



Schilling Robotics ATLAS 7R Manipulator

**We put you first.
And keep you ahead.**

The Subsea Industry relies on hundreds of Schilling Robotics' manipulators every day. The ATLAS suited to work with today's highest-performing vehicles under the most demanding conditions.

- » Extraordinary Lift-to-Weight Ratio
- » Premium Dexterity Allows for More Effective Positioning While Grasping Wellheads, Panels, or Tools
- » Long Reach and High Degree of Agility Provides a Large Operating Envelope
- » Common Parts Used Throughout Arm to Reduce Needed Spares Inventory
- » Built for Durability and Reliability in Harsh Subsea Environments
- » Standard Depth Rating of 6,500msw

It has been designed to lift heavy loads, while being lightweight and easy to control. With seven degrees of freedom, a high lift capacity (250kg or 550lb at full extension), and a depth rating of 6,500msw, the ATLAS gives operators the freedom and strength to perform a wider range of heavy-duty jobs in harsh subsea environments.



Tough and Durable

We took the most recent technological advances in manipulator structure, design, and actuation, and applied them to the ATLAS to accomplish harsh and demanding ROV intervention tasks involving heavy lifting jobs. It has been structurally optimized to withstand prolonged abuse without possessing excess material that adds unnecessary weight. It uses similar actuators in all locations, which are made of titanium for high strength, long life, and no corrosion. It is durable because its structure is made from 6061-T6 aluminum extrusions and billets for an optimal strength-to-weight ratio.

Dexterous Grabber

The ATLAS allows the operator to more effectively position a ROV when grasping onto objects such as tools or panels. With seven functions and a high lift-to-weight ratio, it is a premium option over traditional 5-function grabbers, and is particularly effective when paired with a TITAN 4 manipulator.

