



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SERIES 62HS High Torque

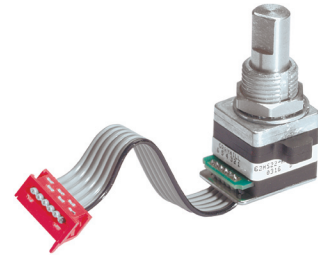
FEATURES

- High Rotational Torque Provides Positive Tactile Feedback
- Optically Coupled for More than a Million Cycles
- Optional Integral Pushbutton
- Compatible with CMOS, TTL and HCMOS Logic

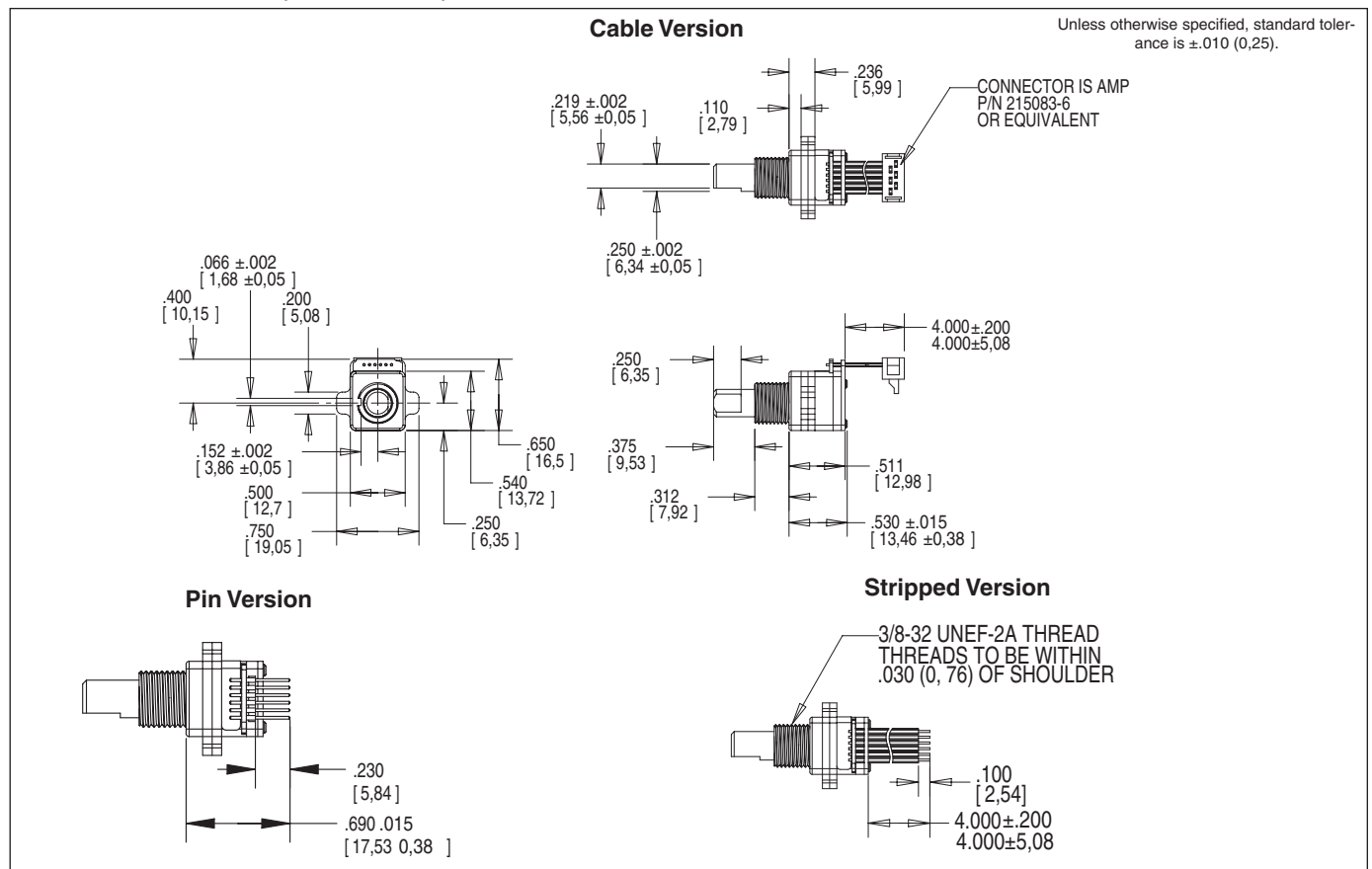
- Available in 8, 12 and 16 Detent Positions
- Choice of Cable Length and Terminations

