

# Piezo Motor Model I-20

## Description

High performance linear piezoelectric motor (Pat# 7,471,030 B2) with integrated non-magnetic cross-roller bearing ways. Body and structural elements are titanium. Piezoelectric elements use non-magnetic materials. Standard unit has 300 series stainless steel screws/hardware and the option for all non-ferrous screws/hardware is available.

- Compatible with vacuum environments
- Zero power / power off position lock
- Two-channel, non-stick-slip inchworm type drive



## Specifications

Total stroke	15 mm (0.6 in)
Typical Step Size	5 $\mu\text{m}$
Analog Move	20 nm
Axial Drive Stiffness	>5 N/ $\mu\text{m}$
Out of Plane Angular Motion	<100 $\mu\text{rad}$
Motor Speed	Up to 1 mm/sec (with MD-90 motor driver)
Max Drive Force / Power off Hold	10 N / 15 N
Dimensions	28 mm x 14 mm x 25 mm (1.1 in x 0.55 in x 0.98 in)
Materials	Titanium, ceramic, PZT, copper
Mass	33 g
Operating Voltage	-30V to +150V
Controller	DSM MD-90

## Geometry and Dimensions

