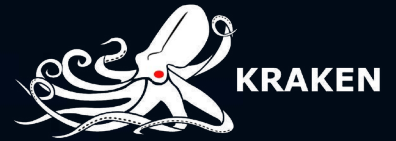


SeaThrust™



Works Best Under Pressure

Kraken's SeaThrust™ rim-driven thrusters are quiet, compact, and lightweight. They convert electric power directly into propulsion without transmission loss or gearbox noise. Couple that with our exceptional expertise in pressure tolerant technologies, and you have a thruster that works best under pressure.

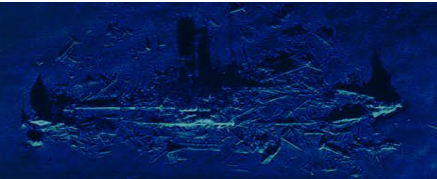
SeaThrust rim-driven thrusters have always been designed with deep water applications in water depths up to 6,000 m. The thrusters are responsive, powerful, easy to integrate, and provide a unique combination of ultra-compact power and high-maneuverability that are virtually maintenance-free.

Kraken offers two versions of SeaThrust™, the T100, and T160, both to suit your operational requirements. The thrusters fit a multitude of applications such as unmanned underwater vehicles, remotely operated vehicles, autonomous underwater vehicles, manned underwater vehicles, and surface crafts.



Features

- Unique technology without requiring seals
- Two solidly-molded parts without oil or air
- High-reliable and rugged design
- One moving, direct-driven propeller only (gears not required)
- High torque at low RPM
- Low-friction, easy to service seawater lubricated bearings
- Hubless propeller offering low-risk of entanglement
- Clockwise and counterclockwise propeller
- Symmetrical forward and reverse thrust
- Integrated temperature monitoring
- Diverse options for connections



SeaThrust™ T100 Specifications

Maximum Depth	6,000 m
Thrust	Up to 20 kgf
Input Power	1.2 kW
Voltage	24, 48, 110 VDC
Max RPM	2,300 rpm
Weight (Air)	2.7 kg
Weight (Fresh Water)	1.7 kg
Size: Tunnel	100 mm
Size: Outter Diameter	164 mm
Size: Length	56 mm

SeaThrust™ T160 Specifications

Maximum Depth	6,000 m
Thrust	Up to 48 kgf
Input Power	2.2 kW
Voltage	24, 48, 110 VDC
Max RPM	1,400 rpm
Weight (Air)	5.6 kg
Weight (Fresh Water)	3.1 kg
Size: Tunnel	160 mm
Size: Outter Diameter	244 mm
Size: Length	47 mm

Electronic Control Specifications

2-Phase high current microcontroller based thruster driver	
RMP or Current control	
Simple programming	
Software package on demand	
Operation depth	6,000 m
Power	Up to 2.2 kW
Voltage	24 - 120 VDC, 400 VDC
Interface	RS485; RS422; CAN; RS232; Analog ± 5, 10 VDC



SeaThrust™ is perfectly suited for Remotely Operated Vehicles (ROVs) like MPI's JetMaster (left) and for Autonomous Underwater Vehicles (AUVs) like Kraken's own ThunderFish® (below)

