Specifcation:  **Inertial Actuator IFX22-200**

**Rated Force:**
70 N peak at 18 Watt at 70 Hz, with coil at 20°C, due to displacement limit. (mounted in a ≥ 50 lb block)
70 N peak at 18 Watt at 70 Hz, with coil at 140°C.
110 Newtons per Ampere at 70 Hz; 11.5 Newtons per Ampere above 200 Hz, with coil at 140°C.
The force constant is independent of the direction and amount of current.

**Electrical:**
Coil resistance: 6 Ohm
Time constant: ≤ .9 millisecond

**Temperature:**
Drop in force constant for 100°C rise: 20%
Increase in resistance for 100°C rise: 39%
Internal temperature rise at 22 Watt input: 120°C (mounted on a 200 square cm X 2 cm thick aluminum)
Max internal temperature: 140°C

**Static Armature Stiffness:**
Internal spring constant: 43.4 Newtons per mm
Resonance frequency of armature 67 Hz. (unit mounted on a ≥ 50 lb block)

**Mechanical:**
Max armature displacement: ± 1.5 mm (internal hard stops)
Total weight: .58 Kg. Armature weight: .245 Kg
Dimensions: 60 mm diameter. 55 mm long.
Mounting: Four 8-32 screws on 38 mm circle
Housing completely sealed, no external moving parts

**Fatigue Life:**
Infinite fatigue life if armature amplitude does not exceed 1.0 mm.
This translates into a max force of 50 N at 70 Hz.
For other frequencies: F≤.01fx^2, where F is the force in Newtons and f is the frequency in Hz.

**Stray Magnetic Field:**
Mounting surface: .04 Tesla max. Cylinder surface: .01 Tesla max