Signature Motion ECO60

The ECO60[™] is a linear actuator in a small compact design which incorporates the latest sliding element linear bearings and specially prepared Mil standard hard anodized aluminum slide shafting to provide smooth, precise and durable linear motion. It includes an aluminum carriage with fully adjustable preload, and easy to replace sliding bearings. The aluminum construction and sliding element bearings make the ECO60 ideal for use in harsh or wet conditions including weak acids, cleaning agents used in washdown applications, hydrocarbons, grease and oils. Repair kits are available to service common wear items.

- Travel lengths range from 3" to 36"
- Stainless steel lead screws with 0.1", 0.2" or 0.5" lead
- Easy to attach together into multi-axis gantry systems
- Supplied with NEMA 17 motor mounting flange
- Optional dust cover for added debris resistance
- Optional home and travel limit switches



Durable Design and Materials

The **ECO60[™]** is designed inside a compact footprint of 60mm wide. The base, end plates and top carriage are all made from 6061-T6 aluminum and are machined to have all surfaces within 0.002". All parts are anodized for an attractive, corrosion-resistant finish. Slide shafting is made from hardcoat finished aluminum and assembled into the base.



Sliding Element Linear Bearings

The **ECO60™** carriage is made from billet aluminum and all surfaces are

machined to allow for correct contact and conformity between the sliding element linear bearings and the hard anodized shafting to enable smooth and efficient linear motion. The carriage is anodized and has stainless steel threaded inserts in the carriage pre-load adjusting threaded holes for improved durability and strength.

The sliding element linear bearings are constrained inside specially machined notches to maintain alignment and make assembly simple. The linear bearing material is polymer and suitable for a wide range of applications including in wet and debris contaminated areas. The carriage pre-load is easily field adjustable to provide user prefered snugness and can be re-adjusted to compensate for wear on the linear bearings. The sliding elemnts can be replaced when worn out.



Simple and Flexible Attachment

Gantry and multi-axis configurations are simple to configure and design with the standardized gantry plates. The XY plate enables 2-axis attachment across a horizontal plane, while the XZ bracket enables 2-axis attachment in a vertical plane.

Dust Cover

The dust cover version provides added debris protection over the actuator and features an anodized aluminum cover strip. The carriage is extended with an additional mount to provide threaded attachment points.

Limit Sensors & Repair Kits

As an option, limit and home sensors are available and feature an adjustable position flag which attaches to the carriage. Sensors are 12-24VDC micro inductive proximity sensors and feature an illuminating status LED.



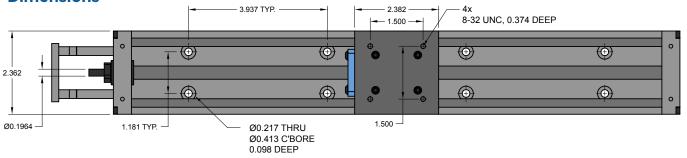
Repair kits with replacement linear bushings, lead screw nut, and bearings enable long service life without having to change the complete actuator assembly.

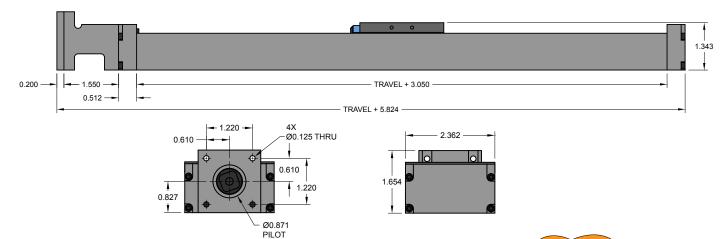


Product Numbering Scheme



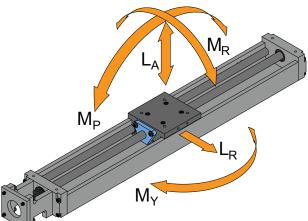
Dimensions





Load Information

ECO60 LOAD CAPACITY			
Load Direction		Metric	Imperial
Load Capacity	LA	489 N	110 lbs
Load Capacity	L _R	489 N	110 lbs
Pitch Moment Capacity	M _P	3.6 N-m	32 in-lbf
Yaw Moment Capacity	M _Y	3.6 N-m	32 in-lbf
Roll Moment Capacity	M _R	5.7 N-m	50 in-lbf
Thrust Load	0.1″Lead	311 N	70 lbf
	0.2″Lead	311 N	70 lbf
	0.5″Lead	222 N	50 lbf



Certified AS9100C & ISO 9001 Certified WBENC Woman Owned Certified Bay Area Green Business ITAR Regulation Compliant