

ELIMINATOR HDRTM

Heavy Duty Roller Screw Linear Actuators



- ***Thrust From 2,000 to 25,000 lb_f***
- ***Heavy Wall Steel Construction***
- ***Longest Life***
- ***Simultaneous High Thrust with High Speed***
- ***Piston with Rugged Anti Rotation Feature***
- ***Sealed Chamber Design***



Precision Mechanical Products

Precision Experience In MotionTM

The only roller screw linear actuator manufactured in North America with machine tool grade, heavy wall steel construction.

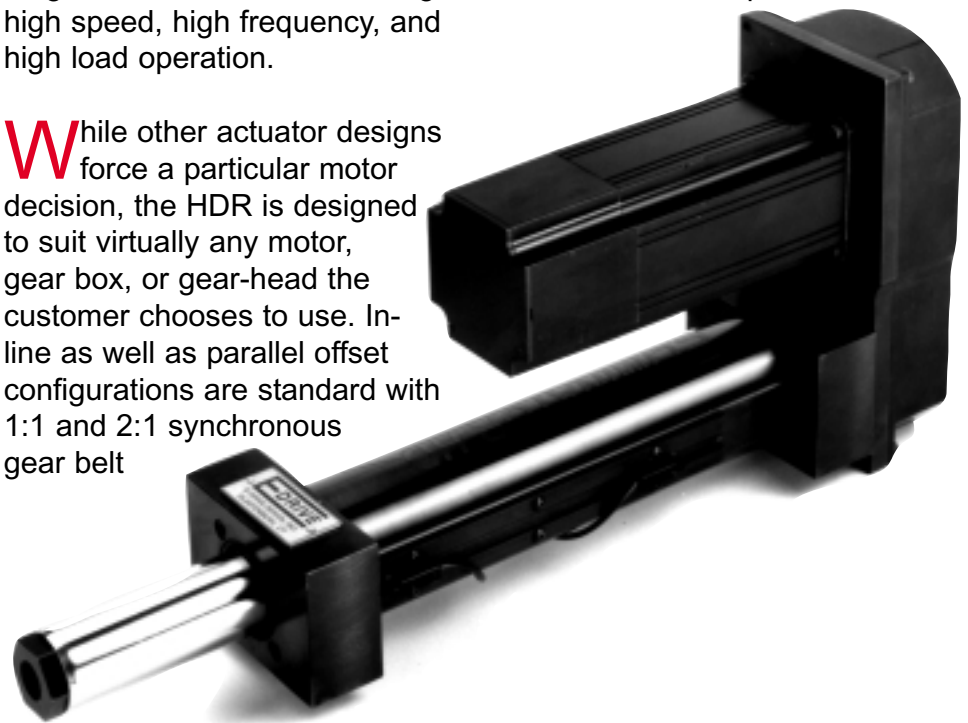
The Heavy Duty Roller Screw linear actuator series was developed to provide a strong, durable, and precise linear actuator for high end applications. It offers the many advantages of our Ball Screw actuators with additional benefits for certain critical applications such as impact loading. As an alternative to hydraulic actuators, it eliminates many of the associated concerns, such as noise, heat, leakage, controllability, and low stiffness, while handling high loads at high speeds and maintaining the rugged and durable steel construction typical of hydraulics.

E•DRIVE has shown consistent success in the toughest applications, e.g. High loads, high

speeds, high precision, and extreme durability. Precision roller screw systems, tailored for maximum life, high impact tolerance, high load and speed, provide precise motion while fully enclosed, thus eliminating contamination related failures. A long bronze nose bearing provides support for the extended piston. Rugged bronze keys in opposing steel slots provide anti-rotation and counter the tangential forces created during high speed, high frequency, and high load operation.

While other actuator designs force a particular motor decision, the HDR is designed to suit virtually any motor, gear box, or gear-head the customer chooses to use. In-line as well as parallel offset configurations are standard with 1:1 and 2:1 synchronous gear belt

ratios available. Dual, nonferrous dovetail switch tracks provide a simple method of placing and adjusting switches for over travel protection as well as "home" detection. Hall effect type as well as reed limit switches are available. Machine tool principals and guidelines ensure robust sizing of all components. Traditional front flange, bottom, foot, and trunnion mounting capabilities are available for the standard price.



Capabilities

Model Number	Thrust Load Rated (lb _f)	Thrust Load Max. (lb _f)	Linear Velocity Max. (in/s)	Travel Length ⁽¹⁾ Max. (in)	Frame Size (in)	Lead ⁽²⁾ (mm)	Roller Screw Diameter (mm)	Roller Screw Speed Max. (RPM)	Torque @ Roller Screw Max. (in-lb)	Dynamic Capacity per million revs (lb _f)	Dynamic Capacity per million inches (lb _f)	Motor/ ⁽³⁾ Gearhead Frame Supported Max. (in)	Unit Weight "U" Motor Mount (lb)	Unit Weight "L" Motor Mount (lb)
HDR304	4,000	8,000	20.0	24	3	8	21	3,810	223	13,992	9,520	4.25	37	30
HDR406	6,000	12,000	18.0	36	4	8	30	3,429	669	26,343	17,923	5.75	143	129
HDR516	16,000	30,000	14.0	48	5	8	39	2,667	1,672	36,482	24,882	8	318	268
HDR625	25,000	40,000	14.4	48	6	8	48	2,743	2,229	56,134	38,192	8	478	422

⁽¹⁾ Intermediate lengths are available; Standard Lengths are in 6 inch increments, starting at 6 inches; Lengths longer than the max are possible: Consult factory.

⁽²⁾ Standard lead accuracy is .001 in/ft; Optional lead accuracy is .0005 in/ft.

Standard backlash is .001 inch maximum; Optional zero backlash is also available.

⁽³⁾ Motor adapter plates are available for larger motor frames.



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