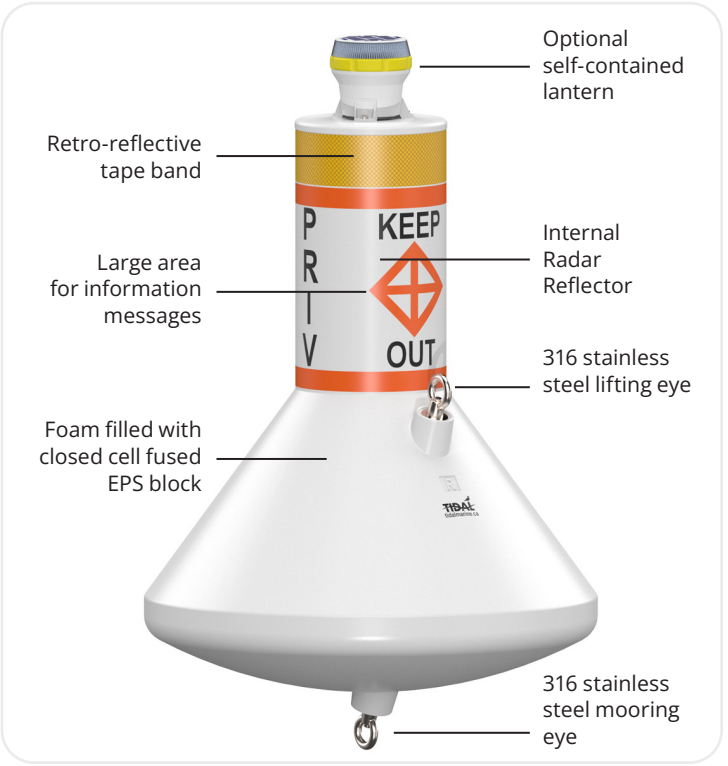
# TDL-0.89M-LE
Pillar Buoy

**The TIDAL™ 0.89m Pillar buoy is primarily designed for use as a Regulatory buoy for inland waterways. The Pillar buoy shape provides exceptional stability with a large area for messages to mariners. It is also used as a lateral buoy to mark channels and to identify the boundaries of aquaculture leases.**

## KEY FEATURES

- Rugged Polyethylene Construction
- 316 Grade Stainless Steel Mooring Eye to Lifting Eye
- Large Area for Messages and Reflective Tape Band
- Internal Radar Reflector and Inserts for Lantern
- 100% Recyclable after a long service life




## MANUFACTURED TO LAST

Virgin colour compounded UV-20 polyethylene designed and tested to provide long-lasting colour fade and impact resistance. Completely foam filled to prevent water ingress if the buoy is damaged.

## LARGE AREA FOR INFORMATION

The upper section of the buoy provides a significant area for messages to mariners. All the typical symbols and messages for regulatory buoys are offered, with custom messaging and branding available.

## VERSATILE

The large diameter of the floatation section provides exceptional stability. Lightweight moorings can be used to allow the buoy to surf in high current waterways.

## COLOUR CONFIGURATION

Available to meet the requirements of all IALA Colour / Configuration Recommendations with top marks and self-contained lanterns.

## RECYCLING AND REUSE

All TIDAL™ buoys are manufactured solely with materials that are readily recyclable; items like the radar reflector are designed and secured so they can be re-used. Call to discuss how you or TIDAL™ can recycle your buoys.

