ED-22 ANALOG OUTPUT SERIES MAGNETIC ENCODER

Reliable and Consistent Rotational HMI Device

DESCRIPTION

The ED-22 Series Magnetic Potentiometer can be used to replace a conventional potentiometer. This product offers 270 degrees of electrical travel, integrated rotational stop system, 300 degrees of mechanical travel, utilizing a sleeve bearing and shaft fitted with an O-ring seal. This sensor is designed for rotary human machine input (HMI) applications.

The Non-contact magnetic sensor design utilized in the ED-22 is well suited for industrial applications where temp. extremes, high vibration and shock, and contamination are present.

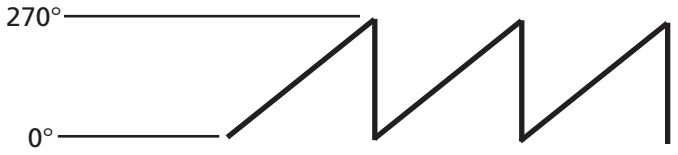
The ED-22 is designed using our standard modular and flexible construction methods. We can customize housings, shafts, and terminations to meet your exact specifications with little or no tooling costs.

FEATURES

- Magnetic Sensing Technology
- Encapsulated Electronics/Sealed unit
- Harsh Environment Compatibility
- .5 to 4.5, .1 to 4.9 or 0 to 5 Vdc outputs
- Standard industry package size
- Consistent Rotational Torque
- Resistant to Contamination
- Highly Resistant to Vibration
- Metal Shaft and Bushing
- Wide Operational Temperature Range (–40°C to 85°C)
- Custom Housings, Shafts, Terminations Available
- Excellent Stability - No Mechanical Contacts to wear

APPLICATIONS

- Machine Tool Control
- Paint Spraying System Control
- Medical Equipment
- Industrial Test and Measuring Equipment
- Off Highway Cab Controls
- Marine
- Exercise Equipment
- Value Positioning
- Industrial Joysticks



Sample Analog Output

Position Sensors Technical Support:
Tel: 757-766-4348
Fax: 757-766-4297
Email: position@meas-spec.com

measurement SPECIALTIES

ED-22 SERIES MAGNETIC ENCODER

performance specifications

Measurement Specialties reserves the right to update and change these specifications without notice.

Standard Outputs ranges over 270°	.1 Vdc to 4.9 VDC
Operating Temperature	–40°C to +85°C (Extended temperature range available, contact factory for details)
Maximum Speed	300 RPM
Bearing Life	3,000,000 cycles
Bearings	Sleeve
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 (VDC)	5Vdc +/-.25

Note: All specifications are specified with Vdd @ Nominal input voltage, and Ambient Temperature 25 Degrees Celsius.

mechanical

Axial Load (lbs)	4.5 [20 N] Max.
Radial Load (lbs)	2.25 [10 N] Max.
Operating Speed (rpm)	300 = Sleeve
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	-40 to +85 °C
Storage Temperature	-55 to 125 °C

ordering information

ED-22 – SB – RRRR – O – P

Connection
P= pin header
C= cable

Analog
V= Voltage

Output Ranges
0149 = .1 - 4.9 Vdc
0050 = 0 - 5 Vdc
0545 = .5 - 4.5 Vdc

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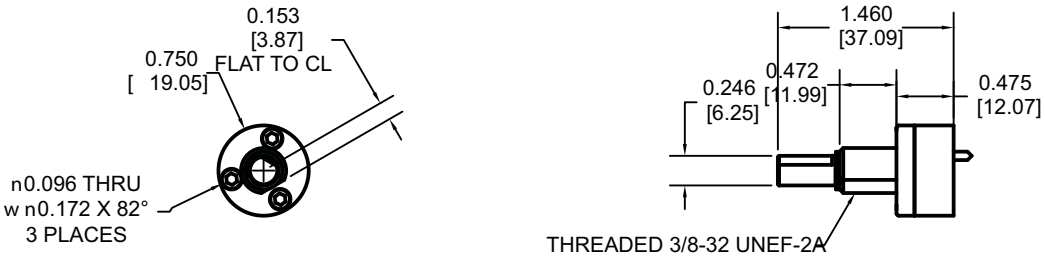
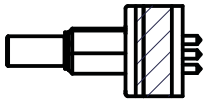
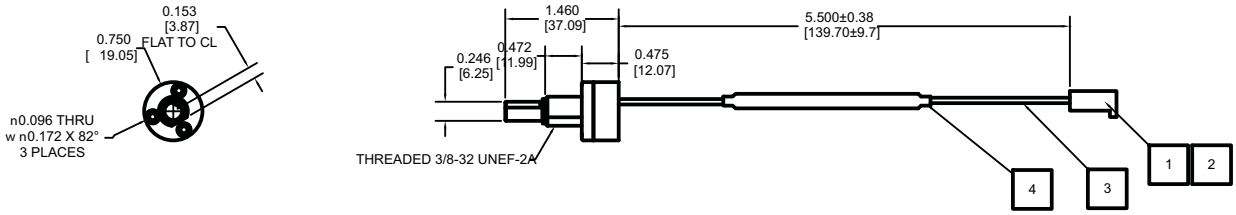
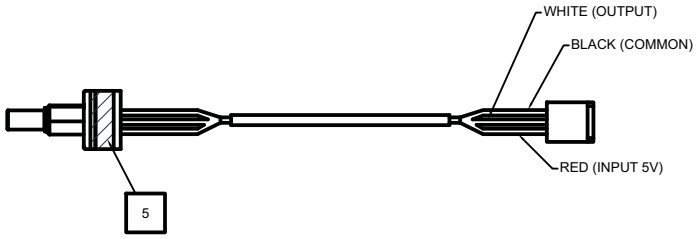
dimensions









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