



CERTIFICATE NUMBER

DATE

10-GE556571-PDA

08 March 2010

ABS TECHNICAL OFFICE

Genoa Engineering

## CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of  
**ASTEL D.O.O. - DUTOVLJE**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).


PRODUCT: Underwater light

MODEL: EQUATOR: MSR0640 - MSR1280 - MSR36240  
CONUS: MSR0680 - MST0680 - MSR18240 - MST18240  
CONVEX: MSR0680 - MST0680 - MSR18240 - MST0680 - MTH0680 - MTH18240  
PLAQUE: MFM0680 - MFM18240

ABS RULE: 2010 Steel Vessel Rules 1-1-4/7.7  
Guide for Building and Classing Motor Pleasure Yachts

OTHER STANDARD IEC Publication 60529;

AMERICAN BUREAU OF SHIPPING

  
Giorgio Barbini  
Engineering Type Approval Co-ordinator

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

**ASTEL D.O.O.**

DUTOVLJE 138

DUTOVLJE

6221

Slovenia

Telephone: +386 5 7310771

Fax: +386 5 7310789

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**Intended Service:**

Underwater lights for installation on yachts below the waterline.

**Description:**

See attachment

**Ratings:**

Power supply: 12 - 24 Vdc - max. 5.4 A/12 Vdc or 2.5 A/24 Vdc

Enclosure: IP68

Hydrostatic Pressure: 10bar/ 10 minutes

**Service Restrictions:**

Unit Certification is not required for this product.

Arrangements of installation, including hull connection and welding/lamination details, to be submitted for each application to an ABS Technical Office for due review.

**Comments:**

Installation procedure and details are to be in accordance with the manufacturer's latest instructions and guidelines.

**Notes / Drawings / Documentation:**

This Product Design Assessment (PDA) is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product. Use in a non-classed vessel, MODU or Facility is to be to the satisfaction of the manufacturer and purchaser.

**Term of Validity:**

This product/model is covered under Product Design Assessment (PDA) Certificate # 10-GE556571-PDA, dated 08/Mar/2010. This PDA Certificate expires 07/Mar/2015. It will remain valid for 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first). It is valid for all vessels contracted on or before the date of the Rules used in this evaluation.

**STANDARDS**

**ABS Rules:**

2010 Steel Vessel Rules 1-1-4/7.7

Guide for Building and Classing Motor Pleasure Yachts

**National:**

NA

**International:**

IEC Publication 60529

**Government Authority:**

NA

**EUMED:**

NA



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**Others:**

NA

