

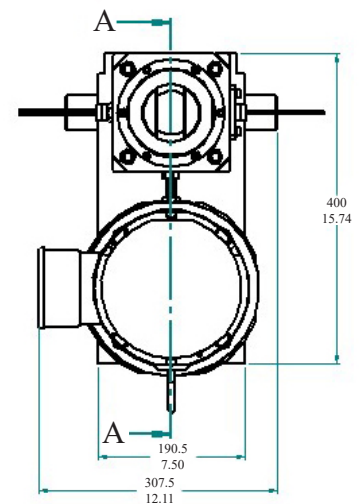
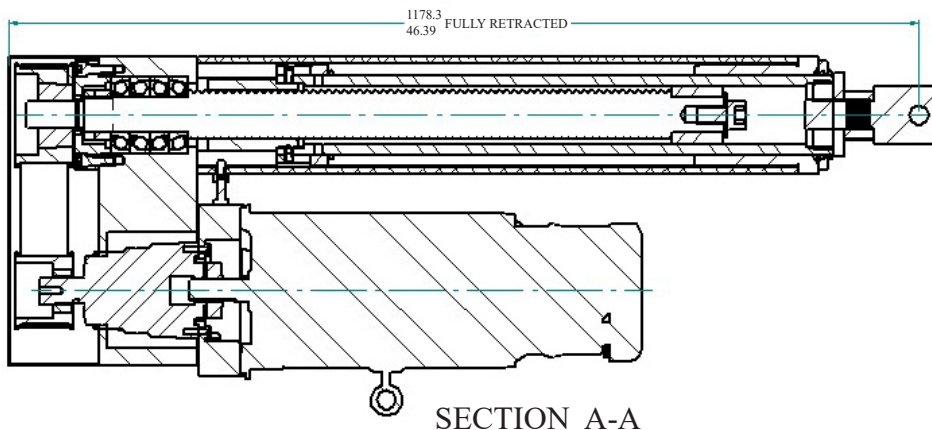


A4000 Actuator

Mikrolar actuators are repeatable, accurate, stiff and durable. They are designed for the most challenging industrial applications and environments. Each of our actuators can also be customized to fit your application. Just let us know about any specific stroke, load, speed or footprint requirements. Our actuators can fit virtually any motor or gearbox the customer requires.

A Series:	INCH	METRIC
Stroke	18 in	457.2 mm
Screw Diameter	2.5 in	63 mm
Screw Lead: 10mm std	0.39 in	10 mm
Nominal Velocity	1.8 in/sec	45.72 mm/sec
Dynamic Load Rating - Continuous	12,792 lbs	5,814 kg
Dynamic Load Rating - Intermittent	20,000 lbs	9,071.85 kg
Max Static Load	34,508 lbs	15,652 kg
Weight (w/out motor)	348 lbs	158 kg

- Environmental Rating: IP54 (std) - IP65 (optional)
- Optional adjustable limit switches
- Available in various mounts:
 - Front and rear flange
 - Clevis
 - Trunnion



MADE in the USA



7 Scott Road, Suite 5
phone: (603) 617-2508

Hampton, NH 03842
fax: (617) 849-5850



www.mikrolar.com
sales@mikrolar.com



Mikrolar Actuators



Mikrolar is now offering its proprietary actuators for sale.

In the production of a quality Stewart Platform, actuator accuracy, axial and radial rigidity are essential.

Why use Mikrolar actuators?

- **Stiffness**
- **Accuracy**
- **Repeatability**

Axial Stiffness:

Most actuators have decent axial stiffness, the ability to resist tension and compression along the length of the rod. (See Fig. 1) Most people equate this with rod diameter and diameter of the screw. But they also need to take into account any backlash from preload on the nut, the drive train and anti-rotation devices. Axial stiffness directly determines accuracy of length, and results in chatter if done poorly.

Radial Stiffness:

Most actuators **do not have** very good radial stiffness, the ability to resist forces from the side. While this might have only a very small affect on the overall length of the actuator (the delta difference is minor) it can cause huge stiffness issues. Radial stiffness directly determines machine stiffness.

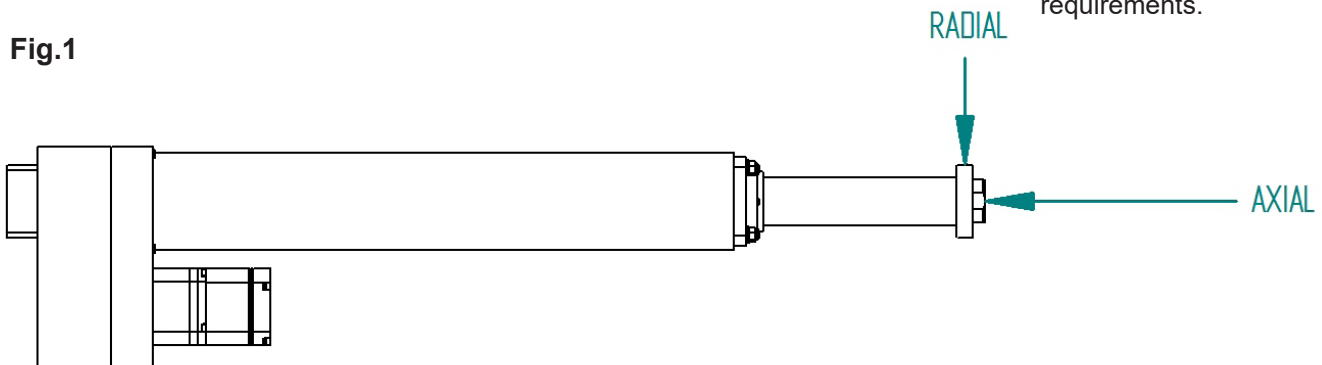
P2100 Hexapod with Mikrolar actuators.



