



SL-B1200-FW Marker Buoy Suited to Fast Water

INSTALLATION & SERVICE MANUAL



Product Features & Technical Specifications

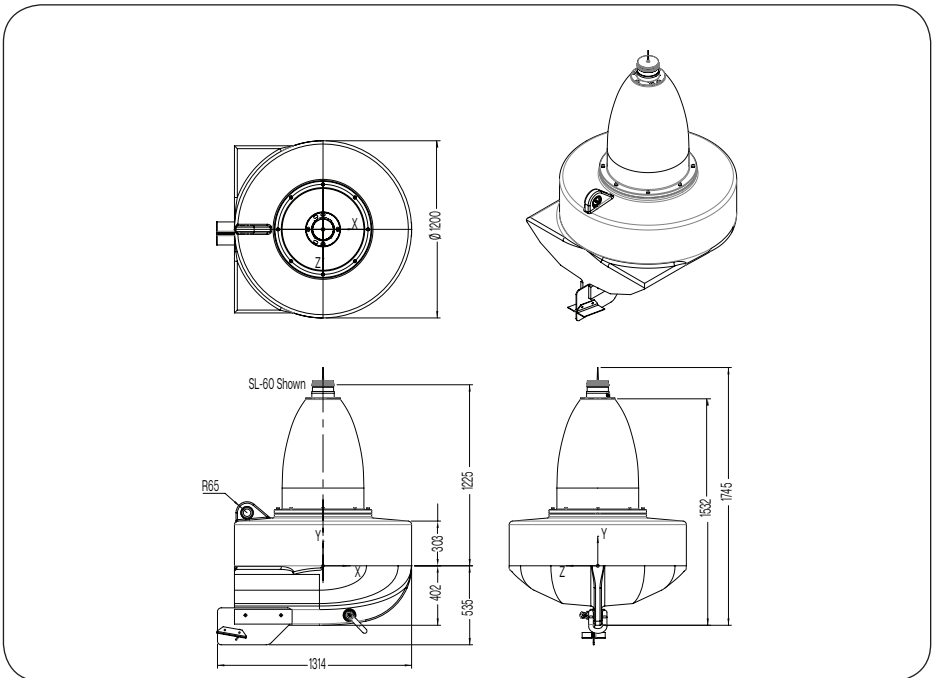
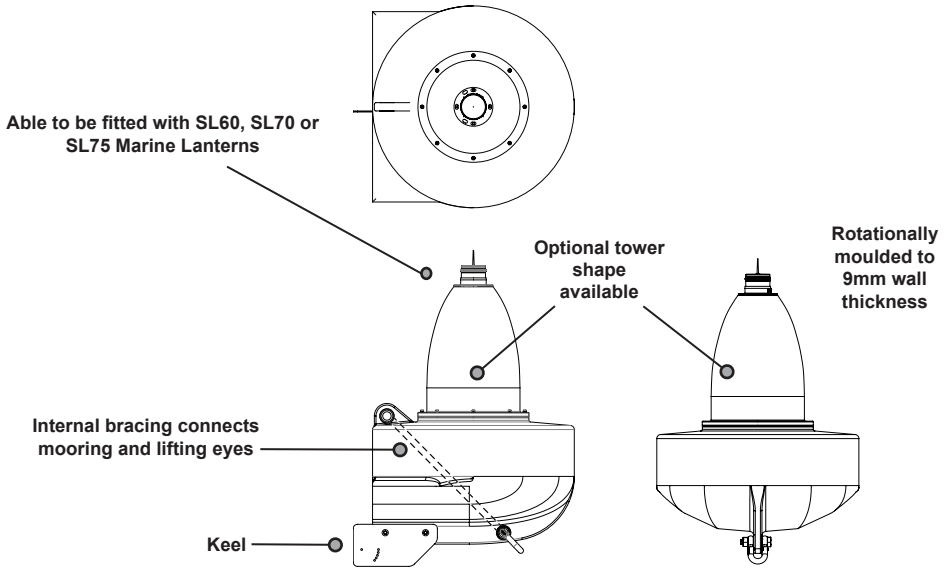


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SEAMOR™ - SEALITE MOORING CALCULATOR



As a service to valued customers, Sealite has developed an advanced mooring calculator based in IALA guidelines and experience from major users.

