

# DATA SHEET

## TMI-Orion Dynamics

# Electrical Linear Actuator



### Underwater Electrical Linear Actuator module

The Electrical Linear Actuator (ELA) is a high-performance, compact and reliable module designed for underwater operation down to a depth of 500 meters. The Electrical Linear Actuator module offers intuitive programmable position controls and embedded controllers. This modular system is also equipped with a connector for an additional module (optional cameras, projectors...). It is adapted to numerous operations and can be mounted on TMI-Orion ROV platforms and retrofitted to most of ROV systems.

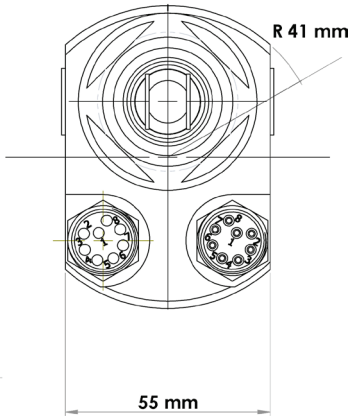
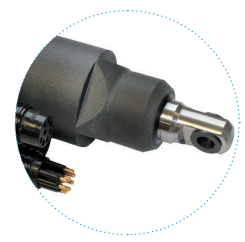
- Manipulators component
- Underwater motion system (camera, projector pan and tilt, sonar, thruster...)
- Ballast correction system
- Sampling system
- ROV locking system
- Subaquatic tooling / ROV equipment
- For scientific community - Environment - Energy – Aquaculture...

### SPECIAL FEATURES

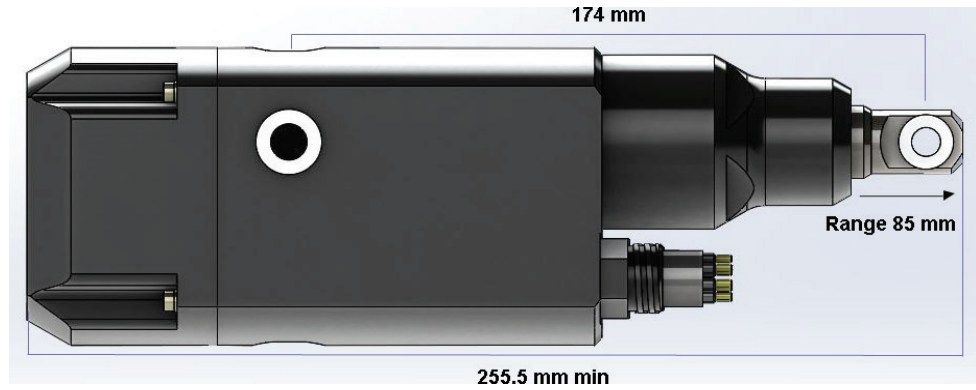
- Ideal for applications with large thrusts where precision and motion control are needed.
- Position feedback
- 1 connector available for add-on capacity (additional actuators, camera, projector...)
- With embedded electronic controller (no external POD required)

### TECHNICAL SPECIFICATIONS

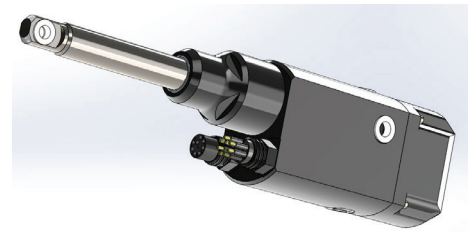
<b>Material</b>	Hard anodized aluminum (body), Stainless steel (rod)
<b>Depth rating</b>	500 m
<b>Dimensions</b>	D. 82 mm x l. 256 mm
<b>Range</b>	up to 85 mm
<b>Weight</b>	2 kg in air 1.2 kg in fresh water
<b>Operating temperature</b>	From -10°C to +60°C
<b>Storage temperature</b>	From -20°C to +60°C
<b>Connector</b>	In: SubConn / out: SubConn MCBH8F (chainable with other TMI-Orion products)
<b>Power supply</b>	9-24 VDC. The characteristics are done with 24 VDC nominal (40 W max.)
<b>Control bus</b>	RS485 (115 200 bauds)
<b>Thrust capability</b>	200 kg (max)
<b>Rod speed</b>	Up to 4 mm per second (configurable)



*Electrical Linear Actuator  
Front view*



*Electrical Linear Actuator  
Side view*



## SOFTWARE AND RELATED PRODUCTS

### Monitoring software

The Electrical Linear Actuator Module comes with a monitoring software.

### Other products

The Electrical Linear Actuator Module can equip the S-ROV or the Electrical Manipulator Arm. Please visit our website for more information.

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