

VIBRATION ACTUATORS





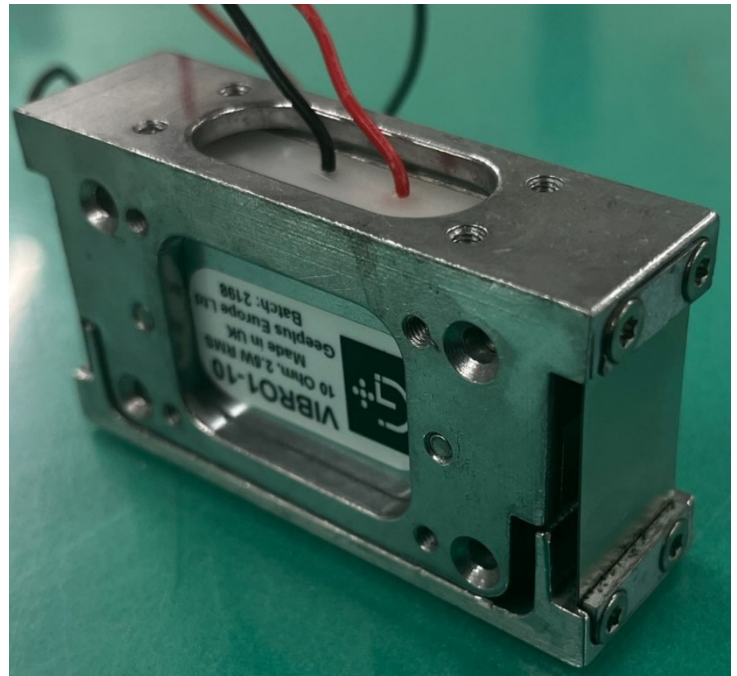
There are a number of applications where vibrating motion is required, for which simple solenoid actuators are not ideally suited, and for which moving coil actuators although technically suitable are a costly option. Geeplus offers some simple bidirectional actuators to address such requirements.

These devices are based on a laminated stator assembly with multiple poles for good force generation, and a simple armature assembly comprising a steel plate with multiple magnets forming the poles.

The devices are offered as a set of stator and armature parts for incorporation into customers own assembly, or as an integrated module with steel flexures allowing linear motion and maintaining separation between the two.

Where separate stator and armature are used, it should be noted that a strong attraction force is developed between these, and the support structure must withstand this force and maintain separation between the two parts.

Amplitude will be larger if the assembly is driven near to its resonant frequency. Applications include linear conveyors, liquid mixing, or powder compacting devices.





P_{100} is the continuous (100% ED) excitation power at which the coil attains temperature T_{max} with the part mounted to a massive heatsink at 20°C

P_{100} 2.5 W

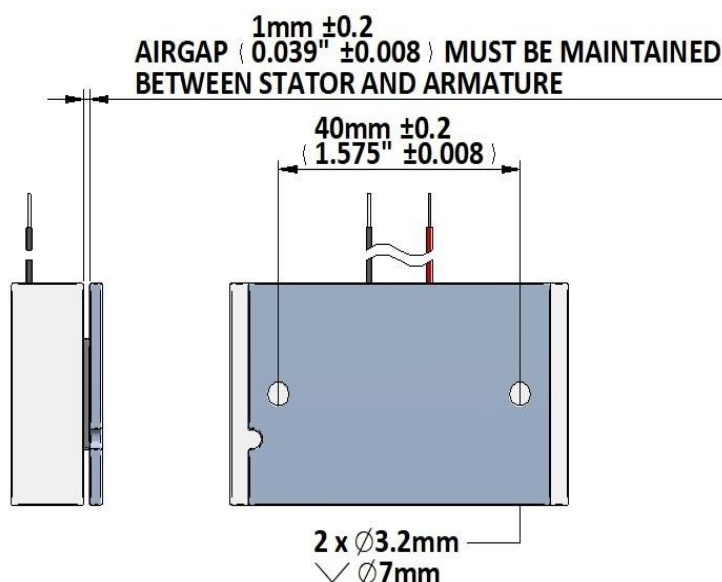
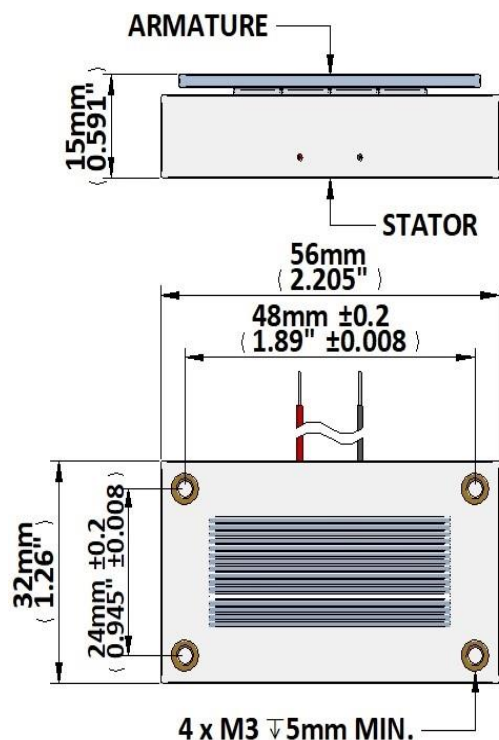
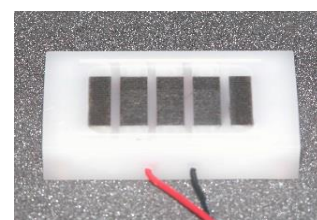
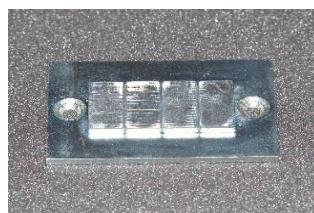
Total Mass 150 g

T_{max} 80 °C

Moving Mass 52 g

Model No.	Resistance R_{20}	Inductance
HAP56-10	10.0 Ω	6.8 mH

The HAP56 actuator is designed to generate linear vibration when energised with an AC signal. It will develop a high force over displacement of 3-4mm for excitation power of only a few watts. It can be used to generate tactile feedback for MMI applications, or as a motion generator for linear conveyors / component feeders



Typical Force Characteristic

