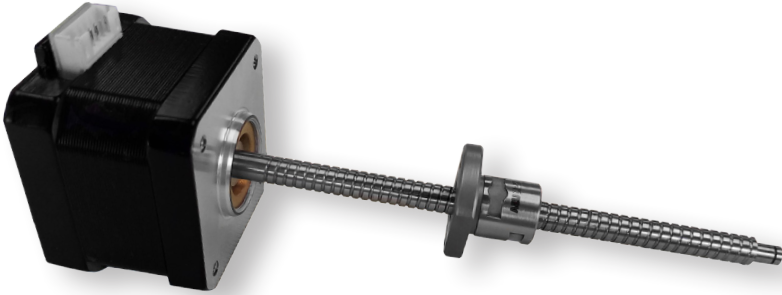


# NSK Motorized Ball Screw Actuator

## MBSA Series - Patent Pending

NSK's motorized ball screw actuator includes NSK's precision ground ball screw directly integrated into a NEMA 17 stepper motor.



### Product Features and Benefits

- › Elimination of motor coupling results in compact space-saving design and reduced assembly time.
- › Compared to a lead screw, a precision ground ball screw offers higher efficiency, lower friction, smoother operation, no backlash, improved rigidity, and longer life.
- › The higher ball screw efficiency can result in a smaller required motor package, reducing energy usage.
- › Available with configurable encoder assembled to motor.
- › Easy disconnect - field replacement of motor and/or ball screw is simplified, saving time and money.
- › Motor and ball screw are combined into a single part number for ease of design and ordering.

### Condition Description:

- ☑ Application space is limited.
- ☑ High linear motion accuracy is desired.
- ☑ Smooth and quiet motion required.

### Applications:

- › Medical
  - Diagnostics
  - Syringe Pumps
  - Microfluidics
  - Imaging
  - Cancer Treatment
  - Automation
- › General Industry
  - Pick & Place Systems
  - Insertion Machines
  - Vision & Inspection
  - Packaging Systems

### Standard Sizes Available for NEMA 17 Motor

Shaft diameter	Lead (mm)	Threaded Length				
6	1	50	100	125		
6	2	50	100	125		
8	1	50	100	125	150	
8	2	50	100	125	150	200

\*Custom lengths, ball screw diameters and motor frame sizes are available - contact NSK Precision America Engineering for assistance.