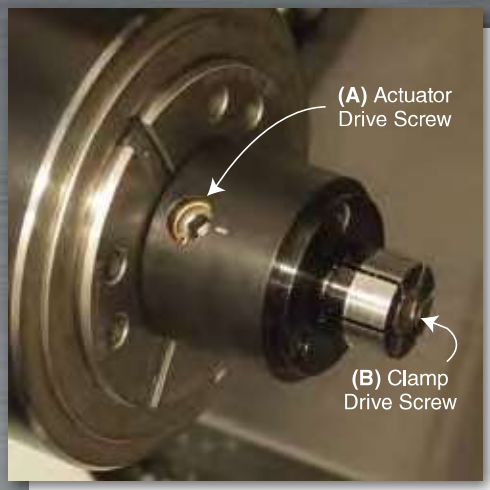
Manual Actuators for Mills and Lathes



The Actuators are specifically designed for gripping the ID of blind holes but may also be incorporated in many applications that require a straight draw actuated 90 degrees from the drive screw. The Actuators are capable of gripping on bores ranging from .16" (4.1mm) to 1.39" (35.3mm) using our standard ID clamps, Models #00 through #4 (flange on #4 may require modification when mounting to Mill Actuator).

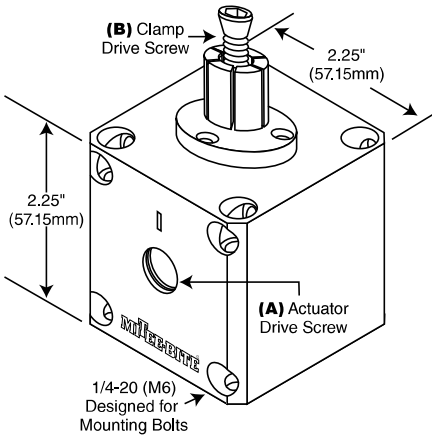
The Mill block can be mounted in several ways including on a fixture plate, for high density workholding applications, or gripped in a vise. The same bolt hole configuration can be used for both the vertical and horizontal planes.

Both styles of Actuators come completely assembled with the heat-treated cylinders tapped for the following clamp drive screws: M2, M4, M6, M8, M10 and M12.

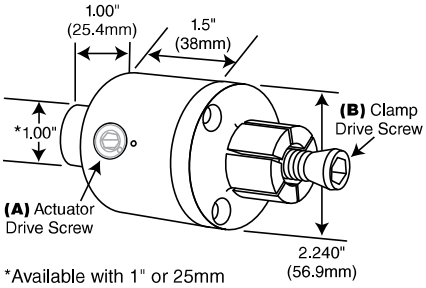
SPECIFICATIONS:

- Manual Actuators will produce over 4,000 lbs. of pull-force with 45 ft. lbs. of torque. Do not exceed 5 ft/lbs with the M2 or 20 ft/lbs with the M4.
- Customer will mount clamps onto the Actuator according to clamp instructions. Actuators may be used with clamps other than ID Xpansion™ Clamps.
- The Mill version has 8 mounting holes with 1.75" (44.45mm) spacing for 1/4-20 (or M6) mounting bolts.
- The "top" access hole for the clamp drive screw is approximately .315" (8mm) for the M2 through M8 and .484" (12.3mm) for the M10 and M12.
- Cylinder travel is .040" (1.016mm)
- Threaded cylinders may be interchanged with our other cylinder sizes by first removing the retaining ring and the actuator drive screw and then tapping out the cylinder. This may require the use of a rubber mallet and punch.
- Threaded cylinders are heat treated to 54 RC, and have a diameter of 5/8" (15.875mm).
- Both the Mill and Lathe versions are made of 12L14 with a black oxide finish.

MILL VERSION



LATHE VERSION



*Available with 1" or 25mm shaft diameter - see chart to right

OPERATION AND USE:

- Align Indicator mark on actuating screw (A) (apex of cam) with the alignment mark on actuator housing.
- Lightly tighten clamp drive screw (B).
- Tighten actuator drive screw (A) expanding ID clamp .002 - .005" (.050 - .13mm).
- Machine clamp to size of your bore.
- Loosen actuator drive screw (A) aligning marks once again.
- Loosen clamp drive screw (B) approximately 1/8 turn.

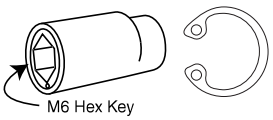
Ready for use, load parts and tighten actuator screw. Do not exceed 45 ft/lbs of torque. Care should be taken not to over-tighten with the smaller diameter screws (M2, M4).

Part Number			
Mill	Lathe 1" Shaft	Lathe w/25mm Shaft	Cylinder Thread
34502	34602	38602	M2
34504	34604	38604	M4
34506	34606	38606	M6
34508	34608	38608	M8
34510	34610	38610	M10
34512	34612	38612	M12

Mounting Screws not included.

ACTUATOR DRIVE SCREW WITH RETAINING SNAP RING

Part No.
34550



REPLACEMENT THREADED CYLINDER

Part Number	Thread Size
34002	M2
34004	M4
34006	M6
34008	M8
34010	M10
34012	M12