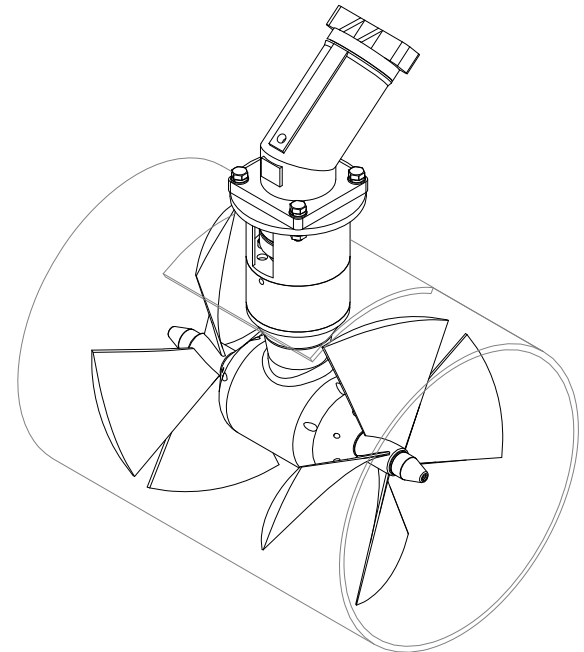


# QT150

## PROPELLER THRUSTER UNIT

### DESCRIPTION:

A thruster unit is an energy transfer device in Quantum’s integrated systems. The thruster unit is installed in the bottom of the vessel’s bow or stern with its propeller shafts extending in a transverse plane across the hull. The contra-rotating propellers are spun via a hydraulic motor in order to create hydrodynamic thrust in either the port or starboard direction. The use of thrusters becomes increasingly important for maneuvering purposes.



### FEATURES:

- **SIMPLE INSTALLATION:** The thruster unit is delivered fully assembled for easy installation into the vessel’s structure. Quantum can also supply the unit pre-installed in a survey approved thruster tunnel.
- **EFFICIENCY:** The QT150 thruster’s propellers operate with one half inch radial clearances to the tunnel, providing improved thruster efficiency.
- **LOAD HANDLING:** Bearings on the main propeller shaft and pinion shaft are utilized to distribute the dynamic loads imposed on the thruster unit.
- **MINIMAL MAINTENANCE:** The thruster unit is simple to maintain during normal operation, with stainless steel components used as much as possible to minimize corrosion. Easily accessible lubrication points are provided as well as lube oil header tanks, to maintain constant lubrication of the bearings. Zinc anodes supplied on the unit can be changed underwater. The unit is designed for replacement of o-rings, seals, and bearings during vessel haul-outs every other year.

|  |                    |
|--|--------------------|
| <b>Typical Vessel Length*</b>                  | 30-50m (100-165ft) |
| <b>Estimated Thrust Achieved**</b>             | 13kN (2940 lb)     |
| <b>Hydraulic System Pressure</b>               | 276bar (4000psi)   |
| <b>Hydraulic Flow Required</b>                 | 223LPM (59GPM)     |
| <b>Propeller Diameter</b>                      | 610mm (24")        |
| <b>Tunnel Inside Diameter Required</b>         | 635mm (25")        |
| <b>Width (inside tunnel)***</b>                | 700mm (27.5")      |
| <b>Height (above tunnel, inside vessel)***</b> | 480mm (19")        |
| <b>Weight (without tunnel)</b>                 | 246kg (541 lbs)    |

\* Provided for reference only. Consult a Quantum representative for system sizing.  
 \*\* Actual achieved value varies with many parameters outside of Quantum's control. See a Quantum representative for more information.  
 \*\*\* Dimensions are of the equipment, and do not include service allowances.

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*Equipment is covered by Quantum's 1 year comprehensive warranty. Service and technical support are available worldwide.*

