

APRB-252 ROTATING MARINE BEACON



With over 250 field installations, the APRB-252 is an extremely successful medium range rotating beacon. The APRB-252 rotating beacon is an updated and improved version of the FA-251/APRB 251 rotating beacon with the same highly efficient precision-molded, acrylic, Fresnel lenses and UV stable, seamless, molded acrylic cover configured in a proven environmental packaging system. It features a new drive system with a microprocessor controlled four-phase stepper motor in the top of the beacon turning the lens panels supported by a large sealed bearing in the base of the lantern.

The optical system is comprised of a hexagon arrangement using up to six Fresnel lenses rotated around a wide choice of stationary light sources. The lens panels contain both catadioptric and dioptric injection molded lens elements. Use of available light flux is highly efficient with 76% of the flux emitted by the lamp is contained within the projected beam between the 10% intensity points.

Form No.: 100511A

Replacement of selected panels with blanking plates or colored panels provides for a wide variety of flash codes including group flashes and alternating colors commonly used on airway beacons.

FEATURES

- Ranges in excess of 22 nautical miles.
- Operates from 12 Volt or 24 Volt DC supply. Ideal for use with solar power. Built in day light control.
- Microprocessor controlled four phase stepper motor drive. 1.5 watts maximum power consumption.
- 16 pre-programmed, hex-switch selectable speeds from 0.5 to 10 rpm. Easily accessed and changed in the field.
- Lamp change and focusing access in base of beacon. No need to remove lens cover.
- Low maintenance costs with highly reliable, proven drive system.
- Light weight, easy to handle and install. Easily transported by one technician.
- Seamless, molded, 250 mm acrylic lens cover protects optical elements from environmental contamination.
- Monitor ready when fitted with the APCL-5/10 FLASHCHANGER[®] which includes an RS-232 interface to provide a seamless interface with a radio modem monitoring system.
- Simple interconnection/control of standby optic with APCL-5 FLASHCHANGER.
- Wider horizontal and vertical divergence giving longer flash length. 3-degree vertical divergence to 10 % of peak intensity allows a tolerance for errors in leveling and focusing.

OPTIONS

Wide range of lamps: tungsten halogen, metal halide, bifilament.

A 1-watt cooling fan is mounted in the base of the optic for loads exceeding 75 watts.

AC Input available.

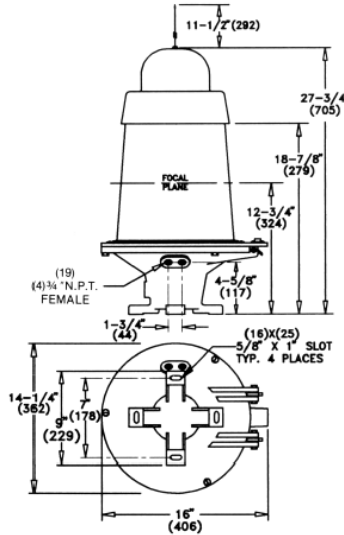
Magnetic reed switch in base of beacon to provide rotation monitoring.

Specifications subject to change without notice

**PHOTOMETRIC DATA (CANDELA)
Schmidt-Claussen Method**

Halogen Lamp C-8 Filament	Peak Intensity	EFI (FL-10)
12V, 108W	296,000	119,000
6.3V, 38W	194,000	73,000
12V, 35W	170,000	66,500
12V, 50W	252,000	102,500
12V, 75W	272,000	114,000
12V, 20W	90,000	32,900
150W MH 10K hr	279,500	183,210
150W MH 4K hr	406,000	270,600
Incandescent Lamp CC-8	Peak Intensity	EFI (FL-10)
12V, 0.5A	25,800	8,840
12V, 1.0A	56,400	20,300
12V, 2.0A	76,400	33,900
12V, 3.0A	119,000	75,100

Intensities with lens cover in place. Note: Filter Factors: red = 0.34, green = 0.31, yellow = 0.71



SPECIFICATIONS

- **Type:** APRB-252 Rotating Beacon
- **Beam configuration:** 6 lens panels in hexagonal form, 95 mm focal length.
- **Speed of rotation:** 0.5 to 10 rpm preprogrammed, hex-switch, selectable stability better than +/- 1%. Easy access to adjust.
- **Day/Night control:** External photocell. Rotation independent of photocell.
- **Lamp voltage regulation:** Extended pulse width modulation including regulating 24 Volts input down to 12 Volt lamp or 12 Volt input down to 6.3 volt lamp. 3% loss maximum.
- **Lampchanger:** 4-place or 6-place APCL-5/10 Flashchanger.
- **Voltage supply:** 12/24-volt DC version or 220 / 240v AC input.
- **Power consumption:** Lamps-200 watt max, Drive Motor-1.5 watt max.
- **Power source:** Solar power, battery, 120/220/240 AC/DC power supply unit.
- **Dimensions:** Height: 705 mm Diameter: 410 mm
- **Weight:** 15 kg
- **Fixing:** Four slots on 200 mm (PCD).
- **Materials:** Cast aluminum base, molded acrylic lens panels and cover.
- **Monitoring Output:** RS-232 (4800, N,8,1) Formatted Data Stream from APCL-5/10.
- **Monitoring Equipment:** Radio Modem (Meteorburst, UHF, VHF, Cellular, etc).
- **Functions Monitored:** Rotation Speed, System Voltage, Number of Good Lamps in Lampchanger, Photocell Status, System Status.
- **Secondary Optic Control:** Auto activation of secondary optic if primary optic "system status normal" signal is not received by secondary optic.

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