

1. Introduction

The EZ15 Encoder is a compact 1.5” incremental optical encoder, designed for optical shaft encoder motion control and precision sensor systems. Our ET7272 available models are short circuit proof with automatic thermal shutdown. Our EZ Encoder also includes reverse voltage protection of the inputs.

2. Specifications

ELECTRICAL

INPUT

Voltage: 10-30 VDC
 Current: 100 mA @ 24VDC (without any load)
 High Voltage: Min. 2.4VDC TTL Compatible
 Low Voltage: Max. 0.4VDC TTL Compatible

OUTPUT

Incremental Counts: 250, 500, 720 PPR
 Output: TTL or Sourcing (P) or Line driver ET7272
 Voltage: $30V/V = 18-30VDC (V_{in} = V_{out})$
 $30V/5 = 5VDC$

MECHANICAL DATA

Housing

Dimensions: 1.5” diameter and .97” depth
 Shaft: ¼”

Ratings

Max. Shaft Load: 10 lbs.
 Enclosure: NEMA 12, IP54

ENVIRONMENTAL

Housing	Size 15 (1.5” dia.)
Max. Starting Torque @ 25 °C (oz. in.)	2
Moment of Inertia (oz*in ²)	2×10^{-4}
Max. Shaft Speed (RPM)	5000
Shaft Size	1/4”
Max. Shaft Loading Axial and Radial:	15 lb.
Bearing Life at Max. Mfr. Spec.	2×10^9
Shock	100g for 11ms
Vibration	20g to 2000Hz
Freq. Response	60 kHz
Operating Temperature	-10°C to 70° C
Storage Temperature	-40°C to 85°C

3. Wiring

The shielded interconnecting cable should be routed in its own conduit and kept separate from other high voltages/high inductance wiring. The shield drain wire should be connected to earth ground at both ends of cable.

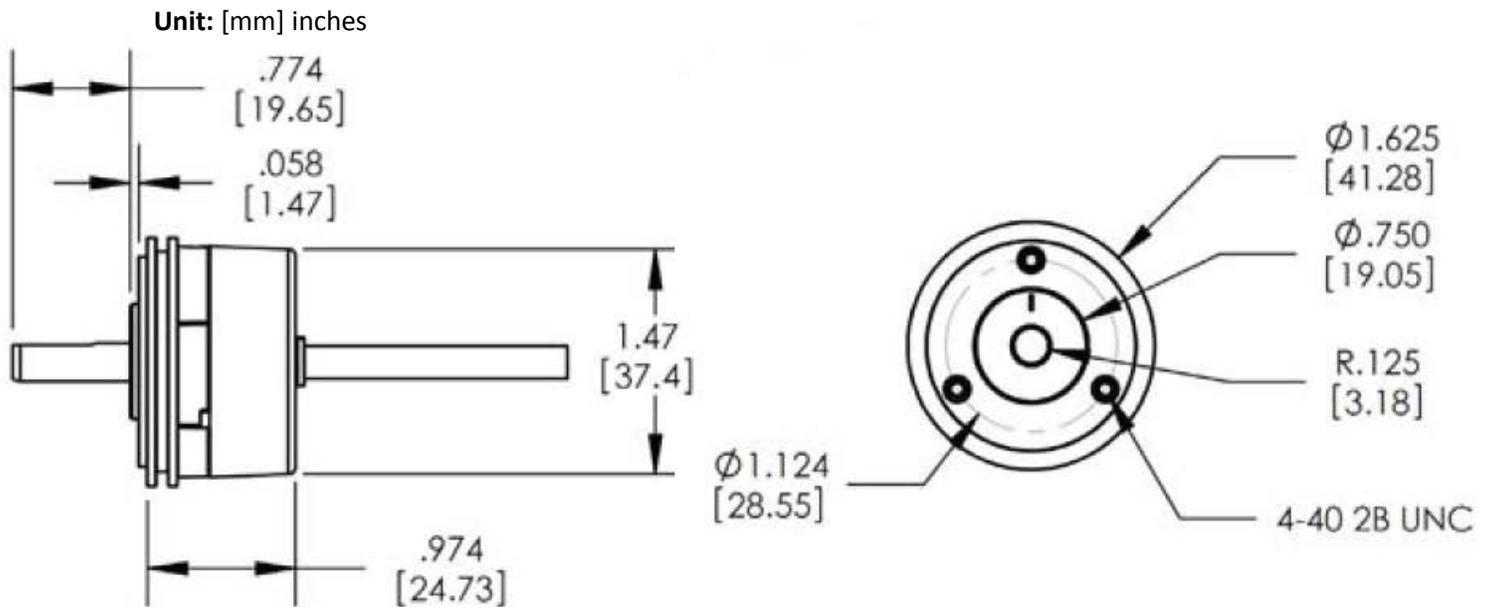
COLOR	6 Conductor Cable
Brown	Signal A
White	Signal A'
Blue	Signal B
Green	Signal B'
Red	Vcc
Black	GND

4. Mounting

Servo-Mount or Face Mount

Our EZ Encoder can be mounted with traditional servo-clamps or through the three 4-40 mounting holes on the face of the resolver.

Zero Reference ($\pm 5^\circ$): The position at which the flat on the shaft lines up with the screw in the case and the two mounting holes on the EZ Encoder's face plate.



5. How to Order

EZ15 – XXXX – XXXX – XXX
 1 2 3

1. PPR

0250 0500 0720

2. Input Power / Output Driver

30V/V 10-30Vin, $V_{in}=V_{out}$

30V/5 10-30Vin, $V_{out}=5V$

3. Cable Length (in ft)

000 6.5 Ft. Cable

002 2 Ft. Cable

005 5 Ft. Cable

020 20 Ft. Cable

050 50 Ft. Cable

100 100 Ft. Cable