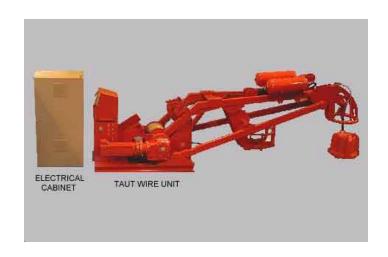
KONGSBERG

LTW Mk 15B

Light Weight Taut Wire Mk 15B

Position-reference system

The Light Weight Taut Wire Mk 15B is a position-reference system designed to provide accurate data of a surface vessel's movement with respect to the position of a depressor weight on the sea floor.



Features

- Cost-effective main or supplementary positionreference system
- Well-proven and reliable technology
- Highly stable A-frame construction
- Separate control electronics for all-weather operations (ice-free)
- Operational water depth up to 300 m
- Tension monitoring

Options

- Operational water depth up to 500 m by changing depressor weight
- Remote Control panel (wall-mounted or brackets)
- Taut Wire computer for enhanced accuracy in water depths above 200m

Description

The Light Weight Taut Wire Mk 15B is a position-reference system designed for use in deck-mounted port or starboard position on surface vessels. Its purpose is to provide accurate data of a surface vessel's movements with respect to the position of a depressor weight on the sea floor.

A wire is maintained at a constant tension by means of a depressor weight on the sea-bed and a pneumatic and electric servo-assisted "mooring" system. Any movement of the vessel will cause the tensioned wire to deviate from its initial inclination. This movement activates potentiometers mounted in the gimbal (sensor) head and produces changes of analogue signals directly proportional to the deviation in inclination.

System Specifications

System Accuracy

	THE DUTING THE PARTY OF THE PAR	DEVIATION IN METRES					
CURRENT AT SEA SURFACE CURRENT AT SEABED WIRE ANGLE		0 m/s 0 m/s			0.5 m/s 0.5 m/s		
		200 Kp	WATER DEPTH 100	В	0.6	1.2	24
MOORING TENSION	200 300	0	1.B 3.5	3.5 7.6	9.3	11.2 23.3	13.0 28.0
300 Kp MOORING TENSION	WATER DEPTH 100	D	05	1.0	20	2.5	3.0
	200	Π.	15	3.0	8.0	9.5	11.0
	300	D	3.0	5.5	18.0	20.0	24.0
	400	D	5.0	11.0	31 D	36 D	41.0

DimensionsDeck equipment

Height: 3550 mm (parked)

1665 mm (operational)

Width: 1400 mm

Length: 1700 mm (parked)

5115 mm (operational)

Weight: 2530 kg including depressor

weight (360 kg)

Support frame: $1700 \text{ mm} \times 1300 \text{ mm}$

Electronics cabinet

Height: 1900 mm
Width: 800 mm
Depth: 510 mm
Weight: 250 kg

NOTE:

The distance between the Deck equipment and the Electrical cabinet must not exceed 50 m.

Electrical

Input voltages:

• 440 VAC +20%/-30%, 3-phase, 50 to 60 Hz

• 220 VAC, single phase, 50 to 60 Hz, (from UPS)

Power consumption:

440 VAC input: 22 kW (continuous load)

36 kW (peak load, maximum

30 minutes)

220 VAC input: 500 W

Models

Unit Name Article number

LTW Mk 15B 702788

SDP System Interface

Three (3) digital and four (4) analogue input channels are required.

Pressurized Air

Maximum pressure: 10 bar

Minimum pressure: 6 bar

Minimum flow: 5 Nm³/h

Purity (in accordance with ISO 8573-1)

solid contamination: class 5

water: class 3

oil: class 5

Environmental

Ambient temperature

operational:

- cabinet: 0 to +55° C

- deck equipment: -15 to +65° C, no ice*

(see Note: *)

storage: $25 \text{ to } +70^{\circ} \text{ C}$

Ambient humidity

operational: 20 to 100% relative

humidity

storage: 0 to 100% relative

humidity (sealed in aluminium foil)

Operating wind strength: 0 to 80 knots

Ice thickness

operational: none*

parked: up to 100 mm thick**

(see Note: * and **)

Acoustic noise: less than 90 dBA at 1 m

Protection standard

cabinet: IP22 deck equipment: IP56

Surfaces: surface treated and

painted steel.

NOTE:

* Any ice on the deck equipment must be removed before the equipment is operated.

** A build-up of ice, over 100 mm thick, may cause damage to the deck equipment structure.



