



POINT FLASHING BEACON

PFB LED

FAA L-864

ICAO TYPES B & C

Compliances:

- ETL Listed to UL 1598 US
- ETL Listed to CSA C22.2 No.250.0-04 Canada
- ETL Listed to UL 1598A Marine Vessels
- ETL Verified FAA L-864 to FAA Advisory Circular 150/5345-43G
- Registered ISO 9001:2008
- Compliance to ICAO Annex 14 Medium Intensity Types B & C
- Compliance to UK CAP 168 Medium Intensity & Low Intensity (Group B)
- Army TM 5-811-5, para. 7-5.c. Hazard Beacon
- American Bureau of Shipping (ABS) Type Approved Product

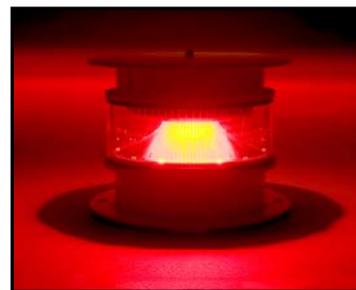


The PFB LED red medium intensity flashing beacon is specified for use on aviation obstructions. All castings are aluminum, all hardware is stainless steel and the lens is glass. There is no plastic. All exterior metal beacon parts are powdercoat painted aviation yellow for corrosion resistance that meets the US Military Standard Salt Fog Test conducted per MIL-STD-810F, Method 509.4, Procedure I.

Point Type	Color	Voltage	Options & Accessories
PFB-37001	R: Red C: Clear/White G: Green Y: Yellow	1: 120 volts ±20% 2: 220 volts ±20% 3: 12 VDC 4: 24 VDC 5: 48 VDC	SEE TABLES ON PAGE 2 & 3

FEATURES

- Flasher failure alarm; beacon remains ON
- LED array failure alarm
- Over voltage & over current protection
- Short circuit & open circuit protection
- Metal oxide varistor surge protection
- No external plastic parts
- Modular components for servicing
- Replaceable LED array sections (5)



Intensity: 2,000 candelas as defined in FAA Advisory Circular 150/5345-43G

Wattage: 67.0 watts AC
79.6 watts at 12V DC
56.3 watts at 24V DC

Volt-Amps: 110.4 VA at 120V AC

Input Range: 93 to 144 volts 120V AC
176 to 264 volts 220V AC
10.8 to 13.2 volts 12V DC
21.6 to 26.4 volts 24V DC

Temp Rating: ± 55° C per FAA certification test

Dimensions: 15 (381) x 15 (381) x 12 (304) H
Inches (mm)

Weight:: 41 lbs 18.6 kg

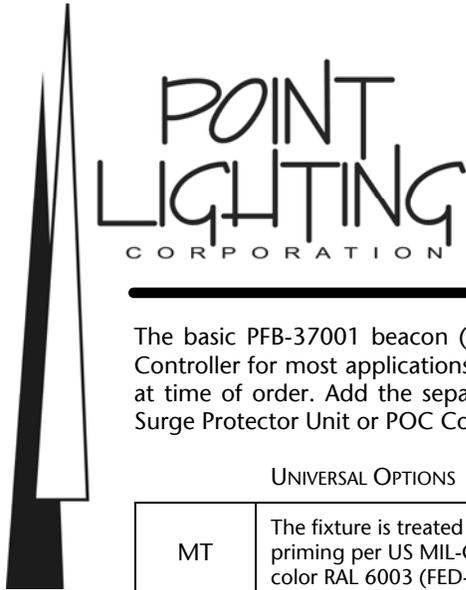
Mounting: 4 Holes on 13.25-inch circle

PFB-37001-R-1

PATENT PENDING
2011/0121734 A1



OL-2.1.5 August, 2013



POINT FLASHING BEACON

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The basic PFB-37001 beacon (PATENT PENDING) catalog number is intended for use with a Point POC Controller for most applications. Other configuration options below are available to be factory installed at time of order. Add the separate FAA Photoelectric Controller to all systems. Add the separate SPU Surge Protector Unit or POC Controller as required by the system.

UNIVERSAL OPTIONS

MT	The fixture is treated for marine conditions by cleaning per US MIL method III of TT-C-490, chromate priming per US MIL-C-5541, epoxy powder base coat and glossy polyester powdercoat finish coat in color RAL 6003 (FED-STD-595 color #14097) green. Oven cured per US MIL-PRF-24712A.
GPS	Control unit & antenna for GPS synchronization of flashing multiple beacons.

