

Owner's manual

BOW THRUSTER PROTECTION

1. SAFETY INSTRUCTIONS



WARNING:
PRIOR TO BEGINNING THE INSTALLATION
SHUT OFF THE THRUSTER MOTOR

Before using the device, carefully read this manual and keep it for future reference.

- a) Prior to beginning the installation shut off the thruster motor.
- b) This device is not intended for children. If the device is handled in children's presence, children shall be kept under adult supervision. After usage store the device in a safe manner out of the reach of children.
- c) In the case of malfunction or breakdown of the device or any of its parts, stop using it immediately. Do not attempt to repair the device but contact the qualified technician.
- d) Unauthorized alteration or modification of the product or any furnished component will void this warranty in its entirety, and there shall be no liability on the part the manufacturer for any special, indirect, incidental or consequential damages resulting from use of such a product.
- e) The quality of installation determines the quality of thruster protection; therefore it is necessary to follow installation steps in accordance with provided instructions.
- f) The Bow Thruster Unit must be dismantled prior to vessel crane lifts or land transport.

Limited Warranty

This product is warranted against defects in materials and workmanship for a period of one (1) year from the date of original retail purchase. To claim the warranty service return the defective product with the original proof of purchase containing the date of purchase and product code. Any claim under this Limited Warranty must be submitted before the end of the warranty period described above. Repair or replacement shall be the sole remedy of the customer. This warranty is not transferrable and applies only to the original consumer purchaser.

This product is designed to minimize the possibility of damage to thruster systems by preventing typical mooring lines and other large floating debris from being drawn into thruster tunnel, and subsequently striking or entangling thruster propeller. Under no circumstance does the manufacturer claim that this device will completely block and prevent any and all floating objects, regardless of the size and shape, from passing through the device openings.

2. TECHNICAL SPECIFICATIONS

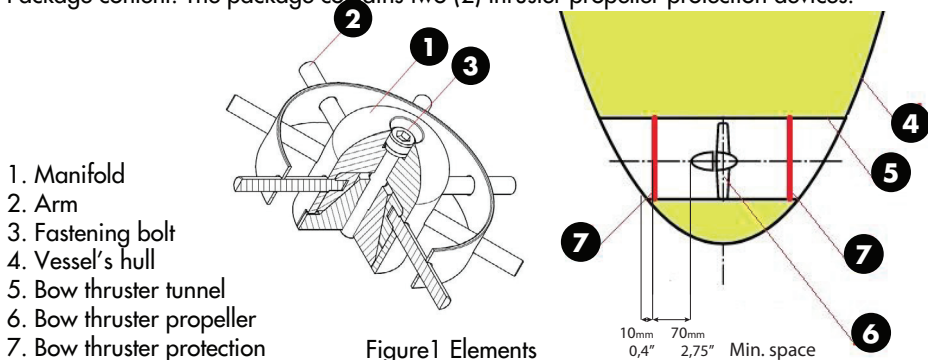
Component Materials: Polyoxymethylene (POM), inox AISI 316

Product mass: 900 g

Nominal Diameter: 185 mm

Maximum thrust force: 300 kgf or 660 lbf

Package content: The package contains two (2) thruster propeller protection devices.



3. USER GUIDE

- The Bow Thruster Protection unit shall be mounted perpendicular to the surface of the bow thruster tunnel.
- Device fastening: Tightening of the bolt expands the arms until all arm tips have achieved contact with the surface of the bow thruster tunnel. Once the device can remain in place and no longer requires additional support, the bolt must be tightened to 30 Nm or 23 ft-lb (rotated another 630 to 720 degrees) to achieve firm connection.
- Underwater installation must be performed by trained professional.
- For the Video of the bow thruster protection device installation visit the following link:



Figure 2 Installation on the side of the tunnel wall

<https://www.youtube.com/watch?v=CMwqyJa-VLQ>

4. MAINTENANCE

The bow thruster protection device is manufactured from durable, noncorrosive materials. As another layer of protection, it can be coated with antifouling paint in accordance with paint manufacturers instructions. Regular maintenance consists of mechanical removal of algae, shellfish, and other marine deposits, and rinsing with water.

- Minimal clearance between the protection device and the lower end of the propeller shaft shall be 10 mm.