



GLOBAL
Diving & Salvage Incorporated

SAAB Cougar XT ROV



SAAB



Specifications	Seaeye Cougar-XT
Depth Rating	2000 msw / 6,561 feet
Length	1506 mm / 59 inches
Height	745 mm / 29 inches
Width	1000 mm / 39 inches
Launch Weight	344 kg / 758 pounds
Forward Speed	> 3.2 knots
Thrust Fwd	170 kgf / 374 pounds force
Thrust Lateral	120 kgf / 264 pounds force
Thrust Vertical	110 kgf / 242 pounds force
Payload	80 kg / 176 pounds

THE VEHICLE

Chassis

polypropylene chassis with a stainless steel lift frame, is totally maintenance free, non corroding

Buoyancy

The syntactic foam buoyancy block is split into two sections for easier handling and access to vehicle components. Apertures are provided for sonar, Xenon strobe and tracking transponders.

Equipment Interfaces

- Two Five Function Manipulator & cutter interfaces
- CP Interface (Proximity or Contact)
- Obstacle avoidance, profiling, side scan sonar – MS 1000
- Capable of supporting Bathymetric system
- Fixed focus, zoom and stills cameras
- 3-phase tooling supply, 3,000 psi hydraulic
- Auxiliary connections providing telemetry & DC power for other accessories

Propulsion

The Cougar XT features brushless DC thrusters with velocity feedback. Four vectored horizontal and two vertical SM7 500 Volt brushless DC thrusters provide full three-dimensional control

Compass & Rate Gyro

A Flux-gate compass and a solid-state rate sensor give superior azimuth stability in forward flight and in auto heading.

Specifications	Cougar-XT
Accuracy	$\pm 1^\circ$
Resolution	0.351°
Update rate	98 mS

Depth Sensor

The system uses an electronic depth sensor accurate to $\pm 0.1\%$ FSD accuracy.

Automatic Pilot

The compass, rate gyro, altimeter and depth sensors provide an automatic pilot for depth, heading and automatic altitude operation.

Video System

Equipped with a high resolution / low light black and white camera and a color zoom (18:1) camera and four high efficiency, high power LED lamp units, transmits multiplexed video over two multimode fibers in the umbilical/tether. This provides up to 4 simultaneous video channels which are networked to two DVD recorders or USB drive.

Pan & Tilt Unit

The ± 90 degree camera pan & tilt platform is equipped with two cameras and one LED lamp. A proportional tilt feedback potentiometer provides an accurate pan & tilt angles which are displayed on the video overlay.

ROV TOOLING & QUICK-CHANGE TOOL SKID

Manipulator Skid

The Cougar-XT includes a detachable dual 5 function manipulator tool skid. These manipulators have an integral 12 mm rope cutter. A function grabber or a 14 inch disc cutter is also available.

Five Function Manipulator:

- Lift capacity at full reach – 85 pounds
- Jaw open / close 0 – 6 inches
- Rotate torque – 26.5 foot pounds

Heavy Duty Grabber

- Jaw open – close - 0 – 12.5 inches

Disc Cutter

- Disc size – 14inch
- Diameter of cut – 4.25 inches

SURFACE CONTROL AND POWER SUPPLY

- AC and DC supply switching control
- DC current and voltage indication
- Control of video and video overlay
- A keypad for system configuration
- Plugs and sockets for system connections and interfaces for ancillary equipment
- ROV control system (remote from the Hand Control Unit)
- Output to Telemetry monitor unit for RS232

Control data is transmitted between the surface Central Processor Unit (CPU), PCB and subsea CPU PCB via dedicated twisted-pair cables from the ROV using a half duplex RS485 communication link.

Video Overlay

- Heading data (in degrees)
- Analogue Compass Rose
- Depth in meters (or feet)
- Pan & Tilt position
- Date and time
- Free text from keyboard
- TMS Bail Count (TMS cable counter when used with TMS)
- CP probe readings (if fitted)
- Vehicle Turns Counter

COUGAR-XT DEPLOYMENT

Global's Seaeye Cougar-XT can be operated in either free swimming with up to 450 meters / 1,476 feet of soft umbilical or for greater protection of the vehicle as it passes through the splash zone and for faster travel to and from the working depth, it is deployable via a garage Tether Management System (TMS).