

## DR011

### Direct Replacement Encoder For BEI EX152



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. These encoders are in stock and ready for delivery today. 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.

**REPLACE  
THIS  
WITH  
THE DR011**



- The Accu-Coder™ DR011 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!**
- *Huge savings* in price comparison!
- The accuracy, reliability, and quality that only come from an Accu-Coder™
- Industry Best 3-year warranty!

## 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° (±18°) electrical at 100 kHz output  
 Quad Phasing.....90° (±22.5°) 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.

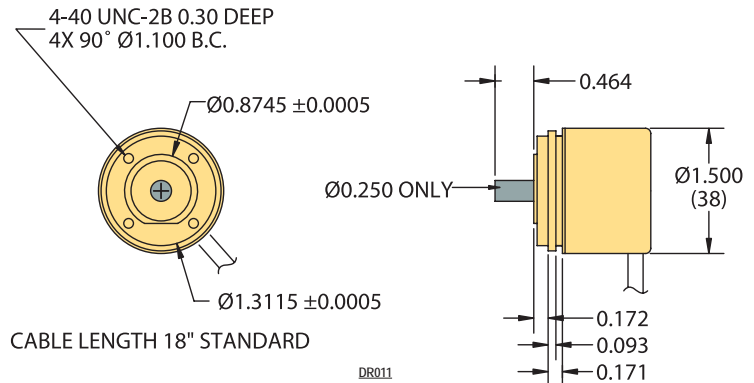
### Mechanical

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  
 Moment of Inertia .....4.0 oz-in typical for -40° C operation  
 Moment of Inertia .....2.8 x 10<sup>-4</sup> oz-in-sec<sup>2</sup>  
 Max Acceleration .....1 x 10<sup>5</sup> 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

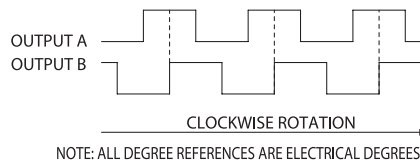
### Environmental

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

This Direct Replacement Encoder provided by;

