, accept responsibility for damage, loss or expense resulting from any error or omission. We reserve the right to make alterations in line with technical advances and industry standards.

## 1. **INTRODUCTION**

These certified steady lights have been designed for use in potentially explosive atmospheres and harsh environmental conditions. The glass reinforced polyester enclosures are suitable for use offshore or onshore, where light weight combined with corrosion resistance is required.

The housing is manufactured completely from a U.V. stable, glass reinforced polyester. Stainless steel screws and mounting bracket are incorporated ensuring a totally corrosion free product.

Units can be painted to customer specification and supplied with identification labels.

## 2. **INSTALLATION**

### **General**

When installing and operating explosion-protected equipment, requirements for selection, installation and operation should be referred to eg. IEE Wiring Regulations and the 'National Electrical Code' in North America. Additional national and/or local requirements may apply.

Ensure that all nuts, bolts and fixings are secure.

Ensure that only the correct listed or certified stopping plugs are used to blank off unused gland entry points and that the NEMA/IP rating of the unit is maintained.

### **Mounting**

#### Direct mounted version

The unit can either be directly mounted using inserts moulded into the back of the enclosure (standard) or a backstrap (optional) can be fixed to the unit giving an optional mounting position for when direct mounting is deemed suitable.

MEDC recommend the use of stainless steel screws.

Direct mounting: M5 (13/64")\*

Backstrap mounting: M8 (5/16")

\*Please note: For direct mounting, please observe the following formula to determine length of fixing screw required:-

Length of screw = Thickness of mounting surface + 25/64" (10mm)

#### Pole mounted version

The unit can be mounted to a 1/2" or 3/4" pipe and may be mounted in any position. To mount the unit, thread fully onto conduit and secure with the grub screw provided.

### **Cable Termination**

**CAUTION: Before removing the cover assembly, ensure that the power to the unit is isolated.**

Unscrew the grub screw in the flange of the cover. Unscrew and remove the cover and lens assembly using the spanner supplied to gain access to the inside of the unit. Unscrew the 2 off plastic thumbscrews and carefully lift the bulb holder assembly clear of the mounting pillars to gain access to the terminals.

Cable termination should be in accordance with specifications applying to the required application. MEDC recommends that all cables and cores should be correctly identified. Please refer to the wiring diagram provided with the product. Ensure that only the correct listed or certified cable glands are used and that the assembly is shrouded and correctly earthed.

All cable glands should be of an equivalent NEMA/IP rating to that of the strobe and integrated with the unit such that this rating is maintained.

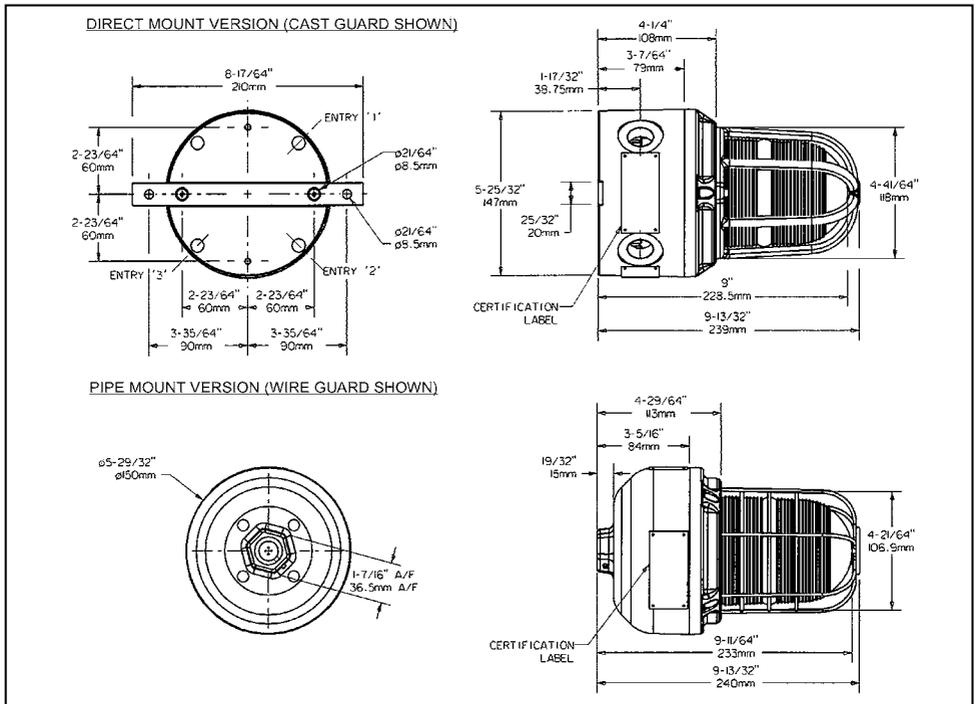
The internal earth terminal, where fitted, must be used for the equipment grounding connection and the external terminal is for a supplementary bonding connection where local codes or authorities permit or require such a connection.

Once termination is complete, replace the bulb holder assembly onto the mounting pillars and fully tighten the thumbscrews. Take care not to over tighten. Replace the cover assembly, ensuring the cover is screwed down fully. There should be a maximum gap of  $1/128"$  (0.2mm) between the faces of the cover and enclosure to ensure o-ring compression. Ensure the cover seal is correctly seated in it's groove during re-assembly. Re-tighten the grub screw in the cover flange to secure the cover.

### 3. OPERATION

The operating voltage of the unit is stated on the unit label.

The unit can be powered directly only.



#### **4. MAINTENANCE**

During the working life of the unit, it should require little or no maintenance. However, if abnormal or unusual environmental conditions occur due to plant damage or accident etc., then visual inspection is recommended.

If a unit fault should occur, then the unit can be repaired by MEDC. All parts of the unit are replaceable.

If you acquired a significant quantity of units, then it is recommended that spares are also made available. Please discuss your requirements with the Technical Sales Engineers at MEDC.

#### **5. CERTIFICATION/APPROVALS**

Please refer to marking on the unit for specific approval details.

UL listed for use in USA (USL) and Canada (CNL)	Class I, Div. 2, groups A, B, C & D. Class I, Zone 1, AExd IIC; Exd IIC.
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UL standards	UL 1638 – Ordinary locations UL 50, UL 60079-0, UL 60079-1 CSA-C22.2 No. 205, CSA E60079-0, CSA E60079-1.
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#### **6. CERTIFIED TEMPERATURE**

For a 60W bulb:

T3 – (-55°C to +70°C)  
(-67°F to +158°F)

T4 – (-55°C to +55°C)  
(-67°F to +131°F)

For a 100W bulb:

T3 – (-55°C to +40°C)  
(-67°F to +104°F)