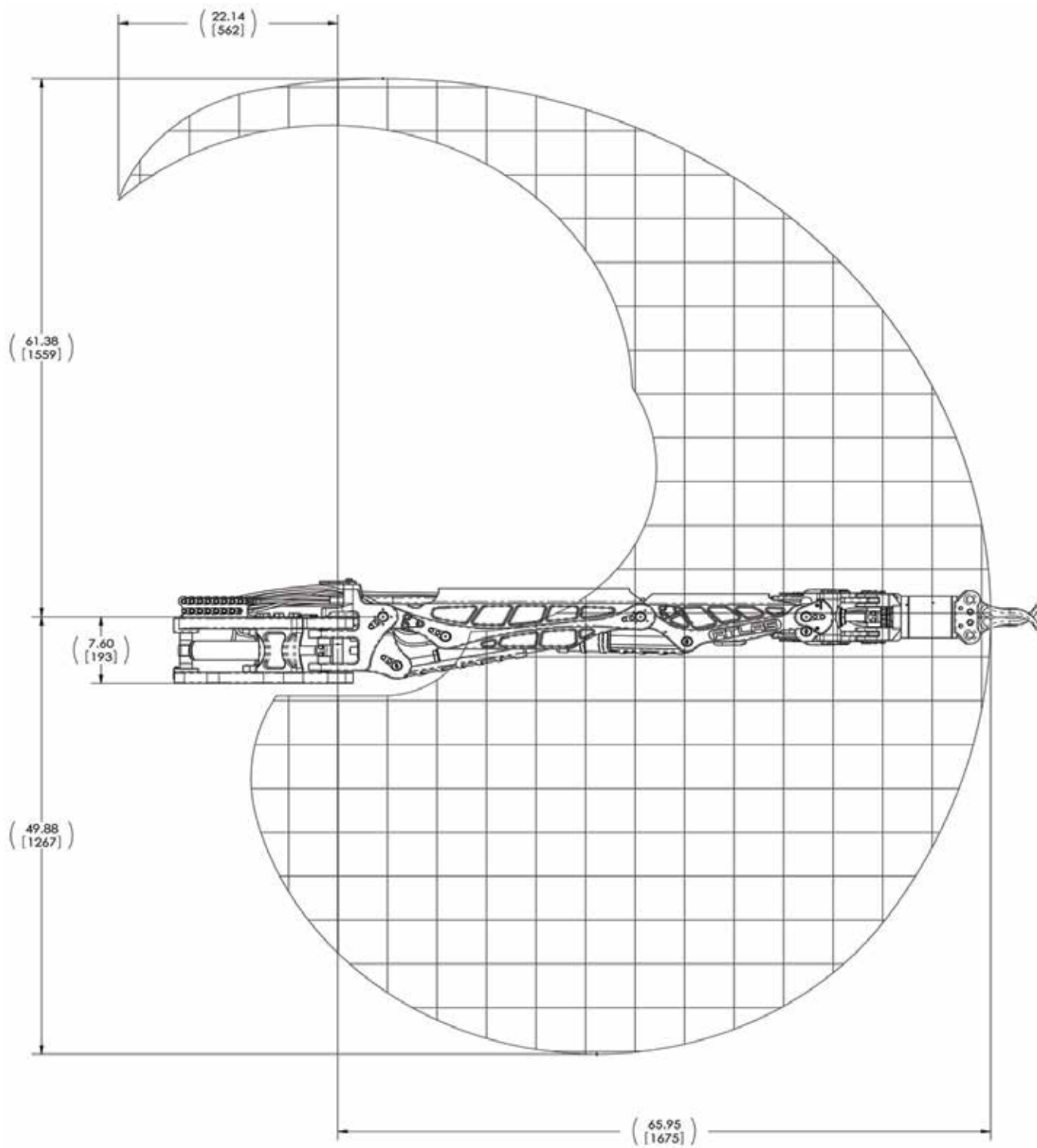
Operating Envelope

A large operating envelope establishes this arm as a dual-role grabber with the dexterity to access tool skids and supplemental equipment, giving an operator needed flexibility in the field. Additionally, having a slim cross-section allows it to reach into restrictive openings. If it needs to be interchanged between a left and right mounting position, this can be done quickly in the field and without the need for additional parts.

