



SEAHORSE 5 LWROV 75 HP

Seahorse 5 ROV is a 75 HP Light Work Class ROV, high performance professional ROV system which can be used for a variety of underwater tasks such as observation, survey and inspections, etc. The aluminum open-frame design, the abundance of space and the generous payload capability provide a versatile solution for the fitting of additional equipment and sensors.

Performance/Dimensions

Power	:	75 HP.
Depth Rating	:	600 MSW.
Payload	:	100 Kg.
Dimensions		
Height	:	1,500 mm.
Length	:	1,750 mm.
Width	:	1,300 mm.
Mass in Air	:	1,500 kg.
Thrust @ 0 Knots (Bollard Pull)		
Forward	:	450 kgf.
Reverse	:	450 kgf.
Lateral	:	350 kgf.
Vertical	:	150 kgf.
Maximum Velocity/ Operational current		
Forward	:	< 1.54 m/s. < 3.0 Kt.
Reverse	:	< 1.28 m/s. < 2.5 Kt.
Lateral	:	< 1.28 m/s. < 2.5 Kt.
Vertical	:	< 0.77 m/s. < 1.5 Kt.
Turning Rate	:	150 Degrees Per Second.

ROV Spread power requirements:

400/440 VAC. 3 phases 50/60 Hz. 250 KVA.

Features

- High Reliability.
- 600 MSW. Version.
- High Thrust Capability.
- 100 kg Payload Capacity.
- Multiple Camera & Sensor Interfaces.
- 5 functions Manipulator.
- 6 function manipulator.
- Auto-Heading.
- Compact Surface Control Unit.
- Aluminum Open Frame Design.

Lighting

5 off 220 VAC 250 Watts halogen lamps, dimmer controlled, 2 off 24 VDC 40 Watts LED lights mounted on frame and camera pan and tilt unit.

Frame

The Seahorse 5 frame is manufactured from T6 aluminum.

- Aluminum load-frame and Stainless Steel fasteners
- Balanced lift point
- Maintenance free



Control System

The system incorporates a *Surface Control Unit* (SCU) which communicates with the vehicle electronics that are housed in a one-atmosphere enclosure located on the vehicle.

The SCU incorporates:

- 1 of 43" color monitors
- 1 of 19" color monitors
- 3 of 17" color monitors
- Pilot's control panel & joystick
- Light dimmers
- Automatic depth & heading control (altitude optional)
- Video overlay system
- Earth leakage protection system (LIMs)

The control cabin power requirements: 400/440 VAC, 50/60 Hz, 10kVA

The Seahorse 5 vehicle electronics are housed in an aluminum one atmosphere enclosure, incorporating the thruster drive systems, light dimmers, telemetry system, compass, depth transducer, pan and tilt camera controls. The housing also has spare electrical connectors to provide power and control for extra equipment interfaces.

Vehicle Functions/ Integral Sensor

- Fluxgate compass.
- Depth sensor and auto depth function.
- Auto heading function.
- Thruster control (Inverters)
- Turns counter.
- 5 Functions manipulators
- 6 Functions manipulator

Propulsion System

The vehicle is propelled by six electric motor, propellers and nozzles, arranged in the following configuration:

- 4 off propeller thrusters for horizontal.
- 2 off propeller thrusters for vertical.

Optional Equipment

The Seahorse 5 ROV system will support the following additional equipment which is available as options to the standard specification:

- Boom arm cameras
- High Definition Sonar System
- Profiling Sonar
- Side Scan Sonar
- Bathymetric and Oceanographic Sensors
- CP probe
- Pipe Tracker
- GPS navigator
- 19' display for bridge

Standard Equipment

- Umbilical System
- 500 meters winch
- LARS, Lock-latch and Bullet
- SIT (Silicon Intensified Transistor) Camera
- Color zoom video camera
- Sonar system
- 2 x 8 channels video matrix switcher
- 4 channels audio communication
- DVD recorder and black box
- 1 of 43" color monitor, 2 of 19" color monitors, 3 of 17" color monitors for display

