



Email : sales@laboratoryinstrumentindia.com

**Product Name :**  
Open Water Propeller Dynamometers

**Product Code :**  
LBNY-0005-1970006



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#### **Description :**

The propeller dynamometers are new designs to replace earlier dynamometers only adjustments to the inclination of the propeller shaft could be made, but with the introduction of the adjustment of propeller shaft height can also be achieved. Depending on the maximum capacity of the drive motors, the maximum torque ratings, and consequently the diameters of the propeller shaft ends, are different. The capacity of the drive motors of the same whereas that of less. Apart from the different arrangement possibilities, the technical details of all essential parts of propeller dynamometers are identical, with exception of the capacity of the drive motors and the maximum load ratings in respect of measurement of torque and thrust.

#### **Technical Specification :**

Temperature compensation: For feeding with constant voltage (not constant current)  
Input resistance: Approx. 257 $\Omega$   
Output resistance: Approx. 240 $\Omega$   
Rated torque, up to: 100  $\pm$ Nm  
Rated thrust, up to: 2  $\pm$ kN  
Load sensor for torque and thrust measurement Full bridge strain gauge type transducer  
Permitted overload of the transducers for a short moment inclusive dynamic peak: 25%  
Recommended supply voltage up to: 10 V DC or AC  
Diameter of propeller shaft end (for taking up the boring in the boss of the propeller to be tested: 22mm  
Rated torque upto:  $\pm$ 150 Nm  
Rated thrust, up to:  $\pm$ 3 kN  
Maximum supply voltage: 15 V DC or AC  
Output voltage at rated load referred to the feeding voltage Approx. 16 mV/V

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Drive motor: 32 kW at 3000rpm  
Permitted overload of the transducers for a short moment inclusive dynamic peak: 25%  
Temperature compensation For feeding with constant voltage (not constant current)  
Load sensor for torque and thrust measurement Full bridge strain gauge type transducer  
Recommended supply voltage up to: 10 V DC or AC  
Maximum supply voltage: 15 V DC or AC  
Diameter of propeller shaft end (for taking up the boring in the boss of the propeller to be tested: 25mm  
Output voltage at rated load referred to the feeding voltage Approx. 16 mV/V  
Drive motor: 64 kW at 4000 rpm  
Output resistance: Approx. 240 $\Omega$   
Input resistance: Approx. 257 $\Omega$ .



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