The system simulates site mooring based on local conditions.

Contact Sealite today for a FREE copy.

Version No.	Description	Date	Author	Approved
1.0	Manual Launch	March 2017	G.Percy	M.Nicholson
1.1	Update to include shackle as standard	June 2019	M.Dutka	M.Nicholson



Introduction

Congratulations! By choosing to purchase a Sealite Buoy, you have become the owner of one of the most advanced rotationally-moulded polyethylene marine buoys in the world.

Sealite Pty Ltd has been manufacturing buoys for over 25 years, and particular care has been taken to ensure your buoy gives years of service.

As a commitment to producing the highest quality products for our customers, Sealite has been independently certified as complying with the requirements of ISO9001:2015 quality management system.

By taking a few moments to browse through this booklet, you will become familiar with the versatility of your buoy, and be able to maximise its operating function.

Sealite Buoy Division

Sealite marine buoys are manufactured on-site from rotationally-moulded UV-stabilised polyethylene, and are designed to offer a low-maintenance, high visibility solution to marine navigation.

The Sealite buoy division provides turn-key production of navigation buoys. From tooling development, raw materials selection, and production, to final testing and inspection, Sealite guarantees superior quality and fast turn-around times.

Sealite's buoy products are available in a wide range of configurations and sizes, and can be economically shipped worldwide.

Why Choose Polyethylene Buoys?

- No painting
- Inhibits growth
- Increased interval between servicing
- Routine maintenance on location
- Easily repaired in the unlikely event of damage
- Lightweight for ease of deployment and maintenance
- Environmentally friendly – no use of toxic antifouling paint

Mooring Requirements & Regulations

Please contact your local authority for any specific requirements regarding the deployment of buoys. IALA also has guidelines and recommendations that should be followed.

All information given in this manual is advisory only. Please consult with your local authority before deploying your buoy products.

Local conditions that need to be considered include:-

- Water depth
- Maximum currents
- Maximum wind speeds
- Sinker size and weight

SL-B1200-FW Marker Buoy

The Sealite SL-B1200-FW is a large 1200mm diameter marker buoy designed for a variety of applications and is particularly suited to fast water currents of up to 8 knots.

The unique one piece float section has an internally integrated bow and keel which ensures the buoy remains stable during fast currents.

SPECIFICATIONS*

SL-B1200-FW

General Characteristics

Available Colours	Red, Green, White, Yellow as per IALA Recommendations
Focal Plane Height (mm/inches)	1225 / 48
Total Float Volume (ltrs/US gallon)	615 / 162.5
Reserve Buoyancy (kgs/lbs)	78 / 172
Maximum Mooring Load (kgs/lbs)	78 / 172
Draft, Maximum (mm/inches)	402 / 15 ^{59/64}
Freeboard, Minimum (mm/inches)	300/ 11.8
Safe Working Load, 1pt (kg/lbs)	2300/ 5070

Physical Characteristics

Material	Rotationally-moulded UV-stabilised virgin polyethylene
Wall Thickness (mm/inches)	9 / ³ / ₁₆
Ballast (kg/lbs)	55 / 121.3 (Internal)
Filling	Closed-cell polyurethane foam (float section)
Height (mm/inches)	1745 / 68
Width (mm/inches)	1200 / 47 ¹ / ₄
Mass (kg/lbs)	142 / 313
Product Life Expectancy	Up to 12 years

