



POINT FLASHING BEACON PFB-AX LED ATEX-IECEX ZONE 1 & 2 MEDIUM INTENSITY RED BEACONS

Compliances: IECEx Listed: Ex db eb op is IIB T6 Gb Ta -40 to +55-deg C, IP66 & IP67
 ATEX Listed: II 2 G Ex db eb op is IIB T6 Gb Ta -40 to +55-deg C, IP66 & IP67
 ETL Verified FAA L-864 to FAA Advisory Circular 150/5345-43H
 Compliance to ICAO Annex 14 Medium Intensity Types B & C
 Compliance to Transport Canada CL864
 Compliance to UK CAP 168 Medium Intensity & Low Intensity (Group B)
 Registered ISO 9001:2015
 American Bureau of Shipping (ABS) Type Approved Product

The PFB-AX red medium intensity LED flashing beacons are specified for use on aviation obstructions.

- The castings are copper-free (< 0.25%) aluminum.
- The hardware is 316 (A4) stainless steel.
- Isolated wiring compartment.
- Standard with the exclusive Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. See page 5.
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".
- The lens is glass.
- The LED's are rated for 100,000 hours.
- IP66 & IP67 tested and listed.

Point Type	Color	Voltage	Class	Standard & Options
PFB-37002	R: Red	1: AC 96 to 264V 3: DC 10.8 to 26.4V 5: DC 43.2 to 52.8V	AX: ATEX IECEX zones 1 & 2	SEE TABLE ON PAGE 2

Wattage:	41.7 watts	AC Peak at 120V
	44.0 watts	AC Peak at 220V
	7.0 watts	AC Average F4-B-T4
	33.0 watts	AC Average C
Volt-Amps:	66.0 VA	AC Peak at 120V
	73.0 VA	AC Peak at 220V
Dimensions:	Length:	11.1 (282)
	Width:	12.9 (327)
	Height:	9.8 (249)
Weight:	25.0 lbs	11.3 kg
Mounting:	4 Holes on a 12.5 (318) circle Inches (mm)	

PFB-37002-R-1-AX-B-MT
 ICAO MEDIUM INTENSITY TYPE B RED BEACON
 STANDALONE WITH GREEN MARINE TREATMENT
 NOTE: STANDARD FINISH IS YELLOW MARINE TREATMENT



ATEX Certificate Number: CML 17ATEX1250X
 IECEx Certificate Number: IECEx CML 17.0141X



STANDARDS & OPTIONS

F4	FAA L-864 red flashing medium intensity beacon
B	ICAO Type B red flashing medium intensity beacon
C	ICAO Type C red steady medium intensity beacon
T4	Transport Canada CL864 red flashing beacon
DL	UK CAA CAP 168 steady low intensity Group B
DM	UK CAA CAP 168 steady medium intensity beacon
NC	NVG Compatibility for night vision
MT	Green Marine Treatment finish in place of the standard yellow Marine Treatment
-Fxxx	Custom Flash Rate in flashes per minute
-Cxxx	Custom versions as assigned by Point Lighting Corporation

CONTROL & ALARMING OPTIONS

Note: Every beacon without one of these control options has line voltage powered alarm conductor.	
K	Required on every beacon connected to any POC-68xxx series digital controller.
SA2	Voltage Free (dry) Alarm Contact (alarm line is powered by an external source by others)
The MA options are required for two or three PFB-AX beacons to be synchronized without a controller. For four (4) or more PFB-AX beacons, a POC controller is required.	
MA1M	Master PFB-AX 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 PFB-AX beacon synchronized by the above master beacon with internal flasher & non-isolated alarm line powered by the line voltage; 1 or 2 secondary beacons per system.

ENTRY THREADED HUB OPTIONS

Standard with one ¾-inch NPT Hub	
10B	1-Inch NPT
M20	Metric M20 x 1.5mm
M25	Metric M25 x 1.5mm

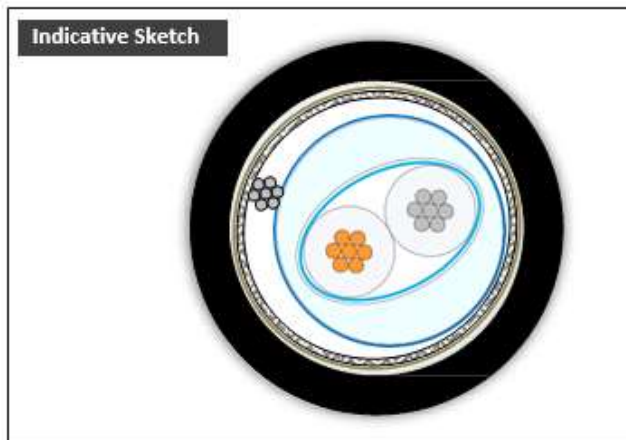
Options continue on page 3

Note: The basic PFB-AX beacon catalog number is intended for use with a Point POC Controller for most applications. Other configuration options above are available to be factory installed at time of order. Add the separate FAA Photoelectric Controller to all systems. Add the POC Controller as required by the system. Touchscreen is optional for safe area POC controllers.

