

1. Description

The *ChainMate* counter is a digital display indicating the length of chain deployed by an electric windlass. In units of measurement of feet, or meters; the 3 digit LED display shows the length of chain that has passed through the windlass; when weighing anchor, the display counts down showing the anchor distance from deck level.

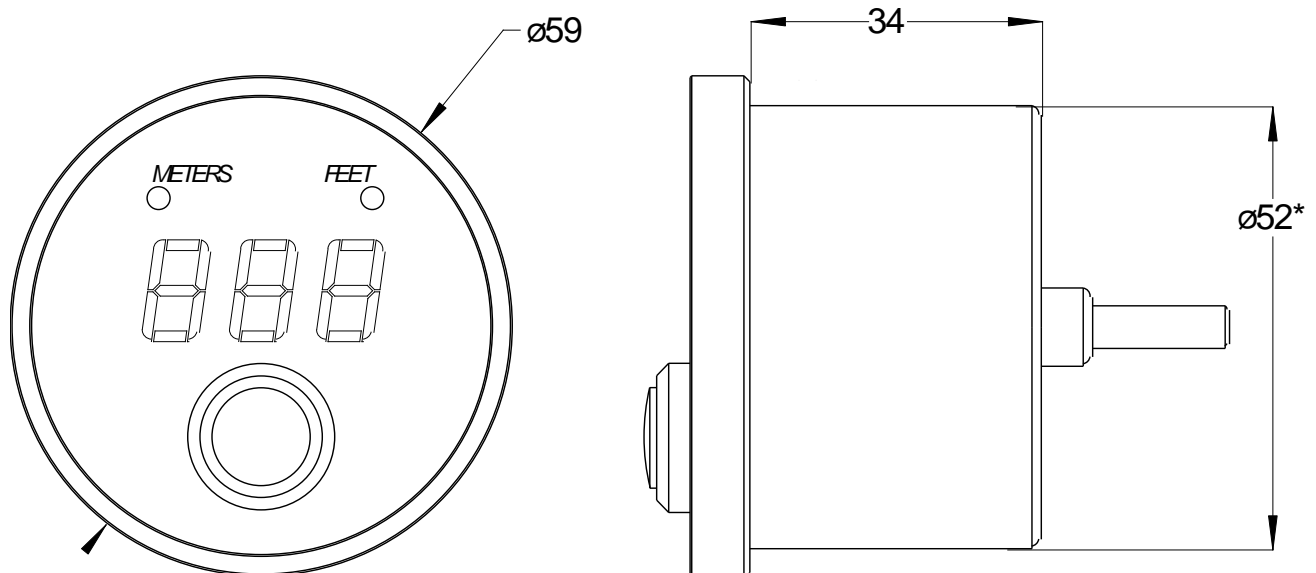
Designed to fit the standard 52 mm (2.1") diameter bulkhead hole mount, the device requires a simple 4-wire connection without the need for troublesome windlass mounted sensors and the associated wiring.

All functions can be viewed and actioned via the single interface button.

2. Specifications

Parameter	Value	Units
Weight	180	grams
Housing material	PVC	-
Operating Temperature range	-15 .. +90	Celsius deg
Protection	IP 65	-
Maximum allowable shock	3	G
Maximum allowable relative humidity	99	%
Units of length measurements	Meters / Feet	-
Range of measurements	0 .. 999 Feet (304 meters)	-
Chain lengths used for calibration	10 (3.05 meters)	feet

2. Dimensional outline



* - fits standard 2.1" opening
All units are millimeters

3. Operation sequence

Device control via single button.

Button	Action
One short press	Device wakes up and show the current counter value
Inactivity for more than 5 second	Device enters the sleep mode
Holding down for 4 seconds followed by a single short press	Device enters the reset mode flashing "000" and waiting for 5 seconds for a confirming button press. A short press of the button resets the counter.
Holding down for 8 seconds followed by a single short press	Device enters the reset mode flashing "---" and waiting for 5 seconds for a confirming button press. Each press toggles the units of measurement between METERS and FEET. The current counter value is maintained, it recalculated based on the units selected
Holding down for 12 seconds followed by a single short press	Device enters the calibration mode flashing "CAL" and waiting for confirming either UP or DOWN signals for 5 seconds. Operating the windlass for the required calibration chain length re-calibrates the device. After successful calibration a non-flashing "CAL" will display for 3 seconds.

4. Electrical specifications

Parameter	Value	Units
DC voltage supply range	6 .. 35	Volts
Current consumption - active	30	Milli-Amps
Current Consumption -sleep	5	Milli-Amps
LED color	Red	-



Connections should be ring terminals #6 (3mm) to the brass posts..

The *ChainMate* Counter's input signals are best sourced from the windlass control solenoids. A simple connection to the output side of the controls will provide the input to the chain counter.