Certifications

IALA	Surface colours compliant to IALA E-108
Quality Assurance	ISO9001:2008

Intellectual Property

Trademarks	SEALITE® is a registered trademark of Sealite Pty Ltd
	5 year

Warranty *

Lantern Options

Options Available

	Sealite SL-15, SL-60, SL-70, SL-75 lantern
	- Mould-in graphics

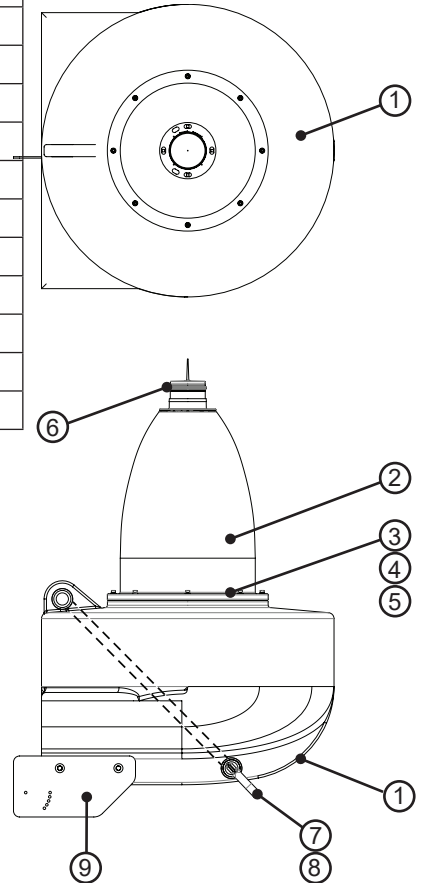
* Specifications subject to change or variation without notice
* Subject to standard terms and conditions





SL-B1200-FW Product Components

No	Description	Quantity
1	SL-B1200-FW Float (with internal fill)	1
2	SL-B1250 Cone or Can	1
3	S/S Bolt, $\varnothing 10 \times 45$ (min Grade 70)	8
4	S/S Spring Washer, $\varnothing 10$	8
5	S/S Penny Washer, $\varnothing 10 \times 31$ OD	8
6	Lantern (SL60 shown)	1
7	SL-B1750 Lug Bush	2
8	32mm Grade M Shackle	1
9	Keel Type 1 with Hardware	1
	Keel Wings with Hardware	Optional
	Trim Bar with Hardware	Optional



SL-B1200-FW Assembly Instructions

Check Components

- Unload all components from container or crate
- Check all components are complete and correct
- Contact your local Distributor or Sealite for any missing parts.

Fitting Top Section to Float

- Position the buoy so the keel is on the ground and the top surface is facing up. Steady using chocks.
- Secure the Can or Cone using 8 x M10 x 45mm Hex Bolt with Penny and Spring Washers.

Fitting The Keel

- Fit the keel plate to either side of the Float Keel using supplied hardware (M12 x 90mm Hex Bolts, penny washer, spring washer and nuts).

Fitting the Trim Bars (Optional)

- Fit trim bars when required by mooring conditions using supplied hardware. Remember to re-fit the Keel Plate when fitting the trim bars.
- Tighten attaching Bolts until firm.

Fitting Lights to the Buoy (optional)

- Position the buoy so the keel is on the ground and the top surface is facing up.

Follow the light installation manual and check that the light activates and flashes correctly before fitting to the buoy.

- Position the Light on the top of the can or cone.
- Secure the light to the Can or Cone using the supplied 4 x Flat and Spring Washers and Nuts.



SL-B1200-FW Mooring Instructions

Mooring Recommendations

Water Depth, D (m) (High Tide plus half wave height)	Recommended Chain Size, Grade L Anchor (mm)	Recommended Chain Length (m)
1-6	20	2 x (Water Depth)
6-10	16	2 x (Water Depth)
10-15	13	2 x (Water Depth)

NOTE:

Due to each installation being unique, the size and weight of the sinker, length and size of chain and any counterweights will need to be determined in conjunction with the local Authorities.

The Sealite SLB1200 Marker Buoy is designed to ride on the current in a vertical position, this will allow any lantern fitted to work correctly and be seen from any direction.

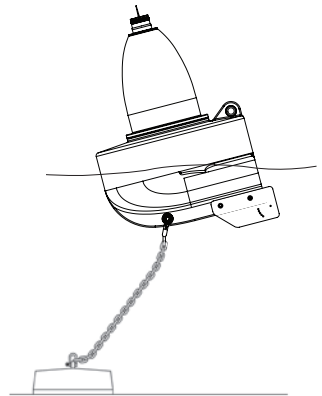
If the buoy is riding forward;

Sealite would recommend the following:

- The Mooring Chain may be too heavy for mooring conditions. When the current is flowing the buoy is leaning into the current rather than riding on the current.

Try the following suggestions:

- Fit a lighter mooring chain (smaller diameter).
- Add trim bars (counterweights) to the back of the keel.