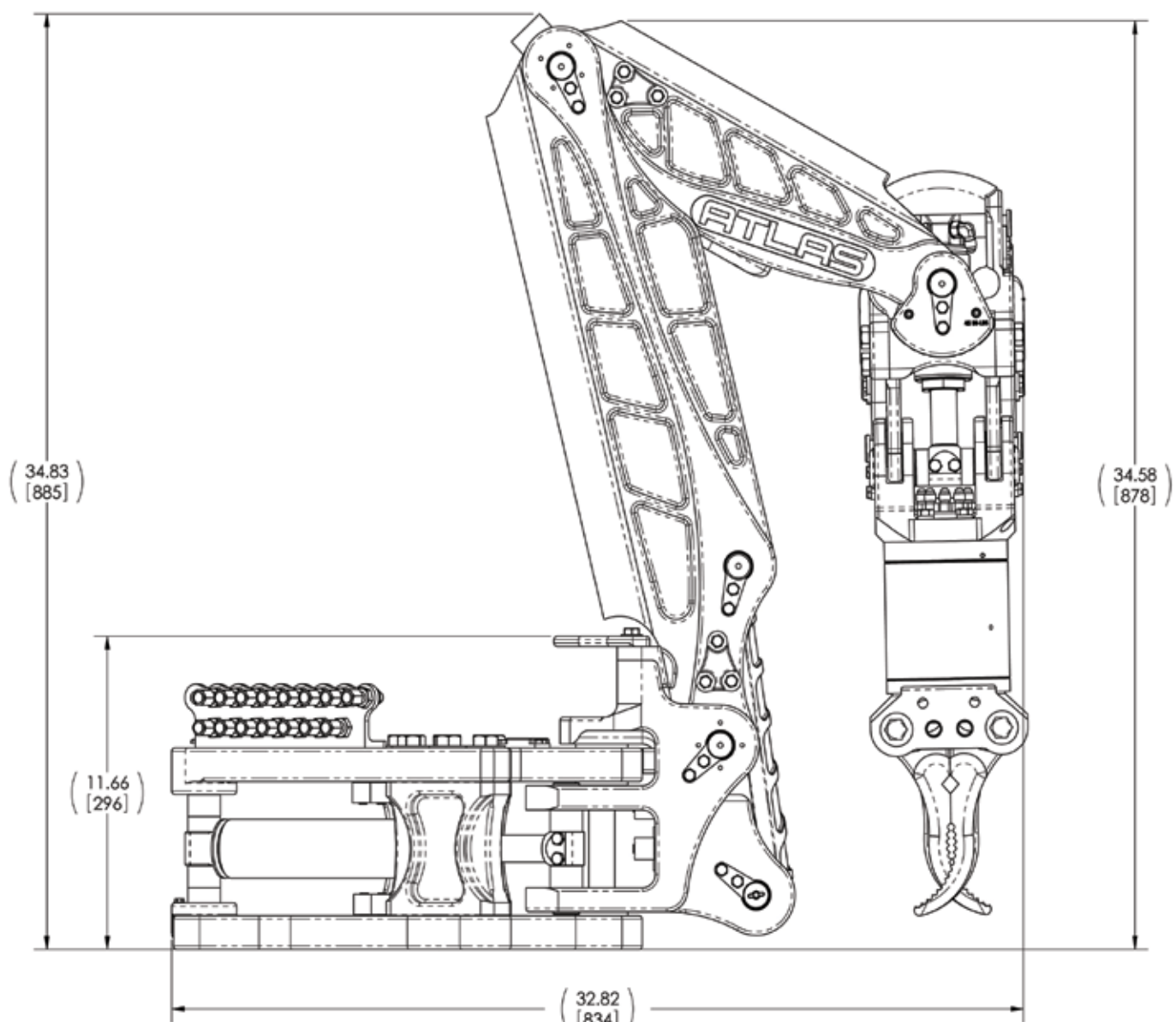
SPECIFICATIONS

Reach:	1,664mm
Type:	Rate Controlled
Functions:	7
Materials:	Anodized Aluminum, Titanium, Stainless Steel

- » Arm Specifications
 - Standard Depth: 6,500 msw
 - Weight in air: 73kg
 - Weight in water: 50kg
 - Lift at full extension: 250kg
 - Maximum lift, nominal: 500kg
 - Standard Gripper Opening: 198mm
 - Grip Force, nominal: 4,448N
 - Wrist torque, nominal: 205Nm
 - Wrist rotate, continuous: 6-35rpm
- » Actuator Function
 - Azimuth: Linear, 120°
 - Shoulder Pitch: Linear, 135°
 - Elbow Pitch: Linear, 135°
 - Wrist Pitch: Linear, 120°
 - Wrist Yaw: Linear, 120°
 - Wrist Rotate: Gerotor, 360°
 - Gripper, Standard: Linear, 198mm
- » Electrical and Telemetry
 - Input Power, Controller: 90-260VAC
 - Input Power, Arm: 24 VDC
 - Power, Controller: 6W start, 3W run
 - Power, Arm: 6W start, 45W run
 - Telemetry: RS-232 or RS-422/485
- » Hydraulic Requirements
 - Fluid: Mineral, Glycol, or Synthetic
 - Viscosity: 10-200 cSt
 - Available Flow: 5.7 - 19 lpm
 - Max. Pressure: 3,000 psi
 - Max. Fluid Temperature: 54°C
 - Fluid Cleanliness: ISO 4406 14/11



Range of Motion, Side View



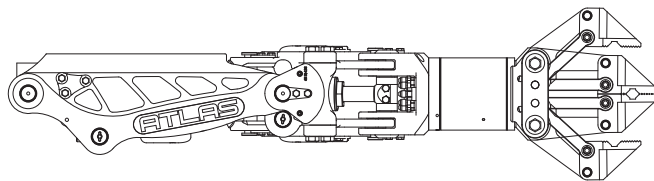
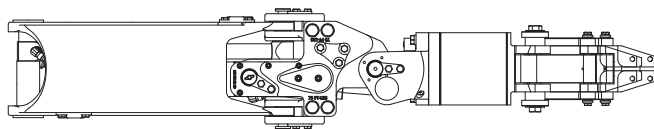
Dimensions with Arm Stowed

Options and Accessories

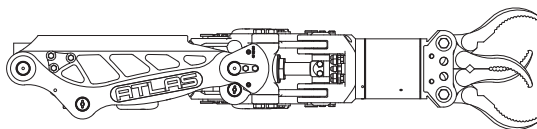
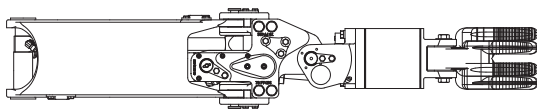
- » 6in (152mm) Parallel-Acting Titanium Gripper
- » 11.2in (284mm) Four-Finger Intermeshing Titanium Gripper
- » Spares Kit
- » Seal Installation Tool Kit

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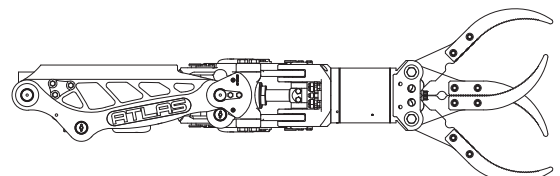
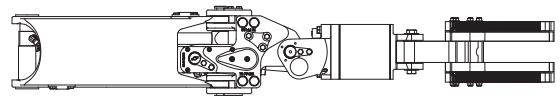
Gripper Options



6" Parallel



7.8" Four Finger Intermeshing



11.5" Four Finger Intermeshing