

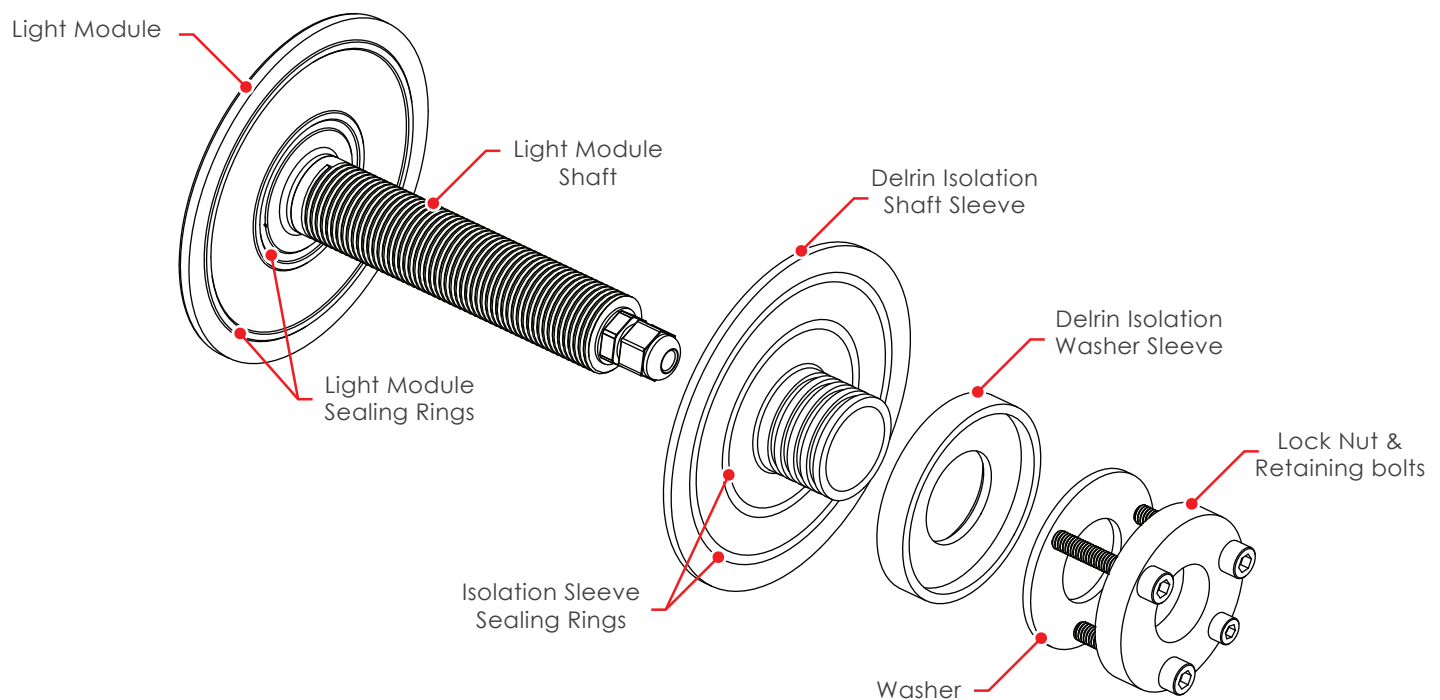
# Thru Hull Isolation Sleeve Assembly Guide



## Before you start!

Always ensure that the vessel's power source and battery are disconnected or isolated prior to installation. A qualified professional should carry out both the electrical and mechanical installation. If in doubt please contact LUMISHORE. Refer to product support section.

**NOTE : DO NOT bond the light to the vessels bonding system.**



How to assemble the isolation shaft and washer sleeve

**Note: This diagram shows the order of assembly. It may look different from product to product, but the assembly order is the same.**

Assembly of the isolation sleeve should be carried out just prior to the installation of the light to the vessel. For full installation instructions for the light module please refer to the Thru Hull installation document.