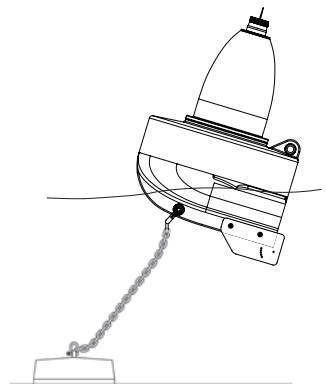
If the buoy is riding aft;

Sealite would recommend the following:

- The Mooring Chain may be too light for mooring conditions, or counter weights are too heavy. When the current is flowing the buoy is leaning away from the current rather than riding on the current.

Try the following suggestions:

- Fit a heavier mooring chain (larger diameter).
- Reduce the weight of Trim Bars (counterweights) on the keel if fitted.

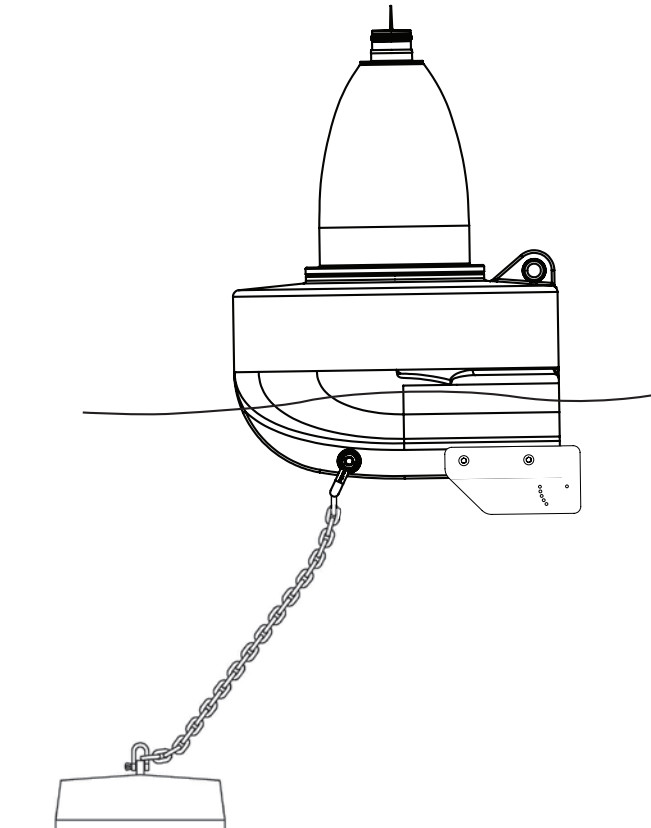


The buoy is riding correctly;

- The buoy is vertical in the water, with a light sitting horizontal.
- The chain is correctly sized, the buoy is not being dragged under the water or bobbing excessively.
- The counterweight on the keel is working correctly, being sized correctly for the prevailing conditions.
- The sinker is weighted correctly to keep the buoy correctly positioned during all tidal currents.

NOTE:

When using a synthetic mooring line it may be necessary to fit a tail chain between the top end of the line and buoy mooring point for correct trim.





Marine Buoy Maintenance

Sealite Marine Buoys are designed to require very little maintenance. We recommend the buoy be inspected annually. Inspection may need to increase depending on the local conditions and the position of the buoy.

IALA Recommendation:

AIMS E-107 suggests moorings are inspected annually or more frequently according to local conditions.

Marine Buoy – Annual Maintenance

- Visually inspect buoy for damage
- Inspect the top mark for any damage. Repair any broken or damaged section.
- Clean buoy of animal debris

Mooring – Annual Maintenance

- Check and clear the tail and ride chains from shells and algae.
- Check for wear on any shackle axis and check the tapered pins. Any worn shackles must be replaced.
- Check the free movement of each swivel around its head. If any swivel head sticks it must be replaced.
- Check every link of the thrash length of the chain. Check the diameter of the nips and sides and also inspect the welds on every link.
- If depth allows, a worn riding chain may be reversed.
- Change a chain when any link shows excessive wear.
- Chain must be replaced if any link wears to less than 3/5 of the original diameter.

Mooring – Biannual Maintenance

- Inspect the ground chain and sinker.

Lanterns – Maintenance

- Please refer to the Installation Manual for the specific Marine Lantern fitted to the Buoy.

Sealite Buoy Warranty

Sealite warranty terms and conditions can be found on our website. Visit [sealite.com](https://www.sealite.com)



We believe technology improves navigation™

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