**NORTH AMERICA: 1-877-446-3337**
**INTERNATIONAL: 1-506-633-7850**

IALA

**info@tidalmarine.com**
**www.tidalmarine.com**

# TDL-0.89M-LE
## Pillar Buoy

## GENERAL SPECIFICATIONS

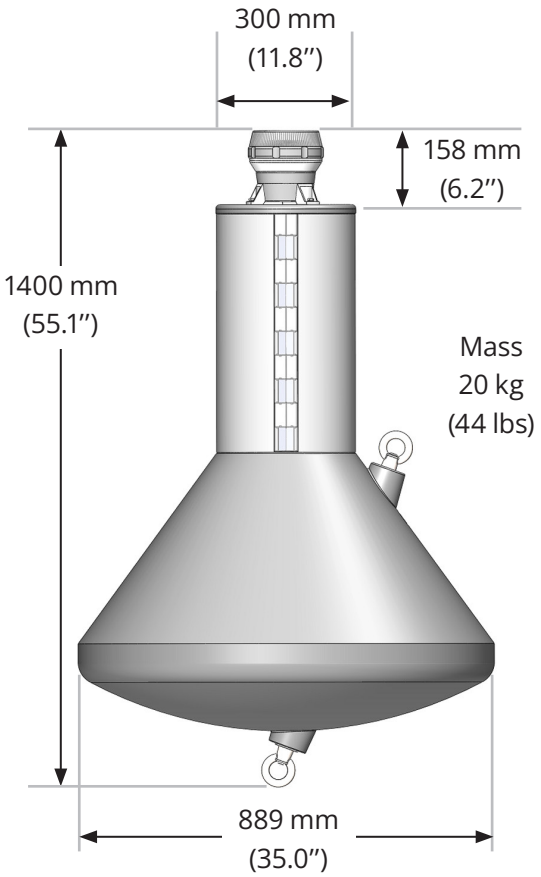
| | | |
|---|---|---|
| Diameter | 35.0 in | 0.89 m |
| Height | 48.9 in | 1.24 m |
| Mass | 44 lbs | 20 kg |
| Hull Floatation Volume | 8.4 $ft^3$ | 0.238 $m^3$ |
| Submergence (Freshwater) | 34.8 lbs/in | 6.21 kg/cm |
| Max. Mooring & Ballast Mass (Air Weight) | 198 lbs | 90 kg |
| Min. Mooring & Ballast Mass (Air Weight) | 22 lbs | 10 kg |
| Draught (at Min. Mooring Mass) | 8.6 in | 0.22 m |
| Reserve Buoyancy (at Maximum Mooring Mass) | 233 lbs | 105 kg |

## PERFORMANCE SPECIFICATIONS

| | | |
|---|---|---|
| Focal Plane Height (at Min. Mooring Mass) | 45.9 in | 1.17 m |
| Visible Height (at Min. Mooring Mass) | 45.9 in | 1.17 m |
| Visual Area / Surface (at Max Visible Height) | 5.49 $ft^2$ | 0.51 $m^2$ |
| Distance of Recognition (at Max. Visible Height) | 0.62 NM | 1.16 Km |
| Radar Range | 0.50 NM | 0.93 Km |
| Internal Radar Reflector (RCS: Average over 360°) | 2 $m^2$ | |

## MATERIAL SPECIFICATIONS

| | | |
|---|---|---|
| Topmark | Conical top available | |
| Buoy Hull | Virgin MDPE with UV20 protection package | |
| Wall Thickness | 1/4 in | 7 mm |
| Foam Filling | Closed cell EPS fused in situ block | |
| Mooring Eye | 316 stainless steel | |
| Safe Working Load (SWL) | 830 lbs | 377 kg |
| Colours | Compliance with IALA Recommendation R0108 | |
| IALA Compliance Testing | Independent laboratory test results available | |
| Colourfastness Test Procedure | Xenon Arc Accelerated Weathering per ASTM D-2565 | |
| Colourfastness Testing | Independent test results available per ASTM D-2244 | |
| Product Life Expectancy | 15 - 20 years | |
| Warranty | 5 years | |




**Mooring Line Design**

- Mooring design to optimize the performance of each buoy.
- Advanced 3D dynamic analysis of the mooring line and buoy.
- Supply of custom mooring lines with proven components.
- Catenary, inverse-catenary, chain, and synthetics.

Our advanced modelling software can perform dynamic analysis of the interaction between the mooring line and the buoy in normal "operating" conditions to assess and optimize buoy performance. Importantly, this dynamic analysis is also used to assess performance across a range of "survival" conditions.

M550 M650 M660

We carry a wide range of self-contained and externally powered lights for navigation buoys from world leaders such as Sabik, Sealite, Ekta, and Vega.

Depending on the size and use of the buoy, we offer options such as AIS Type I or Type II, remote monitoring & control, and on-board solar power systems.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## PERFORMANCE SUMMARY