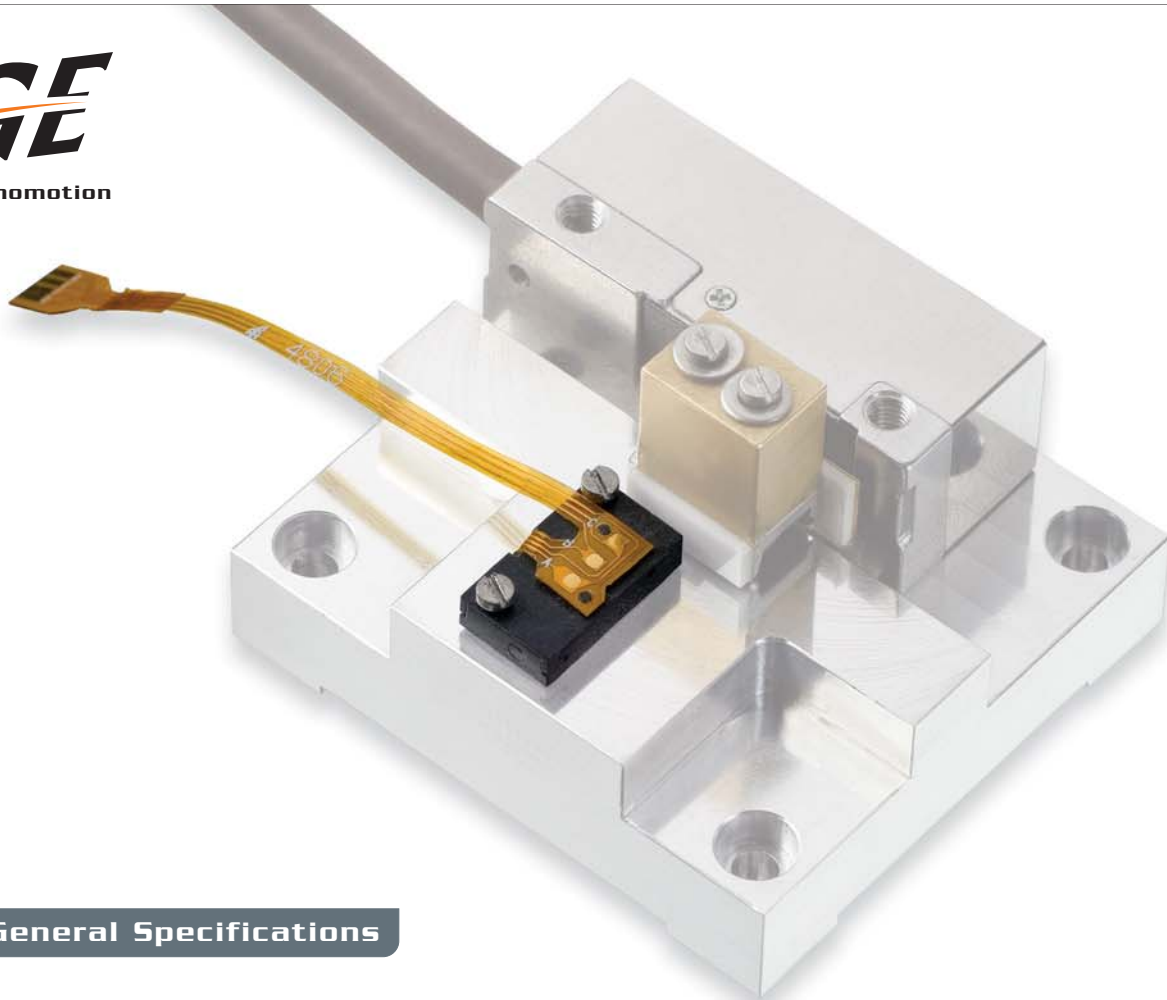


Nanomotion's Edge motor is the smallest industrial motor of its kind available in the marketplace today. Providing unlimited linear or rotary motion, the Edge motor offers extensive opportunities in applications that suit a wide range of industries. The Edge motor works with a uniquely designed, compact ASIC-based driver, and can be operated with any servo controller.

The Edge can be easily integrated into most bearing structures, and is ideal for mass production opportunities.

Edge Motor Key Features:

- Extremely small dimensions
- Excellent move and settle characteristics
- ASIC drive and control
- Inherent brake at power off
- Wide dynamic velocity range
- High resolution



Edge Motor General Specifications

Dynamic Performance

- Maximum Velocity: 120 [mm/sec]
- Dynamic Stall Force: 300 [mN]
- Static Holding Force: 300 to 320 [mN] (reference value)
- Non-Energized Stiffness: 0.06 to 0.09 [N/ μ]
- Nominal Preload on Stage: 1.65 to 2.0 [N]
- Kf: 30.5 mN/VoH command with AB5 Driver (+/-15% tolerance)
40.6 mN/VoH command with AB1 Driver (+/-15% tolerance)
- Kfv: -1.6307 Nsec/m
- Offset: 2-3 [V] of 10 (Driver dependant)
- Attainable Resolution: Better than 100 nm
- Nominal Lifetime: 20,000 hours under nominal operating conditions

Electrical Properties

- Maximal Voltage: 12Vrms, sine wave
- Maximal Current consumption: 130 mArms
- Maximal Power Consumption: 750mW
- Typical Capacitance: 9.5nF / pole

Environmental

- Ambient Temperature: -20°C to 60°C
- Storage: -40°C - +80°C
- Humidity: 0 - 80% non-condensing

Physical Dimensions

- Length: 13.5mm
- Width: 7.6mm
- Height: 3.15mm
- Weight: 0.55 gr

