

APRB-252AC ROTATING MARINE BEACON



The Automatic Power APRB-252AC 250mm Rotating Beacon is an efficient operated marine or air aids to navigation signal with candle-powers well above the range of 375 mm and 500 mm drum type lanterns used with high powered lamps. It provides a light with a nominal range of 23 nautical miles with a 150 watt lamp (rotating at 1/2 RPM).

The beacon will operate from 120V AC commercial or inverter power supply from a DC power source.

The APRB-252AC housing consists of an acrylic cover mounted on a base made of corrosion-resistant aluminum alloy coated with three baked-on layers of epoxy enamel. The inner mechanism includes a six panel drum containing the optical elements. The drum revolves at any of a number of speeds preset to customer specifications. Optional remote control with 16 programmable speeds available.

The APRB-252AC with a 2 place lamp-changer, two 150W lamps and a power supply controller mounted in NEMA 4 enclosure, is optional.

OPTICAL SYSTEM

The optical system consists of six lens panels equispaced at 60° to form a hexagon. Thus, six uniformly spaced flashes are normally seen per revolution. The panels are 4" wide and 12" high. Each panel contains both dioptric and catadioptric elements, injection-molded in a single piece.

Use of available light flux is highly efficient. Tests have shown that 76% of the total flux emitted from the lamp is contained in the projected beam between the 10% candlepower limits. Consequently, beam candlepower per watt of electrical input is very high, making it an ideal optically efficient beacon.

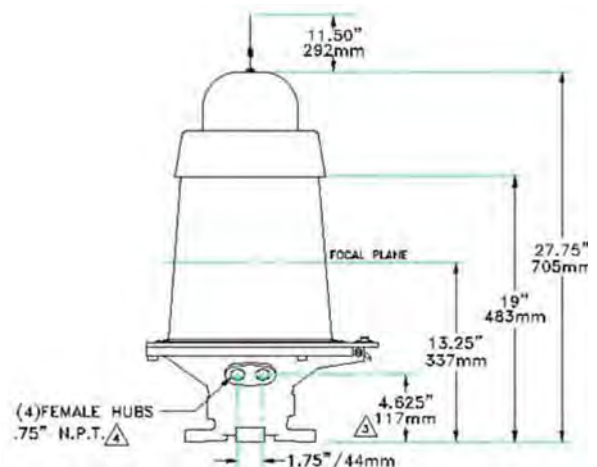
FLASHING CHARACTERISTICS

The basic lens arrangement projects six regularly spaced flashes per revolution. By removing certain lens panels, and, replacing them with opaque panels, variations in flash sequence can be obtained. Drive system is stepper motor and gear box direct drive to optical cage (not belt driven). Rotational speeds can be set at the factory or changed in the field. 20 speeds are available from 0.5 to 10 RPM. Special speeds are also available. Please consult the factory for information.

SIGNAL COLORS

Colored flashes are easily obtained by selecting the proper color acrylic cover. Clear, red and green colors are available from stock.

Also on special order, lens panels can be made of colored acrylic which makes it possible to exhibit a beam in which the colors alternate.



APRB-252AC
EFFECTIVE INTENSITIES IN CANDELAS
R.P.M. AND FLASH INTERVALS

LAMP	Fixed	1/2 R.P.M. 20 SEC.		1 R.P.M. 10 SEC.		2 R.P.M. 5 SEC.		5 R.P.M. 2 SEC.		10 R.P.M. 1 SEC.	
		FL	SC	FL	SC	FL	SC	FL	SC	FL	SC
MH 150/U*	268,000	1.393	209,000	0.697	171,300	0.348	124,400	0.139	70,100	0.070	40,350
MH 150 WATT L4000**	406,000	1.466	331,400	0.733	279,400	0.366	213,100	0.146	124,100	0.073	73,470

These values apply to a clear (white) beam. Multiply by 0.24 for red and by 0.56 for green. SC - Equivalent fixed intensity based on Schmidt-Clausen Method. FL - Apparent flash length in seconds.

*150 watt = 10,000 hrs **150 = 4,500 hrs.

TECHNICAL DATA

Standard Equipment

- **Lenses:** Six clear acrylic lens panels 4" wide by 12" high, equispaced at 60° to form 190 mm hexagon. Each panel contains dioprotic and catadioptric elements.
- **Lens Covers:** 250 mm acrylic. Available in clear, red and green.
- **Drive:** Installed per customer order. Flash character is changed by changing switch settings on motor control board.
- **Lampchanger:** single fixed lamp holder or 120 volt AC 2 place lampchanger.
- **Lamps:** Pre-focused lamps.
- **Drive Motor:** 10-30 volt DC 120 milliamps continuous motor current.

Form No.: 100511A

Optional Equipment

- Red, Green or opaque lens panels
- Red or green lens cover
- Rotation failure detector
- 2 place lampchanger

Ordering Information

Specify type of lamp, RPM and other desired options

Weight

62 pounds

Shipping Information

1 carton, 20" x 19" x 30" (6.6 cu. ft.)

1 carton 18" x 12" x 12" (5.5 cu. ft.)

6.6 lbs

Specifications subject to change without notice

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