

EncoderDriver™ Linear Actuator Packages

Optics

Lenses

Mirrors & Beamsplitters

Prisms & Polarizers

Filters

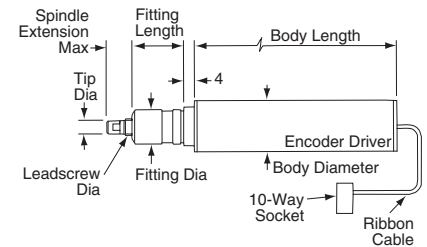
Pinholes

- Closed loop motorized remote control of micropositioners
- Computer control of stages
- LabView software drivers
- 0.05 or 0.02 μm minimum incremental movement
- Direct replacement for manual micrometers



EncoderDriver Linear Actuator Packages are available with ranges of travel of 10 mm, 13 mm, 25 mm, and 50 mm (0.375 inch, 0.5 inch, 1 inch, and 2 inches) to suit micrometer-driven stages from the Ealing range. The 10 mm Actuator is supplied with a non-removable spherical tip, all others are supplied with interchangeable spherical

and flat tips. Each EncoderDriver Actuator Package includes an EncoderDriver Actuator, a 3 m Extension Cable, and the daughter board drive module. This daughter board drive module plugs directly into the EncoderDriver Control Cards. EncoderDriver Actuators are available separately for OEM applications.



Opto-mechanics

Breadboards & Rails

Mounting Hardware

Mirror & Component Mounts

Manual Micro Positioners

Motorized Positioners

EncoderDriver™ Specifications

	Travel			
	10 mm	13 mm	25 mm	50 mm
Leadscrew Pitch (mm):	0.5	0.5	0.5	0.5
Max. Motor Speed (rpm-without load):	13,000	12,000	12,000	12,000
Gearhead Ratio:	256:1	485:1	485:1	485:1
Max. Linear Speed ¹ (mm/min – without load):	28	12	12	12
Slowest Speed (mm/min):	0.05	0.03	0.03	0.03
Resolution (μm):	0.05	0.02	0.02	0.02
Max. Continuous Output Torque (mNm):	77	100	100	100
Max. Intermittent Output Torque (mNm):	77	150	150	150
Nominal Motor Voltage (VDC)	12	12	12	12
Max. Output Power (W):	0.35	0.3	0.3	0.3
Max. Recommended Axial Load ² (kg/lb):	7(15)	10(22)	10(22)	10(22)
Backlash – Typical (μm):	6	6	6	6
Encoder Counts per Revolution of Motor:	40	60	60	60
Encoder Counts per millimeter of Travel:	20,480	58,200	58,200	58,200
Repeatability – Unidirectional (μm)	0.1	0.1	0.1	0.1
Weight (g):	55	110	130	150

¹ Rating for intermittent operation. ² Axial load rating is with point contact on leadscrew spindle tip.

EncoderDriver™ Socket Pin-outs

Pin	Socket Pin-outs
1	Motor + (12 VDC)
2	Encoder Power (+5 VDC)
3	Encoder A Channel
4	Encoder B Channel
5	Encoder Ground (0 VDC)
6	Motor - (12 VDC)

EncoderDriver™ OEM Actuators

Catalog Number	Travel (mm)
37-1187	10
37-1179	13
37-1062	25
37-1070	50