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LIER 113

Modular CTD winch

Highlights

- Line pull capability up to 30 kg
- Drum electrically driven
- Spooling device electrically driven
- Stainless steel frame construction (AISI 316L)
- Stainless steel control cabinet (AISI 316L)
- Auto dip function

Company address
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Introduction

LIER-113 is a survey winch designed for hydrographical purposes such as CTD probes. It has a SWL capability of 30 kg and a winch speed up to 50 m/min on the outer layer at SWL. The winch is equipped with an electrically driven spooling gear. The davit and winch outer structure are made of stainless steel, protecting the internal parts from the seawater environment where this winch is used.

This winch is equipped with a PLC in the electronics cabinet where parameters can be set. An automatic auto dip function is integrated in this system. The operator of the winch only needs to deploy the CTD probe just below the seawater surface. After reaching the surface the auto dip button can be pressed so a fully automated sequence lowers the probe to the target depth set on the display of the winch.

The system consists of parts not heavier than 35-40kg in order to keep it hand carry-able by two people. Complete set can be assembled on location.

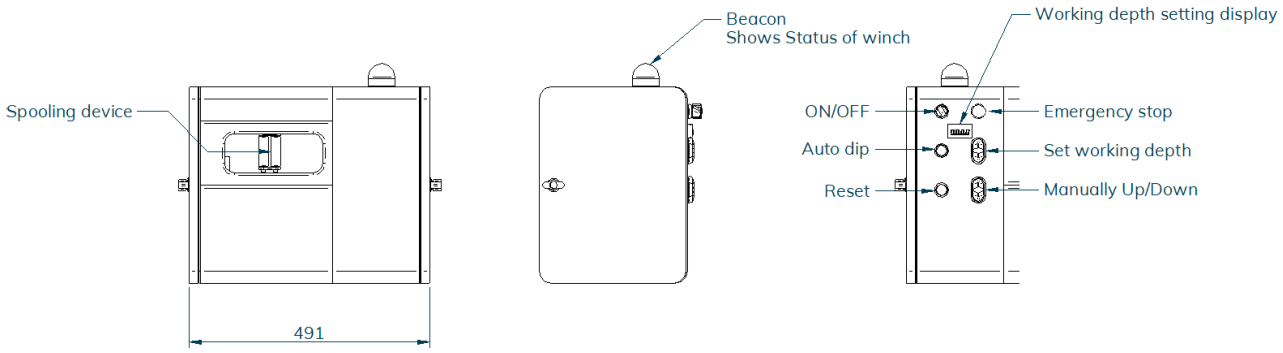
Specifications

Mechanical		Remarks
- Frame dimensions	See drawing	
- Drum dimensions	∅160 x ∅250 x 200 dxDxl	
- Drum capacity	100 mtr	
- Cable/wire dia	4 mm Dyneema	2mm rope on first windings as weak link
- Layers	4	
- Weight	TBD kg excl cable	

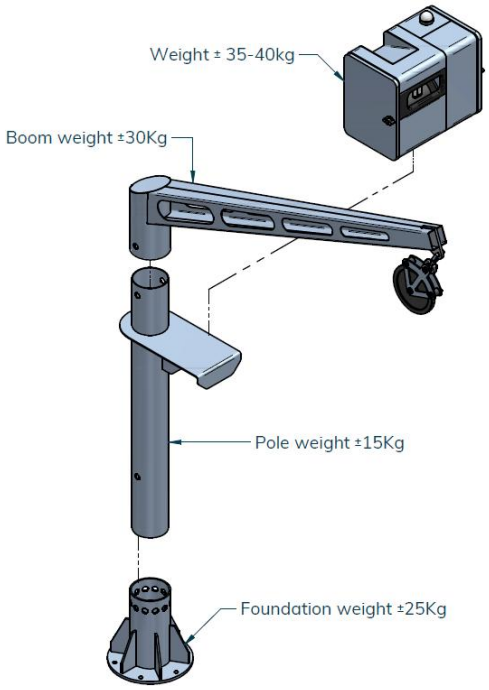
Electrical Supply		
- Voltage	200-240 Vac	Single phase
- Power of inverter	400 Watt	
- Spooler drive	40 Watt	Diamand screw shaft
- Frequency	45-66Hz	
- Absolute encoder	Yes on drum	Integrated in servo motor
- Connection	1x Power connector 1x Ethernet connector	

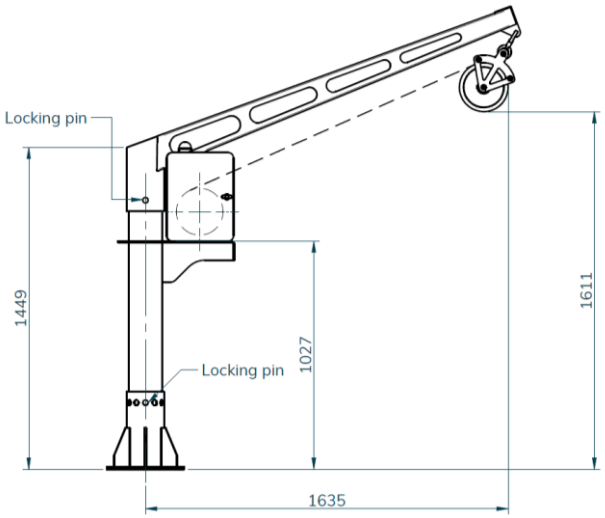
Performance	
- Max. speed bottom layer	0 - 40 m/min
- Max. speed outer layer	0 - 50 m/min
- Safe working load	30kg

Additional features	
- Suitable for slipring use	Mechanical provisions are incorporated in the drum design.
- Local winch control	
- Configuration through web browser	Speeds, cable diameter, length free board etc
- Auto dip function	From approx. 1mtr below surface.
- Slack wire detection	


Spooling device
491
Beacon
Shows Status of winch
Working depth setting display
ON/OFF
Emergency stop
Auto dip
Set working depth
Reset
Manually Up/Down

Dimensions


Weight ± 35-40kg
Boom weight ±30Kg
Pole weight ±15Kg
Foundation weight ±25Kg


Locking pin
1449
1027
Locking pin
1611
1635


SEATEC
EMERGENCY STOP
Actual length
Target length
Set target
Raise
Reset
Auto
Lower