

FA-249WA 155mm MARINE LANTERN

A wide angle lens, designated the FA-249WA, has been developed to provide enhanced vertical divergence for use on buoys, moving structures, and aviation obstruction lighting. In the marine application, this extended vertical divergence greatly improves the effective range of the light in rolling seas. U. S. Coast Guard visual tests indicate that a lantern with the vertical divergence of the FA-249WA lantern with frosted S-11 lamps achieves an effective range that is 80% of its nominal rated range on a buoy in a seaway. This is compared to an effective range of 30% of nominal rated range for typical buoy lights.

Using frosted, S-11 lamps, the FA-249WA also meets vertical divergence of FAA L-810 Red Aviation Obstruction Lights. It is U. S. Coast Guard approved for use on Tension Leg Platforms to 4.5° tilt.

The FA-249WA is a rugged, compact, lightweight signal lantern. It features a Lexan® base, lens ring and hinge which are virtually unbreakable. The design uses Lexan-not acrylic-at the hinge point where mechanical failure and cracking are likely to occur. The base houses the flasher and/or other mechanisms. Quick opening stainless steel latches or stainless steel thumb screws are two options for a strong positive closure of the lantern. The stainless steel latch can be secured with a padlock to deter vandals. A bracket on which the flasher and lampchanger are mounted is secured to the inside of the base section. Fittings in the base provide outlets for electrical connection. The lamp projects into the upper section which supports the 360° acrylic lens.

The lantern features a highly-efficient fresnel-type acrylic optical system. The candlepower output exceeds that of larger conventional pressed glass lenses because acrylic has a higher transmission factor and better optical characteristics. Years of exposure have proven this to be a stable lens material.

Acrylic lenses are available in clear, red, green or yellow. A bird spike is part of the molded lens. Candelabra, prefocused, Marine Signal Lamps are mounted on a rotating mechanism that automatically brings the next lamp into precise focal position when the operating lamp fails. Six-place units are able to rotate S-8 envelope lamps inside the 155 mm lens. Four-place units are able to rotate both the S-8 envelope and the larger S-11 envelope lamps in the 155 mm lens.

Lanterns are fitted with a sunswitch, which limits lantern operation to hours of darkness only.



PHOTOMETRIC DATA
(CANDELA)

12 VOLT FROSTED S-11 LAMPS			
0.55 AMP	54	2.03 AMP	240
0.77 AMP	80	3.05 AMP	360
1.15 AMP	115		

Vertical Divergence is 18.2-20.3 degrees to 10%. Note: For red lens multiply above by 0.30. For green lens multiply above by 0.32. For amber lens multiply above by 0.68. 55 watts is the maximum power dissipation of the lantern.

TECHNICAL DATA

Lens: 155mm, 360° acrylic fresnel lens supplied as wide angle divergence. Available in clear, red, green or yellow. A blue screen is also available.

Materials: Acrylic plastic lens, Lexan® plastic housing, stainless steel fittings, silicone rubber gasket.
®Registered Trade Mark

FLASHCHANGER®: Four- or Six-place motor driven, APCL-5/APCL-10 with selectable flash rhythms, pulsewidth modulation regulation, solar charge regulator, monitoring, synchronization, self-test function, communications port, lampout control terminal, photocell, and enhanced environmental protection.

LAMPS: Prefocused T3.5, S-8, or S-11 envelope and C-8 or CC-8 filament, incandescent or tungsten halogen lamps to 150 watts.

MOUNTING: Four each 5/8 inch holes on a 7 7/8 inch bolt circle--90° apart.

Net Weight 2.25 kg Shipping Weight 5.0 kg



Automatic Power Inc