

Specification: **Inertial Actuator IFX15-100**

Rated Force:

50 N peak at 12 Watt at 70 Hz, with coil at 20°C, due to displacement limit. (mounted on a 50 lb block)
50 N peak at 12 Watt at 70 Hz, with coil at 140°C.
15 Newtons per Ampere at 70 Hz; 3 Newtons per Ampere above 180 Hz, with coil at 140°C.
The force constant is independent of the direction and amount of current.

Electrical:

Coil resistance: .9 Ohm
Inductance: .1 mH

Temperature:

Drop in force constant for 100°C rise: 10%
Increase in resistance for 100°C rise: 39%
Internal temperature rise at 14 Watt input: 120°C
Max internal temperature: 140°C

Static Armature Stiffness:

Internal spring constant: 25 Newtons per mm
Resonance frequency of armature 64 Hz. (unit mounted on a 50 lb block)

Mechanical:

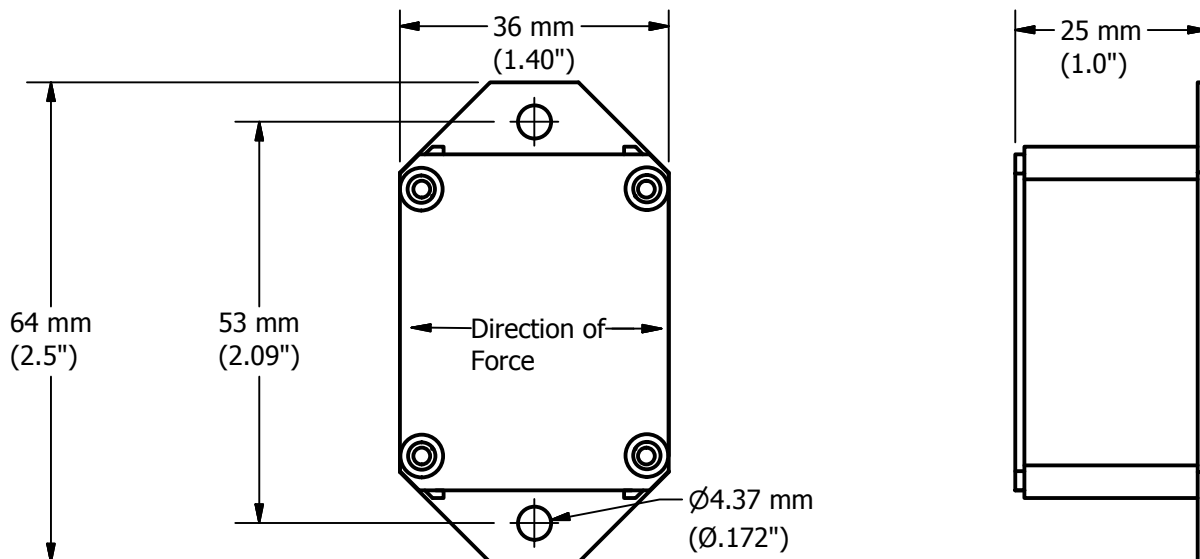
Max armature amplitude: ± 1.6 mm (internal hard stops)
Total weight: 245 grams. Armature weight: 160 grams.
Dimensions: See drawing
Mounting: Two holes $\text{Ø}.172$ "
Housing completely closed, no external moving parts

Fatigue Life:

Infinite fatigue life

Stray Magnetic Field:

Mounting surface: .03 Tesla max



IFX 15-100

