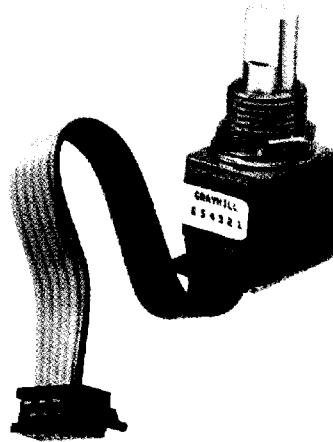


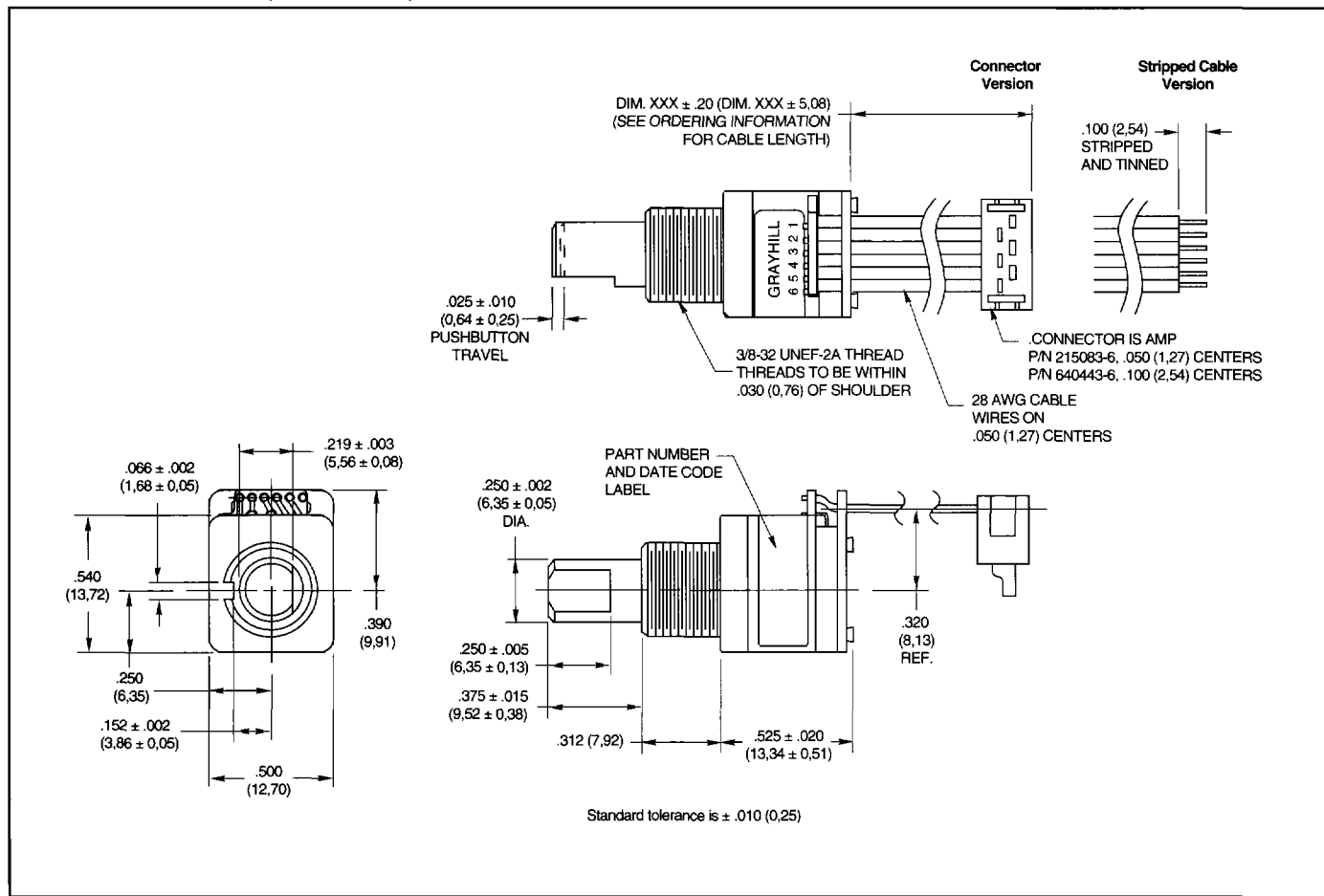
SERIES 62A
Compact, 1/2" Package

FEATURES

- Low Cost
- Long Life
- Economical Size
- Optically Coupled for More than a Million Cycles
- With or Without Integral Pushbutton
- Compatible with CMOS, TTL and HCMOS Logic
- Available in 16, 24 and 32 Detent Positions
- Choices of Cable Length and Terminations
- Used to Set Radio Frequency, Drill Depth, RPM, Menu Select, etc.

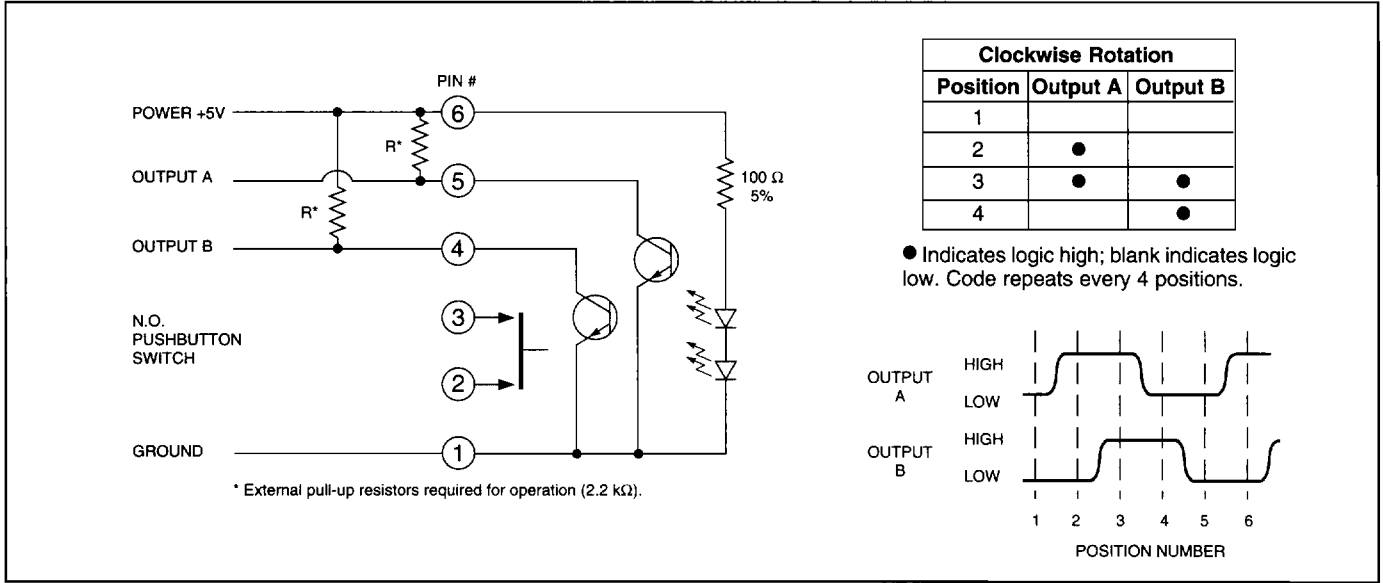


DIMENSIONS In inches (and millimeters)



Optical and Mechanical Encoders

CIRCUITRY, TRUTH TABLE, AND WAVEFORM: Standard Quadrature 2-Bit Code



SPECIFICATIONS

Pushbutton Switch Ratings

Rating: at 5 Vdc, 10 mA, resistive
Contact Resistance: < 10Ω (TTL or CMOS compatible).
Voltage Breakdown: 250 Vac between mutually insulated parts.
Contact Bounce: Less than 4 milliseconds at make and less than 10 milliseconds at break
Actuation Life: 3,000,000 operations
Actuation Force: 725 ± 150 grams