POINTUSA® Data Cable PL10836 is REQUIRED

The data cable is used as one (1) run from the POC controller to the first beacon flashhead's (FH) power supply (PS) and then to each successive beacon PS in turn ("daisy-chain") that terminates at the last numbered beacon PS with the PL11266 Terminating Resistor installed. The beacons are numbered in sequence and MUST be installed on the data cable in that sequence. This allows the POC system controller to identify and monitor each beacon and synchronize the flashing of the system.

The data cable is a data bus and may be routed as required with the numbered beacons connected at any point. Each beacon is tagged and labeled with a location address number and the beacons must be connected to the data cable run in that numerical order.



CULUS
Homologation UL AWM Style: 2661

CE Accordance to Directives:
2014/35/UE; 2011/65/CE; 2015/863/UE

UKCA Accordance to Directives:
Electrical Equipment (Safety) Regulations 2016
The Restriction of the Use of Certain Hazardous Substances in
Electrical and Electronic Equipment Regulations 2012.

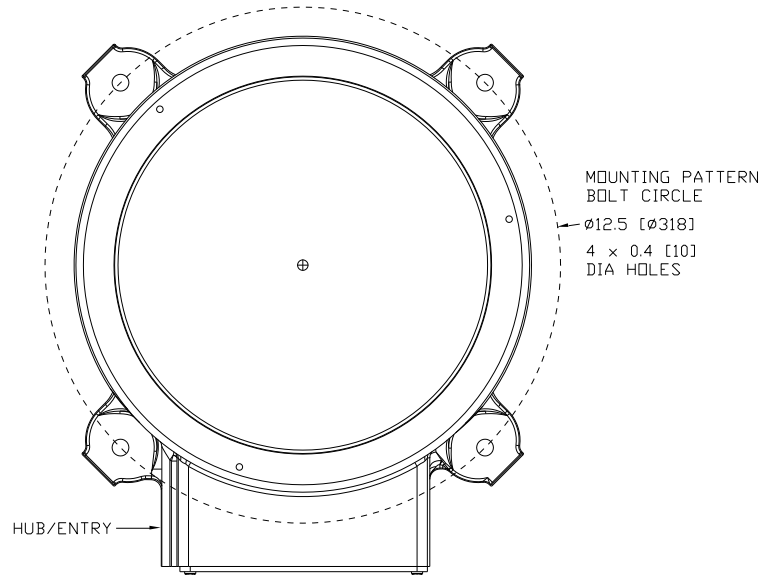
RoHS

- Conductors:** Stranded bare copper wire; Nom. 0.56mm² - 2 x AWG20; nominal diameter 1mm.
Lay agree with UL 758 tab 5.9; conforms to EN 13602 - ETP1, DIN 40500 E-Cu 58.
- Insulation:** Polyolefin compound; Nominal diameter 2.05mm
- Inner jacket:** Polyolefin compound; Nominal diameter 5.1mm
- Shield:** Al/PET/Al over inner jacket; Optical coverage 100%.
Braid type; Tinned copper wire; Nominal optical coverage 85%.
- Drain Wire:** Stranded tinned copper wire; Nom. 0.34mm² - AWG22; nominal diameter 0.75mm; Under braid shield
- Jacket:** PVC; hardness 79 ShA; Diameter 8.4 ±0.3mm; Colour Black similar RAL9005; Conform to UL AWM Style 2464