BACKUP OPTIONS

SB	Standby Beacon: add this option to the 2 nd beacon to operate upon failure of the primary beacon. This standby beacon & the primary beacon will be stacked and interconnected.
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ICAO OPTIONS

	The basic beacon is FAA L-864 style. Specifically, failure of any FAA LED array results in all arrays turning OFF; partial failure results in no light output. The options below are ICAO (international) versions; if one array fails, an alarm is generated and the beacon remains ON.
B	ICAO Medium Intensity Type B (flashing)
C	ICAO Medium Intensity Type C (steady-burning) and UK CAP 168 Medium Intensity Obstacle
D	UK CAP 168 Low Intensity (Group B) (steady-burning) Table 6A.1 & CAP 437 paragraph 4.4
	OPTIONS CONTINUE ON PAGE 3

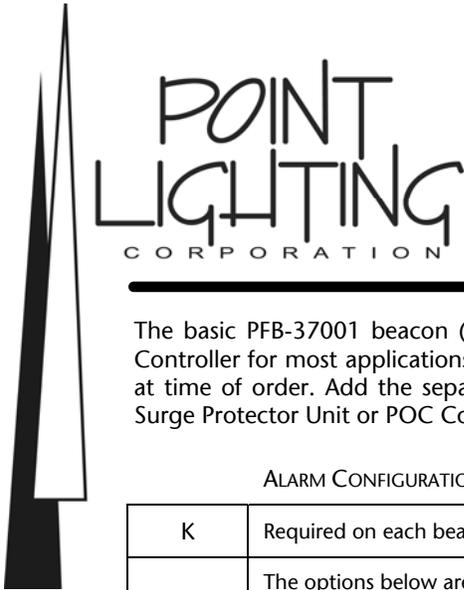
PFB BEACON WITH TRANSFER TO
STANDBY BEACON UPON FAILURE

PRIMARY PFB BEACON
PFB-37001-R-1

ASSEMBLED WITH

STANDBY PFB BEACON
PFB-37001-R-1-SB





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ALARM CONFIGURATION OPTIONS

K	Required on each beacon when installed with any POC-68001 series digital controller.
	The options below are required when the beacon is installed <u>without a POC controller</u> . One of the SA options is required for a single beacon installed without a controller. The MA options are required for two or more synchronized beacons installed without a controller. For more than four (4) beacons, a POC controller is required.
SA1	Single beacon with internal flasher & non-isolated alarm line powered by the line voltage
SA2	Single beacon with internal flasher & voltage free alarm line to be powered by a remote AC or DC source supplied by others (isolated alarm line)
MA1M	Master beacon to be synchronized with one or more secondary beacons with internal flasher & non-isolated alarm line powered by the line voltage; one master beacon per system.
MA1S	Secondary beacon synchronized by the above master beacon with internal flasher & non-isolated alarm line powered by the line voltage; 1 to 3 secondary beacons per system.

RECOMMENDED OR REQUIRED ACCESSORIES

SPU	Each beacon contains limited surge protection. All POC controllers include circuit level surge protection. For systems without a POC, an SPU Surge Protector Unit is strongly recommended: SPU-10770-x x = 1 for 120v x = 2 for 220v Separately ordered and separately installed in the line feeding power to the beacons.
POC	See file OL300POC for a POC-68001 series system controller with touch screen option.
PPC	One FAA Photoelectric Controller is required per system. Separately ordered and separately mounted. PPC-40002-34T For AC systems with a POC Controller PPC-40002-34T-OS For 120v systems without a POC; includes override switch Option -P For wind turbine applications

SPU SURGE PROTECTOR
SEE HL-4.1.5 FOR DETAILS

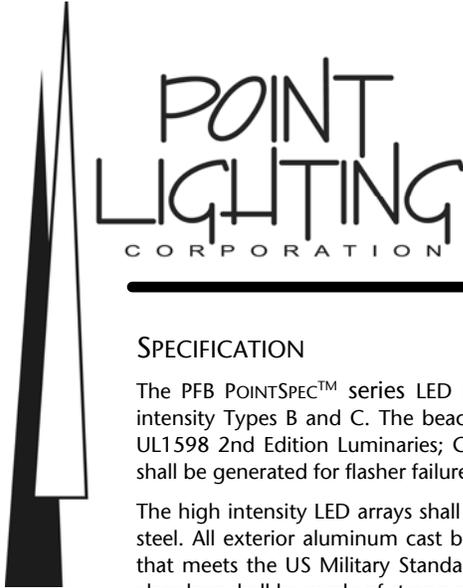


POC-68001 SYSTEM CONTROLLER
WITH OPTIONAL TOUCHSCREEN



FAA PHOTOELECTRIC
CONTROLLER
PPC-40002-34T-OS
INCLUDES OVERRIDE SWITCH





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SPECIFICATION

The PFB POINTSPEC™ series LED red beacon (PATENT PENDING) shall comply with FAA L-864 and ICAO medium intensity Types B and C. The beacon shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels, UL1598 2nd Edition Luminaries; CSA C22.2 No. 250.0-04, 2nd Edition. Sealed to IP66 ingress protection. Alarms shall be generated for flasher failure, LED array failure, over voltage, over current, short circuit and open circuit.