Rotary Encoder Ratings

Coding: 2 bit quadrature coded output
Operating Voltage: 5V ± .25 Vdc
Supply Current: 30 mA maximum @ 5 Vdc
Logic High: 3.8V minimum
Logic Low: 0.8V maximum
Logic Rise and Fall Times: < 30 ms

Operating Torque: 1.9 in-oz ± .6 in-oz initially
Rotational Life: > 1,000,000 cycles of operation (cycle is rotation through all positions and return)
Shaft Push Out Force: 45 lbs minimum
Mounting Torque: 15 in-lb maximum
Operating Speed: 100 RPM maximum

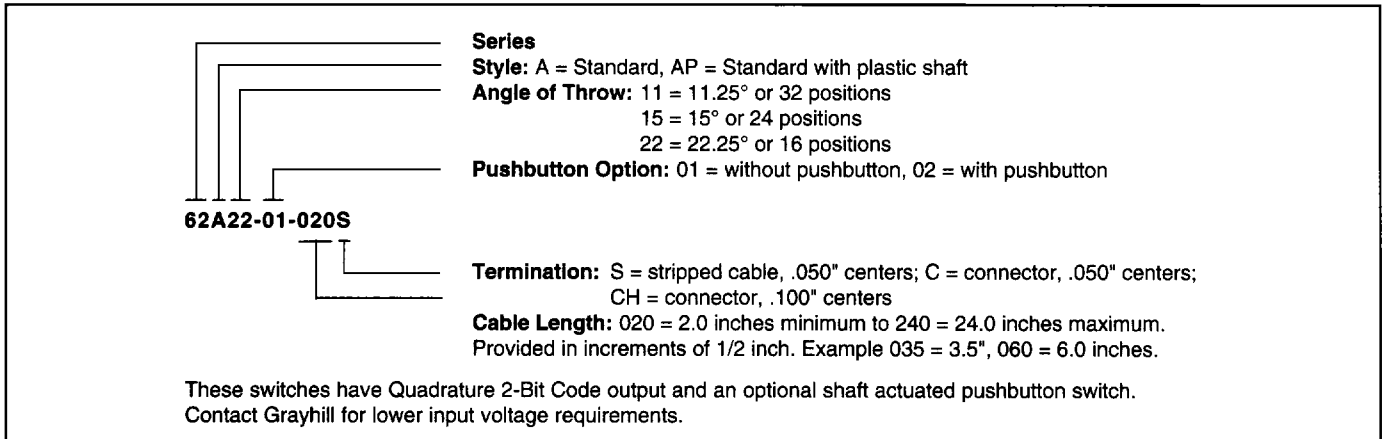
Environmental

Operating Temperature Range: -40°C to 85°C
Storage Temperature Range: -55°C to 100°C
Vibration Resistance: Tested at 10-2000 Hz at 15g or 0.060" double amplitude
Mechanical Shock: Tested at 100 g's, 6 ms, half sine, 12.3 ft/s and 100 g's, 6 ms, sawtooth, 9.7 ft/s
Humidity: 90-95% relative humidity @ 40°C for 96 hrs

Materials and Finishes

Bushing: Zinc casting
Shaft: Zinc casting or plastic
Shaft Retaining Ring: Stainless steel
Detent Spring: Stainless steel
PC Boards: NEMA grade FR-4
Terminals: Brass, Tin plated
Rotor: Reinforced thermoplastic (glass filled nylon)
Mounting Hardware: One brass, nickel plated nut and lockwasher supplied with each switch. Nut is 0.092 inches thick by 0.436 inches across flats
Code Housing: Reinforced thermoplastic
Pushbutton Dome: Stainless steel
Pushbutton Housing: Thermoplastic
Pushbutton Contact: Brass, nickel plated
Dome Retaining Disk: Thermoplastic
Strain Relief: Stainless steel
Cable: 28 AWG, stranded/ top coated wire, PVC coated on .050 centers

ORDERING INFORMATION



Available from your local Grayhill distributor For prices and discounts, contact a local sales office, an authorized local distributor, or Grayhill.

Optical and Mechanical Encoders