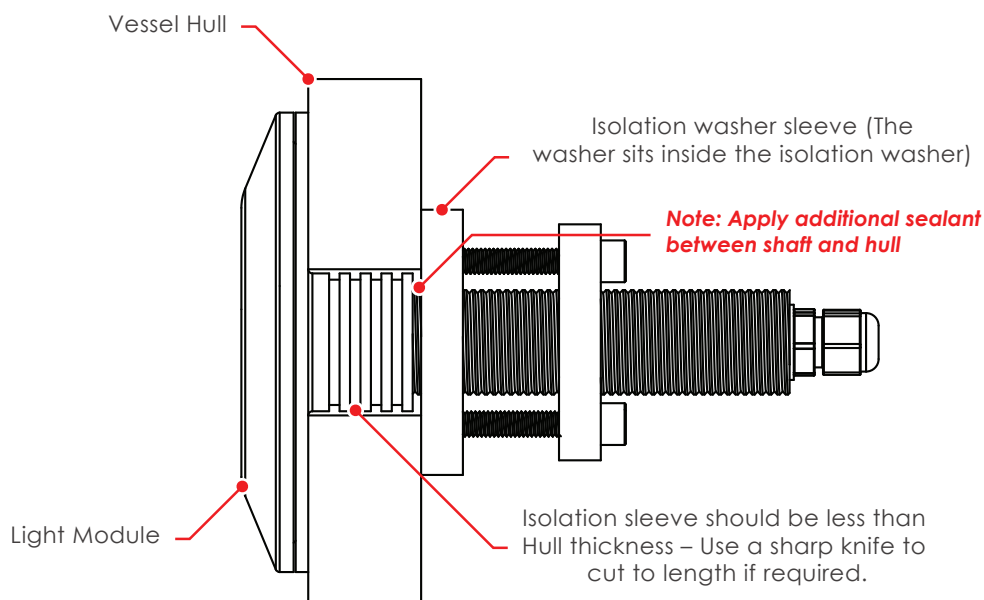
Thru-Hull hole size table

Model	Hole size required in hull	Sleeve Part Number
TIX204	37mm (1" 15/32)	60-0205
TIX404	64mm (2" 1/2)	60-0210
TIX804	93mm (3" 21/32)	60-0211
TIX1604	101mm (4")	60-0212
THX404	34mm (1" 11/32)	60-0207
THX804	34mm (1" 11/32)	60-0208
THX1604	34mm (1" 11/32)	60-0209

**Note : If an isolation sleeve is NOT being used then the hole size will be smaller – refer to the installation manual for the relevant product for the correct hole size.**

- 1 After drilling the hole measure the thickness of the hull, ensure that the isolation shaft sleeve is less than the hull thickness. If necessary, using a sharp knife or suitable cutting implement, the isolation sleeve can be cut to length using the radial grooves as a guide. (see assembly diagram below).
- 2 Before assembling the isolation sleeve ensure that the light and sleeve surfaces are free from dirt and grease. **Note: Do not use an alcohol-based solvent as this may have an adverse effect on the sealant.**
- 3 Using an approved adhesive (3M 4200 Marine or similar), run two continuous beads of sealant around the entire circumference of the sealant grooves of the light. Add an additional continuous bead around the base of the stem.
- 4 Slide the Isolation sleeve down the shaft so that it sits firmly against the back of the light, push the sleeve onto the back of the light until the two surfaces are flush. At this point any excess sealant can be removed using a soft cloth and suitable cleaner.
- 5 Place the Delrin isolation washer sleeve over the Washer.
- 6 Using the isolation sleeve sealing rings for the marine adhesive, the light module is now ready to install onto the vessel as per the thru hull installation document. Please refer to the lights installation instructions.
- 7 During installation and from inside the vessel ensure that sealant is applied from the rear around the shaft to ensure that there is no potential contact between the shaft and the hull.
- 8 **DO NOT** bond the light to the vessels bonding system.

## Final Assembly



**Note: A suitable marine adhesive (e.g. 3M - 4200) should be used between the light module and the isolation sleeve and the isolation sleeve and the hull of the vessel. This diagram shows the order of assembly. It may look slightly different from product to product, but the assembly order is the same.**

LUMISHORE Ltd warrants its lighting systems and associated lights and accessories to be free from defects in workmanship for a period of three years, starting from the date of original purchase. Should your lighting system have a problem during this period, please contact your dealer, boat manufacturer or broker as soon as you become aware of the defect.

Misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters (e.g. fire, flood, storm and lightning), installation by unqualified personnel, unauthorized repair or modification or non-approved installations will void this warranty. For the avoidance of confusion and doubt, non compliance with all installation guidelines, maintenance and operating instructions in this document constitute non conformance with warranty terms.

Full warranty details including exclusions are available at [www.Lumishore.com](http://www.Lumishore.com).