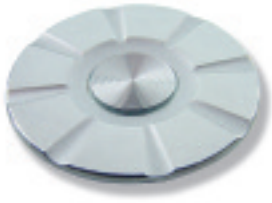


**NEW!**



## Features/Benefits

- **Omni-directional analog control**
- **Variable speed (rate and control)**
- **Low profile**
- **Low power (instant wake-up)**
- **Intergrated switch (center click)**
- **Force/deflection device**
- **Simple electrical interface**
- **Environmental protection**
- **Long life**

## Typical Applications

- **Cell phones**
- **Gaming devices**
- **MP3 players**
- **PDA's**
- **GPS devices**
- **Remote controls**
- **Laptops**
- **Convergent devices**
- **Others**

## Mechanical

OVERALL HEIGHT (mm): < 2  
 ACTUATOR DIAMETER (mm): 20  
 NOMINAL PCB AREA REQUIRED (cir. mm<sup>2</sup>): 615  
 NOMINAL DEFLECTION TO FIRST CONTACT (mm): 0.25  
 MAX. DEFLECTION (mm): <0.75  
 MIN. FORCE TO FIRST CONTACT (g force): < 30  
 MAX. OPERATIONAL FORCE (g force): 1000  
 DOME SWITCH ACTUATION FORCE (g force): 300 typ.

## Interface/Output

POINTING MODES: Relative or Absolute  
 ANGULAR DIRECTIONS: 360°  
 ANGULAR RESOLUTION (deg): 1.8° (8 bit)  
 RATE STEPS: 32  
 SNAP TO AXIS: Optional  
 POSITION SAMPLING RATE: 25-40hz  
 REPEATABILITY: ±2%

## Electrical

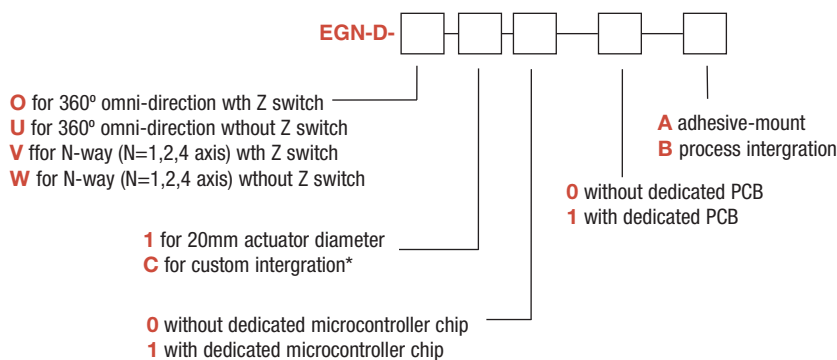
TRANSDUCER RESISTANCE: 600 Ω ± 200 Ω  
 OUT OF CONTACT RESISTANCE: >10M Ω  
 REFERENCE RESISTOR VALUE (R): 1,500 Ω ± 5%  
 DOME SWITCH RESISTANCE: Open>500k Ω  
 Closed<250 Ω  
 POWERING VOLTAGES: ≤8 - 12 Vdc  
 # OF A/D INPUTS REQUIRED: One 8 bit ADC  
 # OF GPIO INTERFACE NEEDED: 4  
 CONTINUOUS USE CURRENT PEAK  
 TYPICAL/WORST CASE: 1.1mA/1.7 mA  
 CONTINUOUS USE CURRENT AVERAGE  
 TYPICAL/WORST CASE: 22µA/34µA  
 SLEEP POWER CONSUMPTION: 0µW



C

Navigation

## How To Order



\*Custom Integration - ErgoNav EGN-D Series can be customized per the design rules and limitations:

- Nav-disc diameter and actuator height (scalable per the design rules)
- Nav-disc actuator (plastic or silicone; color, surface texture, fashion; process Integration)
- \_Nav-disc plastic retainer (integratable to device chassis per the design rules)
- \_Nav-disc silicone sensor pill and pad (process integratable to device membrane elements per the design rules)
- Dedicated microcontroller (contains firmware for quick I/O interface, or firmware compiled into device controller)