Mikrolar also designs and produces high precision positioning systems for use in a wide variety of applications. Our robots are based on a hexapod system, offering high load capacity and range of movement while maintaining a high degree of precision and repeatability.

Our systems are designed to be customized to fit a variety of applications. Please contact us to discuss how we can create a robotic system to satisfy your requirements.

Fig.1



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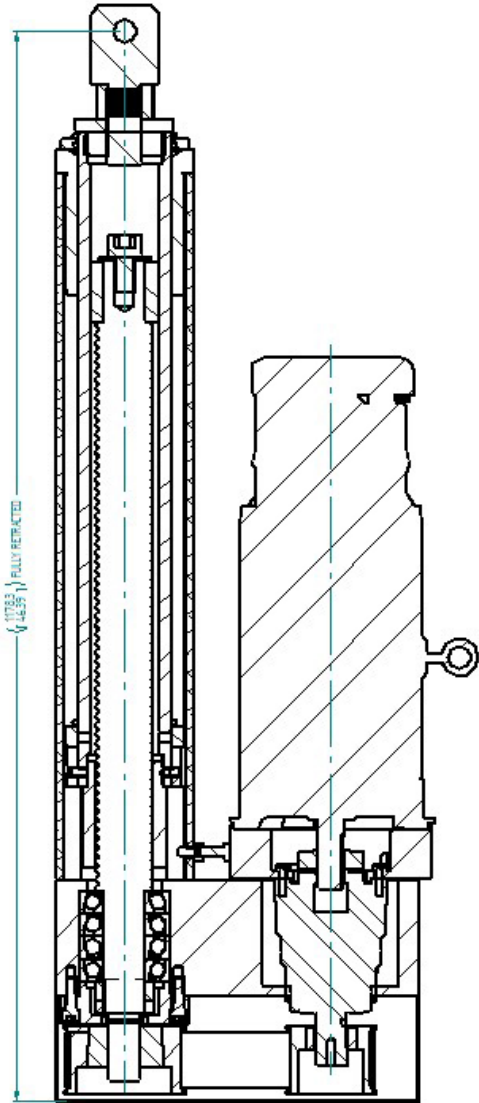
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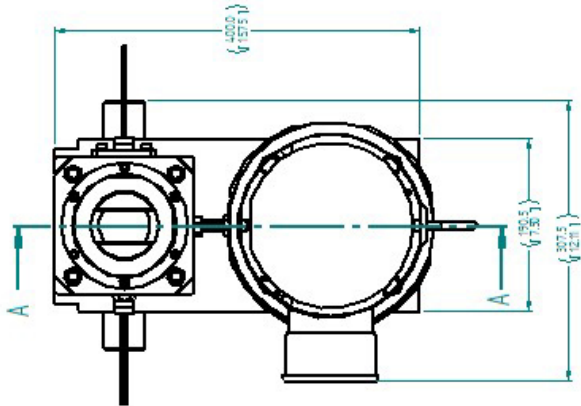


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REV	DESCRIPTION	DATE	APPROVED



SECTION A-A



LEAD SCREW SPECIFICATIONS:
 DIAMETER: 63 mm
 LEAD: 10 mm
 NOMINAL RPM: XXXX
 MAXIMUM RECOMMENDED RPM: XXXX
 DYNAMIC LOAD RATING: 12,792 LBS
 STATIC LOAD RATING: 34,508 LBS
 NUT SPRING RATE: XXXXX LB/IN
 TORQUE TO RAISE: 1 LB XXXX LB-IN

STANDARD AC BRAKE MOTOR SPECIFICATIONS:
 TORQUE-CONT: XXX LB-IN
 TORQUE-MAX: XXX LB-IN
 CONT. RPM: 1750
 MAX RPM: 1800

STANDARD GEARBOX SPECIFICATIONS:
 RATIO: 7:1
 RATED OUTPUT TORQUE: 1599 LB-IN
 RATED INPUT SPEED: 3000 RPM

ACTUATOR SPECIFICATIONS:
 STROKE: 18 IN
 FORCE-CONT: XXXX LBS (MOTOR LIMITED)
 NOMINAL SPEED: 18 IN/SEC
 MAXIMUM RECOMMENDED SPEED: XX IN/SEC
 XXX IN /SEC PER 1000 RPM)
 WEIGHT: 58 LBS

UNLESS OTHERWISE SPECIFIED				MILKOLAR INC.			
DRAWN	DATE	BY	CHKD	DESIGNED	DATE	BY	CHKD
CHECKED	XXX	XXX/XX/XX	XXX	7 SCOTT ROAD SUITE 3			
ENG APPR				HAUPSTON, NH 03242			
MFG APPR				TITLE	ACTUATOR ASSEMBLY		
DECIMAL TOLERANCES: XXX ± 0.05 I ± 0.01				SIZE	1/8" DIA	NO	NO
XXX ± 0.3 I ± 0.05				FILE NAME	HA000-PT-RETR-ASSEMBLY.dwg		
X ± 0.1 I ± 0.16				SCALE	AS SHOWN		
X ± 0.3 I ± 0.32				REVISION			
ANGLES: 90° MIN							
SURFACE FINISH: 125 RMS							
DIMENSIONS ARE IN MILLIMETERS							
REMOVE ALL BURRS AND BREAK SHARP EDGES							