

1.0 Purpose

This Manual is intended to provide descriptive information of the Model CFX-II Marine Lifejacket Light, operating instructions, information for its maintenance and overhaul, instruction concerning the proper mounting of the light on lifejackets to ensure compliance with minimum performance standards, and limitations for the device.

2.0 Description of Device

The Model CFX-II Marine Lifejacket Light consists of a battery assembly and a light assembly, connected by an electrical wire.

The battery consists of two CR123A primary Lithium Manganese Dioxide cells, in an injection-molded plastic housing. Each housing contains two windows that allow water to wet the contacts of an electronic circuit. The electronic circuit detects water and activates the light. The battery has a switch rod that can be moved in two positions. Upper position "AUTO" allows automatic activation of light upon immersion the battery to water. Lower position "OFF" deactivates the light.

The light assembly consists of a miniature incandescent lamp mounted in a plastic bulb holder and covered by a frosted acrylic lens.

3.0 Operating Instructions

Make sure that the switch rod is in upper position "AUTO", if not – move it up to operate. The battery of the CFX-II is activated automatically in less than one minute following immersion of the battery in fresh water or seawater, and the light will light automatically.

4.0 Maintenance and Overhaul Information

1. No maintenance is required.
2. Periodic overhaul is not required. Overhaul at end of life is not possible. Defective units must be returned to the manufacturer or otherwise disposed of.
3. Inspection of Light assembly.
 - a. Electrical Test of battery and lamp:
 - i. Make sure that the switch rod is in upper position "AUTO".
 - ii. Create an electrical short between the exposed electrical contacts.
 - iii. Check that the lamp lights up and starts flashing. An inoperative light should be rejected.

- b. Visual Inspection:
 - i. Replace lifejacket light if the battery housing shows obvious signs of mechanical damage (e.g., cracking or discoloration of the plastic, bulging at one end of the case, etc.).
 - ii. Make sure that both contacts in the battery windows (the water sensors) are clean.

5.0 Instructions for Mounting on Lifejackets.

Some recommended methods for mounting the CFX-II on life vests are:

1. Attach the light assembly to the lifejacket on the top or front of the shoulder.

One may use a Velcro patch or tie wrap, or sew the light assembly to the life jacket, attaching at any four of the eight holes provided in the lower ring of the plastic bulb holder.

2. Attach the battery low on the lifejacket, in an area that will be submerged when worn in water.

One may attach the battery firmly to a strap using a plastic clip bracket provided (upon ordering) with the CFX-II (see page 4). Feed the strap along the back of battery and fasten the bracket to the battery by pushing the clip's four plastic hooks through the corresponding holes on the battery housing. The plastic spikes should face inwards, holding the strap firmly in place.

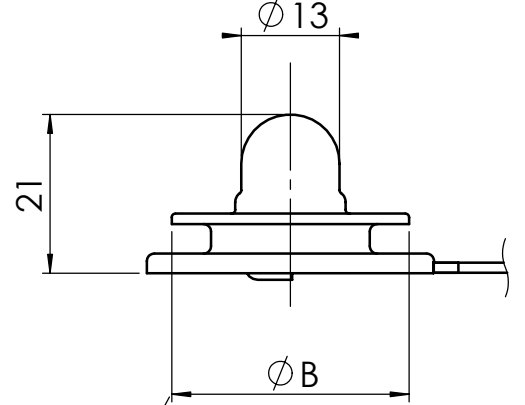
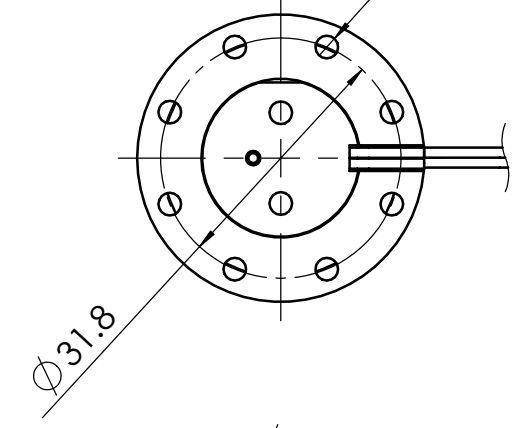
Alternatively, one may attach the battery firmly to a strap or fabric with tie wraps, or by attaching firmly with adhesive strip. The battery may also be sewn to the jacket, attaching through the holes provided for the clip bracket.