APPLICATIONS

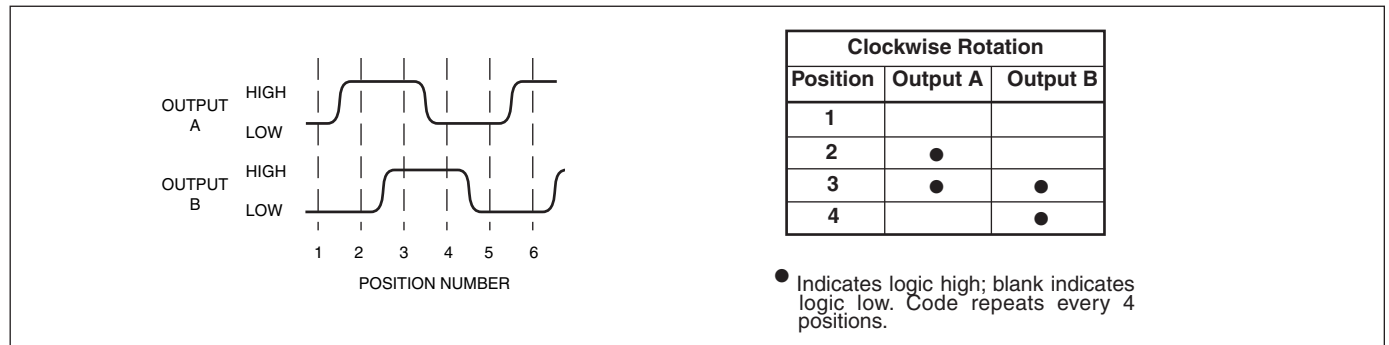
- Avionics



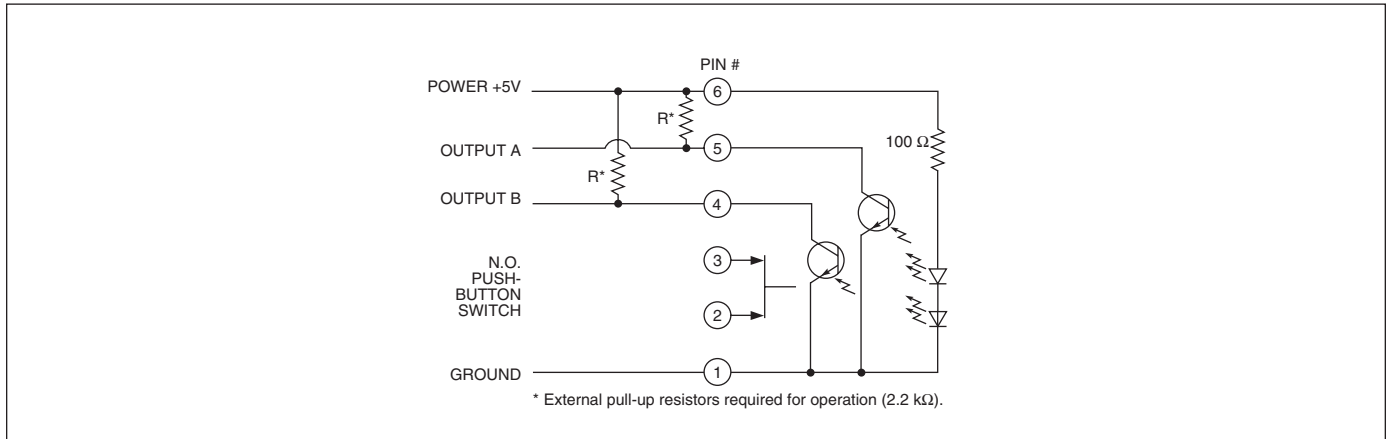
DIMENSIONS in inches (and millimeters)



WAVEFORM AND TRUTH TABLE



CIRCUITRY



SPECIFICATIONS

Pushbutton Switch Ratings

Rating: at 5 Vdc, 10 mA, resistive
Contact Resistance: less than 10 ohms (TTL or CMOS compatible)
Pushbutton Life: 3 million actuations minimum
Voltage Breakdown: 250 Vac between mutually insulated parts
Contact Bounce: less than 4 mS at make and less than 10 mS at break
Actuation Force: 1100 ±300g

Encoder Ratings

Coding: 2-bit quadrature coded output
Operating Voltage: 5.0 ±.25 Vdc
Supply Current: 30 mA maximum @ 5.0 Vdc
Logic Output Characteristics:
Logic High: 3.0 Vdc minimum
Logic Low: 1.0 Vdc maximum
Mechanical Life: 1,000,000 cycles minimum (One cycle is a rotation through all positions and a full return)
Minimum Sink Current: 2.0 mA for 5 Vdc
Power Consumption: 150mW maximum
Output: open collector phototransistor
Logic Rise and Fall: less than 30 mS max

Operating Torque: 5.0 in-oz +/- 1.5 in-oz initial

Shaft Push Out Force: 45 lbs minimum

Mounting Torque: 15 in-lbs maximum

Terminal Strength: 15 lbs cable pull-out force minimum

Operating Speed: 100 RPM maximum

Environmental Ratings

Operating Temperature Range: -40°C to 85°C

Storage Temperature Range: -55°C to 100°C

Vibration Resistance: Harmonic motion with amplitude of 15G, within a varied 10 to 2000 Hz frequency for 12 hours

Mechanical Shock: Test 1: 100G, 6 mS, half sine, 12.3 ft/s; Test 2: 100G, 6 mS, sawtooth, 9.7 ft/s

Relative Humidity: 90–95% at 40°C for 96 hours

Materials and Finishes

Code Housing: Reinforced thermoplastic
Shaft: Stainless Steel

Bushing: Zinc casting

Shaft Retaining Ring: Stainless steel

Detent Spring: Stainless steel

Detent Ball: Stainless steel

Detent Section: Hiloy 610

Printed Circuit Boards: NEMA grade FR-4 gold over nickel or palladium

Terminals: Brass, tin-plated

Mounting Hardware: One brass, nickel-plated nut and zinc-plated spring steel with clear trivalent chromate finish lockwasher supplied with each switch. (Nut is 0.094 inches thick by 0.433 inches across flats)

Rotor: Thermoplastic

Pushbutton Dome: Stainless steel

Phototransistor: Planar Silicon NPN

Infrared Emitter: Gallium aluminum arsenide

Flex Cable: 28 AWG, stranded/top coated wire, PVC coated on .050" centers (cabled version)

Header Pins: Brass, tin-plated

Spacer: Hiloy 610

Shim: Stainless Steel

Backplate/Strain Relief: Stainless steel

Optical and Mechanical Encoders

ORDERING INFORMATION