The high intensity LED arrays shall be replaceable and fitted with plug-in connectors. All hardware shall be stainless steel. All exterior aluminum cast beacon parts shall be powdercoat painted aviation yellow for corrosion resistance that meets the US Military Standard Salt Fog Test conducted per MIL-STD-810F, Method 509.4, Procedure I. The clear lens shall be made of strong soda-lime glass manufactured by Kopp Glass. There shall be no plastics used in the structural construction of the beacon.

OPTIONAL PL40139 HEAT SHIELD

The beacon heat limit is 55-deg C. Installation in higher temperature locations is not warrantied.

The heat shield shall be installed suspended in the air space between the heat source and the beacon. The heat shield shall be fabricated of a rigid alumina fiber matrix that shall remain stable for continuous use at temperatures up to 3128-deg F (1720-deg C). The material shall not be affected by oil or water and shall be resistant to chemicals. Note: Do not use in the presence of hydrofluoric acid, phosphoric acid & very strong alkalis. The heat shield shall be 24-inches wide by 36-inches high. The shield should to be oriented as required to maximize protection.

See OL-8.3.0 for Heat Shield drawing

The PL40139 Heat Shield shall limit transmission of heat in accordance with these tested temperatures:

STACK FACE	BEACON FACE
800	252 F
1200	343 F
1600 F	429 F

These temperatures are surface measurements on opposite faces of the PL40139 Heat Shield. It is expected that the air spaces between the stack skin and the shield and between the shield and the beacon will further limit the heat transmission.

PFB BEACON WITH GPS
& WIND TURBINE BRACKET
PFB-37001-R-1-GPS WITH PL10902





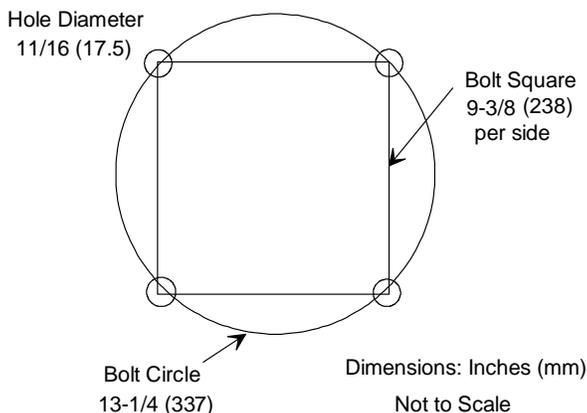
POINT FLASHING BEACON PFB LED FAA L-864 ICAO TYPES B & C

SPARE PARTS & SERVICE

Do not open the beacon unless there has been an in-service failure. Opening the beacon before installation voids the warranty. See the instruction manual for troubleshooting procedures. All service must be performed inside a maintenance facility under clean and dry conditions.

See the instruction manual for a list of field serviceable parts. Contact Point Lighting for return repair service instructions. Do not attempt any testing or repair procedure not stated in the manual.

Beacon Mounting Pattern



BEACON CABLE PIGTAIL

Length: Two (2) meters
Type: SOOW 600-volt
Wires: Six (6) each #16 AWG

TYPICAL SYSTEM WIRING

Power (3): Line-Neutral-Ground
Typically #12 AWG
From POC or SPU
Alarm (1+): One (1) alarm line per PFB
Typically #16 AWG
Data (2): One (1) flash synchronization
One (1) Return
Typically #16 AWG

See Manual for specific wiring schemes

PRESET TORQUE TOOL PL10872

For Sealing Nut to reassemble PFB



REPLACEMENT PARTS

PL10754	Lens, Outer Clear	PL10807	Gasket, Lens Upper
PL10818	Sealing Nut (see tool PL10872)	PL10806	Gasket, Lens Lower
PL10834-x	LED Array Section	PL10825	Motherboard
PL10824A	Power Supply LED	PL10821	Surge Protector AC
PL10808	Power Supply AC-DC	PL10823	Surge Protector DC

See Instruction Manual for parts specific to the version installed at specific location.

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