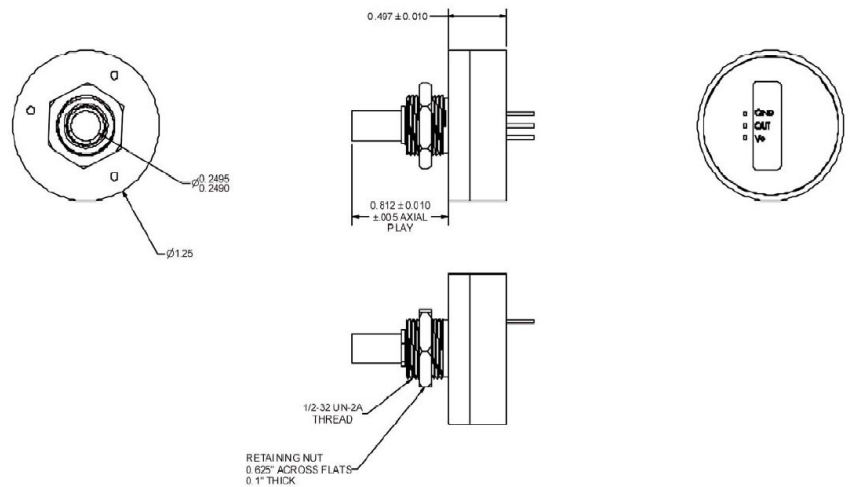


ED-21 Analog Output Series Packaged Magnetic Encoder

The ED-21 Series Magnetic Encoder is designed to replace traditional mechanical potentiometers. This product is offered with a ball bearing supported shaft. 5 standard output ranges are available: 0.5 - 4.5v, 0 - 5v, 0 - 12v, 4 - 20mA and 0 - 20mA. The magnetic technology used in the ED-21 offers advantages over conventional electromechanical potentiometers with sealed electronics, extended temperature ranges, and virtually unlimited life as there are no mechanical parts to wear out.



dimensions



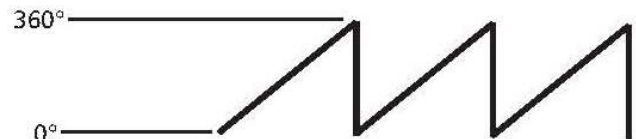
FEATURES

- Magnetic Sensing Technology
- Encapsulated Electronics/Sealed Unit
- Harsh Environment Compatibility
- Analog Voltage and Current Outputs
- Low Profile
- Consistent Rotational Torque
- Resistant to Contamination
- IP52 Sealing
- Metallic Threaded Bushing Mounting
- Wide Operational Temperature Range (-40 °C to 85 °C)
- Custom Housings, Shafts, Connectors Available in Most Cases with No Additional Tooling Required
- Excellent Stability

APPLICATIONS

- Marine, Avionics, Motor Speed and Position Control
- Marine Steering and Throttle Position Control/Feedback
- Monitor Pump Speed and Direction
- Camera Position and Control
- XY Stage Positioning
- Radio Controls
- Motor Feedback
- Medical Diagnostic Equipment
- Video and Sound Editing Equipment
- Valve Position
- Syringe Pump
- Potentiometer Replacement

sample analog output



ED-21 Analog Output Series Packaged Magnetic Encoder

Performance Specifications

Standard Outputs ranges over 360°	.5 – 4.5 vdc, 4-20 mA, 0-5 Vdc, 0-12 VDC, 0-20 mA
Operating Temperature	-40C to +85°C
Maximum Speed	Up to 3000 RPM depending on the bearing option
Bearing Life	30,000,000 cycles
Bearings	Ball
Run Out	.010" max @ .75 from mounting surface
Bushing Mounting Torque	10 in-lb max

Electrical

Current Draw	15 mA (+ output for current loop)
Operating Voltage	5 vdc +/- .26 for .5-4.5 vdc & 0-5 vdc 12.5 – 26 Vdc for current 15-26 Vdc for 0-12 Vdc

Phase Increasing Clockwise

Note: All specifications are specified with Vdc @ nominal input voltage and Ambient Temperature 25 Degrees Celsius.
For current output max loop resistance 700Ω@ 24 Vdc

Mechanical

Axial Load (lbs)	4.5 [20 N] Max.
Radial Load (lbs)	2.25 [10 N] Max.
Operating Speed (rpm)	3000
Shaft End Play (in)	.005 (.10 Max)
Shaft Radial Play (in)	.010 [.25] Max. @ .6 [15.2] from mounting surface
Shaft Push-In Force (lbs)	40 [9N]
Shaft Pull-Out Force (lbs)	6 [1.3N]

Environmental

Vibration	MIL-STD-202F Method 204D Test Condition B
Shock	MIL-STD-202F Method 213B Test Condition C
Humidity	MIL-STD-202F Method 103B Test Condition A
Thermal Shock	MIL-STD-202F Method 107G Test Condition A
Operating Temperature	-40C to +85 C
Storage Temperature	-55C to 125C

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ordering info

