

BALL SCREW ASSEMBLY

What is this?



The images show various sizes of ball screw assemblies.

A ball screw is a **mechanical linear actuator** that translates rotational motion into precise linear motion with minimal friction.

It consists of a threaded shaft (the screw) and a nut that contains ball bearings recirculating inside it.

The ball bearings reduce friction, increase efficiency, and allow for high accuracy in motion.

Key features visible in the image:

- Threaded screw shaft with helical grooves.
- Ball nut housing (the central block with mounting holes) where the ball bearings circulate.
- **Grease fitting/port** (the small red/orange cap) for lubrication.
- High-strength steel construction for durability and load handling.

Typical applications:

- CNC machinery
- Robotics
- · Precision positioning equipment
- Industrial automation

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