6.0 Limitations of the Device.

1. The device is designed to provide flashes of light at a rate of approximately 53 flashes per minute with an effective luminous intensity of at least 0.75 candlepower (Cd) in all directions of the upper hemisphere of the lens, as required under IMO SOLAS regulations, for a minimum of eight (8) hours after activation.
2. Once activated by immersion in water or any other conductive liquid, even if subsequently removed and dried, the device should not be used again as a safety appliance under any marine safety regulation.
3. The device is limited to a service life of five (5) years from the date of manufacture. Until then, it is considered usable as a safety appliance, under IMO SOLAS regulations, if the battery does not show signs of mechanical damage and the light bulb is operative.
4. Storage: Avoid extreme humidity and temperatures.

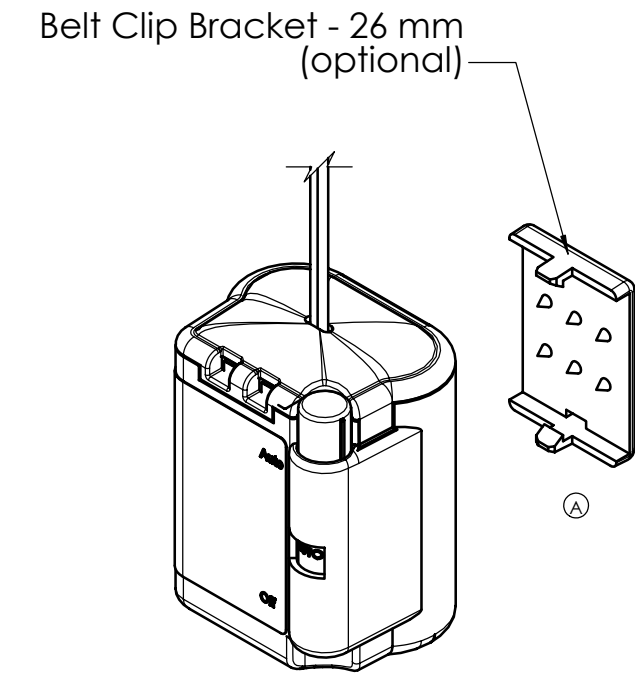
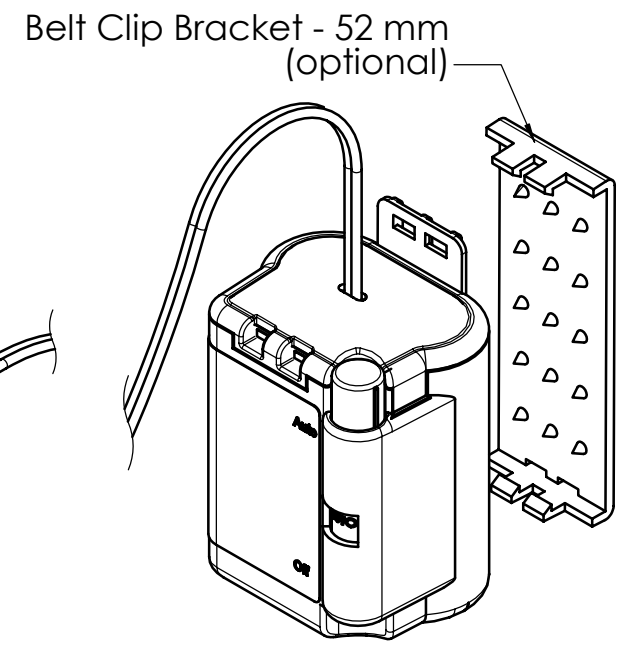
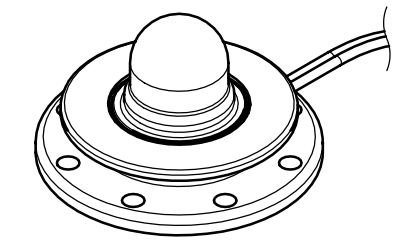
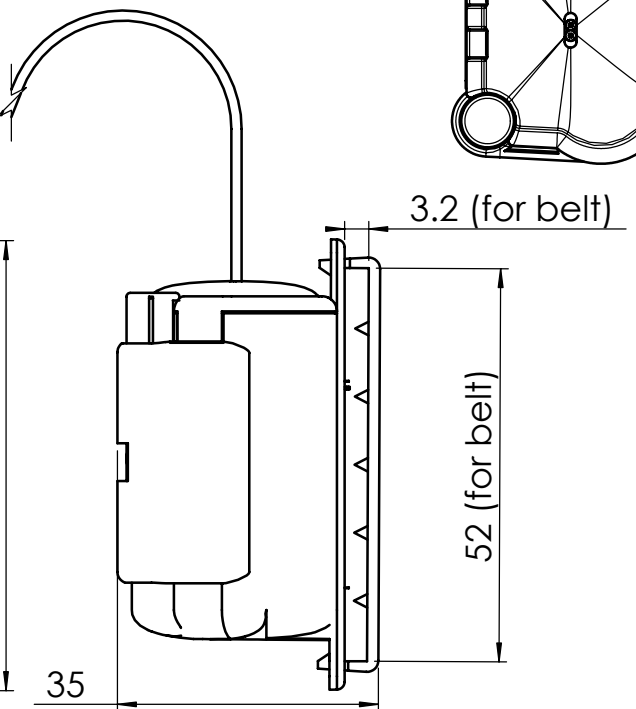
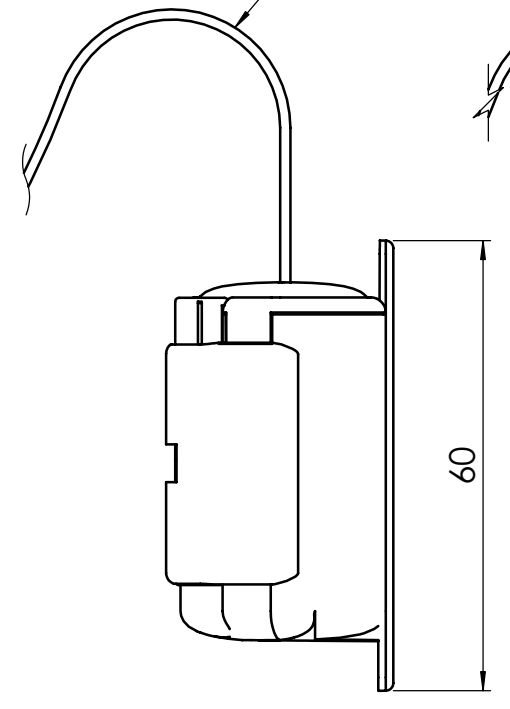
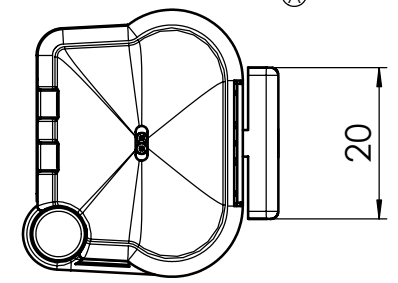
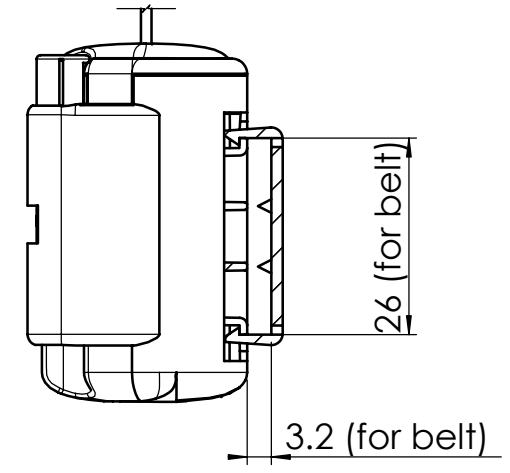
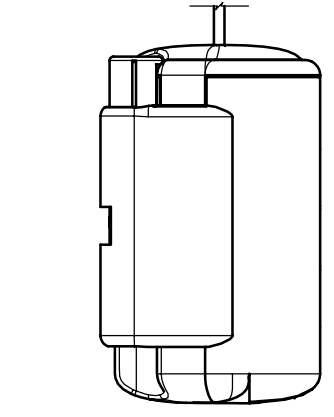
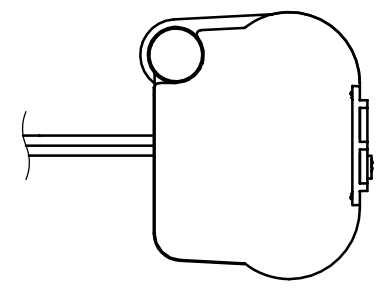
REV.	SH.	DESCRIPTION	DATE	ECO. NO.	APPR.
0		Document release	03.12.03	009-WAB-03	A.G.
A		New Clip option released	27.06.04	013-WAB-04	A.G.

