

# DR011

Direct Replacement Encoder for BEI EX152



Model DR011

The DR011 is the smart direct replacement choice for the BEI EX152 encoder commonly used on postal sorting equipment, baggage systems, and packaging/conveying equipment. This exact replacement has the added benefit of an attached cable, saving a technician time by not having to solder wires to a circuit board. Improved sealing means a longer life with increased protection.

If you need to replace a BEI EX152, save yourself both time and money and order the DR011.

**DR011 Price: \$310**

Additional discounts available for volume orders.



Model BEI EX152

## Features:

- High precision 1.50" incremental encoder
- Stainless steel 1/4" OD shaft
- Quadrature A & B channels
- 1000 CPR
- Push-Pull output
- Servo mount encoder with 4-40 x .30" deep mounting holes on a 1.100" bolt circle
- 18" cable with strain relief
- IP50 sealing
- Shaft speeds up to 7,500 RPM

## The Accu-Coder™ Advantage

- ✓ Get this encoder FAST – you'll get your encoders in days, not weeks.
- ✓ Huge savings in price comparison – the DR011 is your economical solution
- ✓ The accuracy, reliability, and quality that only come from an Accu-Coder™
- ✓ Industry Best 3-year warranty!

**ACCU>CODER™**  
by Encoder Products Company

# DR011

Direct Replacement Encoder for BEI EX152



## Model DR011 Specifications

### Electrical

Input Voltage..... 4.75 to 28 VDC max for temperatures up to 70° C  
Input Current..... 100 mA max with no output load  
Input Ripple..... 100 mV peak-to-peak at 0 to 100 kHz  
Output Format..... Incremental – Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the encoder mounting face. See Waveform Diagrams below.  
Output Type..... Push-Pull – 20 mA max per channel  
Freq Response..... 100 kHz  
Noise Immunity..... Tested to BS EN61000-4-2; IEC801-3; BS EN61000-4-4; DDENV 50141; DDENV 50204; BS EN55022 (with European compliance option); BS EN61000-6-2; BS EN50081-2  
Symmetry..... 180° ( $\pm 18^\circ$ ) electrical at 100 kHz output  
Quad Phasing..... 90° ( $\pm 22.5^\circ$ ) electrical at 100 kHz output  
Min Edge Sep..... 67.5° electrical at 100 kHz output  
Rise Time..... Less than 1 microsecond  
Accuracy..... 0.017° mechanical (1.0 arc minutes) from one cycle to any other cycle.

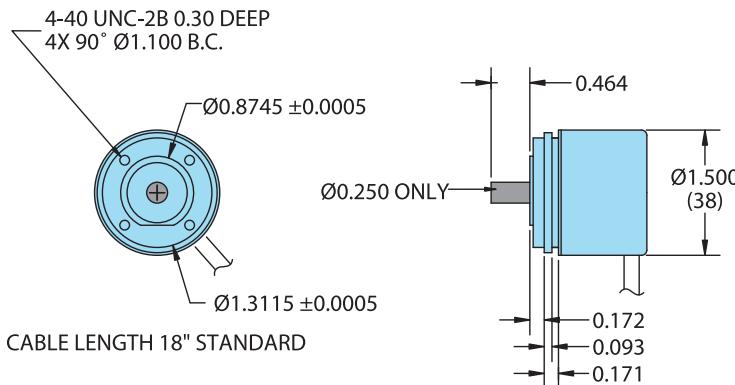
### Mechanical

Max Speed..... 7500 RPM. Higher shaft speeds may be achievable, contact Customer Service.  
Shaft Size..... 0.250" outside diameter  
Shaft Rotation..... Bi-directional  
Radial Shaft Load..... 5 lb  
Axial Shaft Load..... 3 lb  
Starting Torque..... 0.14 oz-in typical  
4.0 oz-in typical for -40° C operation  
Moment of Inertia ....  $2.8 \times 10^{-4}$  oz-in-sec<sup>2</sup>  
Max Acceleration..... 1 x 105 rad/sec<sup>2</sup>  
Electrical Conn..... 18" cable (foil and braid shield, 24 AWG conductors)  
Housing..... Black non-corrosive finish  
Bearings..... Precision ABEC ball bearings  
Mounting..... 1.3115" Servo Mounting face; see dimensions  
Weight..... 3.10 oz typical

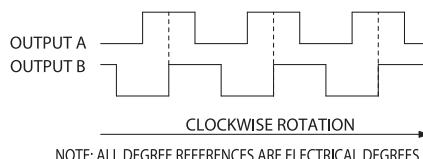
### Environmental

Operating Temp..... 0° to 70° C  
Storage Temp..... -25° to 85° C  
Humidity..... 98% RH non-condensing  
Vibration..... 10 g @ 58 to 500 Hz  
Shock..... 50 g @ 11 ms duration

## DR011 Dimensions



## DR011 Waveform Diagram



## DR011 Wiring Table

Function	Cable Color
COM	Black
+VDC	White
A	Brown
B	Red
Shield	Bare

**Don't see the exact encoder you need replaced?**

Call 1-800-366-5412 and our  
Technical Services Department will cross-reference the  
encoder to the correct EPC model.