

Specification: **Inertial Actuator IFX200-100**

**Rated Force:**

330 N peak at 18 Watt at 130 Hz, with coil at 20°C, due to displacement limit. (mounted on a  $\geq 50$  lb block)  
250 N peak at 18 Watt at 130 Hz, with coil at 140°C.  
100 Newtons per Ampere at 130 Hz; 16 Newtons per Ampere above 300 Hz, with coil at 140°C.  
The force constant is independent of the direction and amount of current.

**Electrical:**

Coil resistance: 4.2 Ohm  
Time constant:  $\leq .3$  millisec

**Temperature:**

Drop in force constant for 100°C rise: 10%  
Increase in resistance for 100°C rise 39%  
Internal temperature rise at 18 Watt input: 120°C  
Max internal temperature: 140°C

**Static Armature Stiffness:**

Internal spring constant: 275 Newtons per mm  
Resonance frequency of armature 136 Hz (unit mounted on a  $\geq 50$  lb block)

**Mechanical:**

Max armature displacement:  $\pm 1.2$  mm (internal hard stops)  
total weight: .70 Kg. Armature weight: .417 Kg  
Dimensions: 48 mm diameter, 87 mm long  
Mounting: Single center screw 1/4-28 UNF  
Housing completely sealed, no external moving parts.

**Fatigue Life:**

Infinite life

**Stray Magnetic Field:**

Mounting surface: .03 Tesla max. Cylinder surface: .02 Tesla max