8x $\varnothing 3$ THRU



Flange diameter - $\varnothing B$, mm
31.4
29.4

Wire Length - L, inch
18"
11"

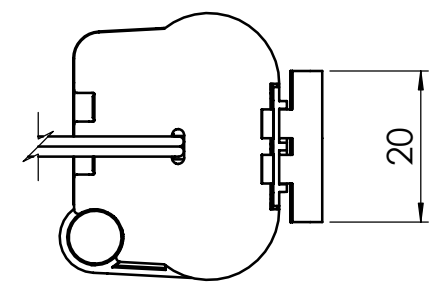
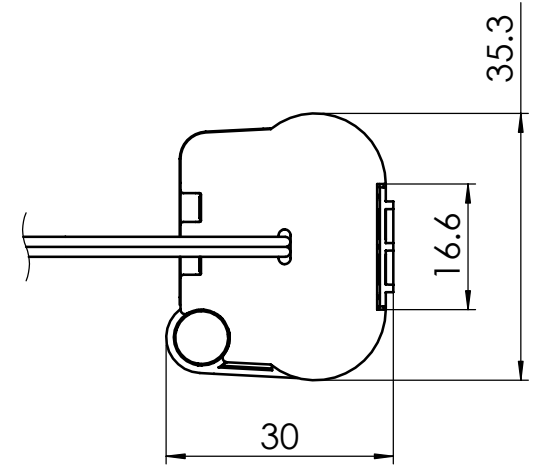
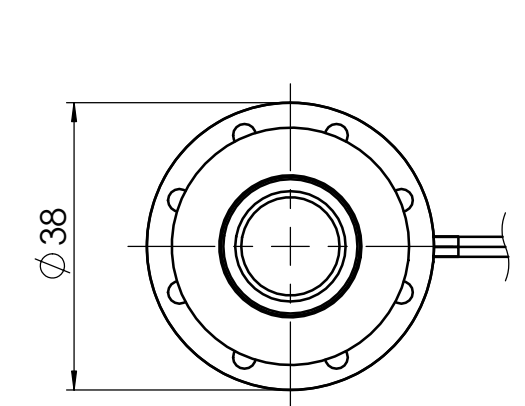


Isometric Views

MASTER DRAWING
DATE 27.06.04
SIGNATURE A.G.

Notes:

- All dimensions are for reference.
- Define the wire length (L), Flange Diameter ($\varnothing B$), Belt Clip Bracket type and its availability upon each order.



SCALE	DIMENSIONS IN	WEIGHT	NAME	SIGNATURE	DATE	Electric Fuel ®	
1:1	mm	0.07	DSND. Alex Gutkin	A.G.	03.12.03	Industrial Zone (west), P.O. Box 641, Bet Shemesh 99000, Israel Tel: (972)-2-990-6666 Fax: (972)-2-999-1013	
			CHKD. Y. Shrim	Y.S.	04.12.03	DRAWING NAME CFX-II. General Drawing.	
			APPR. N. Naimer	N.N.	04.12.03	DOC. TYPE	DOCUMENT NO.
			Q.A. M. Kalderon	M.K.	04.12.03	DW	101 673
GEN. TOLERANCE ± 0.5						SHEET 1 OF 1	
						REVISION A	
						A3	

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