

Specification: **Inertial Actuator IFX10-200**

**Rated Force:**

22 N peak at 50 Hz, with coils at 20°C, due to displacement limit. (mounted on a 20 lb block)  
19 N peak at 10 Watt at 50 Hz, with coils at 140°C.  
24 Newtons per Ampere at 30 Hz: 9 N/A above 100 Hz, with coils at 140°C.  
The force constant is independent of the direction and amount of current.

**Electrical:**

Coil resistance: 6 Ohm  
Inductance: 2.4 mH

**Temperature:**

Drop in force constant for 100°C rise: 20%  
Increase in resistance for 100°C rise: 39%  
Internal temperature rise at 10 Watt input: 120°C (mounted on 100 square cm X 2 cm thick aluminum)

**Static Armature Stiffness:**

Internal spring constant: 5 Newtons per mm  
Resonant frequency of armature 29 Hz (unit mounted on a 20 lb block)

**Mechanical:**

Max armature displacement:  $\pm 1.5$  mm (internal hard stops)  
Total weight: .30 Kg. Armature weight: .15 Kg  
Dimension: 37 mm diameter, 50 mm long.  
Mounting: One 10-32 screw  
Housing completely sealed, no external moving parts.

**Fatigue Life**

infinite fatigue life

**Stray Magnetic Field**

Mounting surface: .05 Tesla max