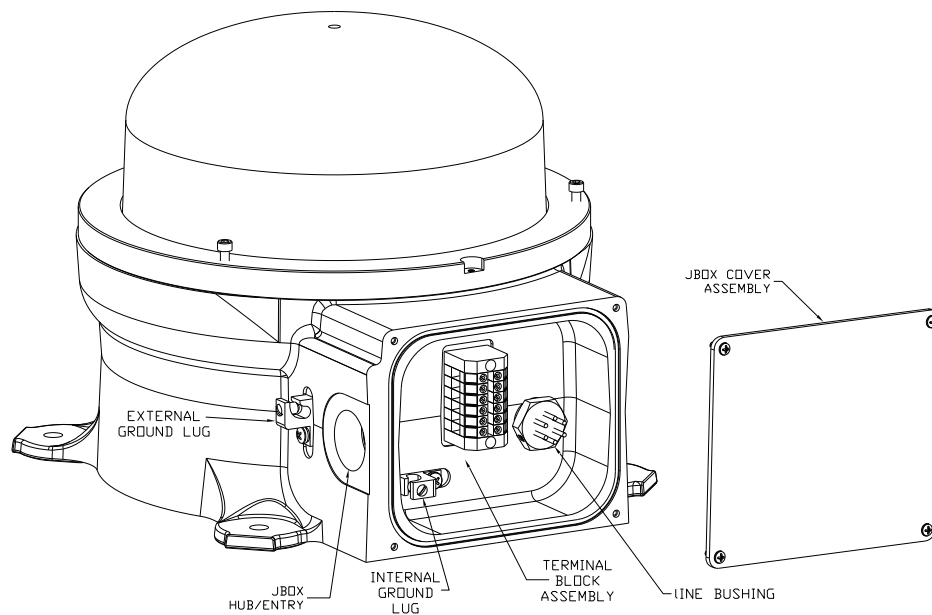
Cable Markings: *POINTUSA D-CABLE TWINAX 100 OHM - PL10836 - E172949 AWM STYLE 2661 90°C 300V
AWM I/II A/B 90°C 300V FT1 - (2xAWG20)C 100 Ω - CE - RoHS - UKCA "week/year"*

Electric:	Operating voltage	300 Vrms
	Voltage test	2000 VAC
	Max conductor resistance (bare)	34.1 Ω/Km - 10.4 Ω/1000ft (IEC60344) - 9.9 ohm/1000ft (linear)
	Max conductor resistance (tinned)	34.8 Ω/Km - 10.6 Ω/1000ft (IEC60344) - 10.1 ohm/1000ft (linear)
	Nominal capacitance	50 pF/m - 15.24 pF/ft
	Nominal impedance	100 Ω
Physical:	Operating temperature range	-25°C to +90°C (fixed)
	Operating temperature range	-10°C to +90°C (flex, free movement not continuous)
Chemical:	Silicone, Pb, Cd, Hg, FCKW free	Yes
Flame:	Flame resistant	UL Cable flame test; CSA FT1; IEC 60332-1-2

MOUNTING PATTERN



WIRING COMPARTMENT



MARINE TREATMENT INCLUDED

Our Marine Treatment tolerates marine, high salt content air and other corrosive environments. The paint finish used by competitors flakes and fails in a short time under such conditions.

The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish in color yellow. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.

OPTIONAL PL40139 HEAT SHIELD

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

The heat shield is framed in stainless steel to be suspended in the air space between the heat source and the beacon. The heat shield is fabricated of a rigid alumina fiber matrix that is stable for continuous use at temperatures up to 3128-deg F (1720-deg C). The material is not affected by oil or water and is resistant to chemicals. The heat shield is 24-inches wide by 36-inches high. The shield should be oriented as required to maximize protection.

Shown below on a flare shielding an incandescent beacon.



The PL40139 Heat Shield limits 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. See file OL-8.3.0 for details.

SYSTEM CONTROLLER WITH TOUCHSCREEN POC-68003-90-1-TS



Handheld Programmer PL11248

Required for assigning in the field each beacon's data cable address for replacements and for relocated beacons.



INSTALLATION & SERVICE

During installation, do not open the dome lens.

Only open the Junction Box cover and follow instructions.

Do not open the beacon dome lens before contacting Point Lighting Corporation for consultation.

Do not attempt any testing or procedure not stated in the manual.

The beacon is fully factory tested and operated for hours before shipment.

Any prohibited action will make the warranty void. You may return the unit for factory repair service.

PFB-37002-R-1-AX-F4-K
MEDIUM INTENSITY RED BEACON



SPARE PARTS

We recommend purchasing a spare PFB beacon matching the catalog number of the installed beacons. A spare PFB beacon must be assigned the data address location number of the beacon it is replacing. Therefore, the handheld Field Programmer device must also be purchased (one per site).

	PL11248	Handheld programmer for assigning the beacon address in the field
Upper dome removal kit:	PL11308	Lens Wrench
	PL10166-274-S	O-ring
	39901	Loctite

POINT LIGHTING CORPORATION

Mail: P.O. Box 686, Simsbury, CT 06070

Tel 01 860.243.0600

email: Info@PointLighting.com

USA

Plant: 61-65 W. Dudley Town Rd, Bloomfield, CT

Fax 01 860.243.0665

website: www.PointLighting.com