



CERTIFICATE NUMBER

DATE

01-HS109481C/3-PDA

11 January 2010

ABS TECHNICAL OFFICE

Houston SED - Ship Equipment

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
TIDES MARINE INC. - DEERFIELD BEACH

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: Bearing, Upper Rudder Bearing

MODEL: URB-STD/ LP

ABS RULE: 2010 Steel Vessels Rules 1-1-4/7.7; 2000 Guide for Building and Classing Motor Pleasure Yachts Section 13;
2001 Guide for Building and Classing High-Speed Craft 3/5.13

OTHER STANDARD: 2005 ABYC Recommendations.; Refer to the Manufacturer's Website (www.tidesmarine.com) for Standards, Ratings and Sizes;

AMERICAN BUREAU OF SHIPPING

Hans P. Haendler

Engineering Type Approval Co-ordinator

TIDES MARINE INC.
3251A S.W. 13TH DRIVE
DEERFIELD BEACH
FL 33442
United States
Telephone: 800-420-0949
Fax: 954-420-5234

MA Certificate No. 08-FL1081351

Product: **Bearing, Upper Rudder Bearing**

Model: **URB-STD/ LP**

Intended Service:

New or Replacement Upper Rudder Post Bearings where the mounting surface is not true to the Rudder Post.

Description:

A self-aligning Upper Rudder Bearing System.

Ratings:

For Rudder Stock Sizes : 1" - 8" or 25 mm - 200 mm.

Service Restrictions:

Unit Certification is not required for this product.

Comments:

1.) For Rudder stock sizes of 1" - 8" or 25 mm - 200 mm. 2.) The manufacturer's recommended installation procedures are to be followed.

Notes / Drawings / Documentation:

This Product Design Assessment (PDA) is valid only 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.

Term of Validity:

This product/model is covered under Product Design Assessment (PDA) Certificate # 01-HS109481C/3-PDA, dated 11/Jan/2010. This PDA Certificate expires 10/Jan/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 Vessels Rules 1-1-4/7.7; 2000 Guide for Building and Classing Motor Pleasure Yachts Section 13; 2001 Guide for Building and Classing High-Speed Craft 3/5.13

National:

2005 ABYC Recommendations,

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

Refer to the Manufacturer's Website (www.tidesmarine.com) for Standards, Ratings and Sizes