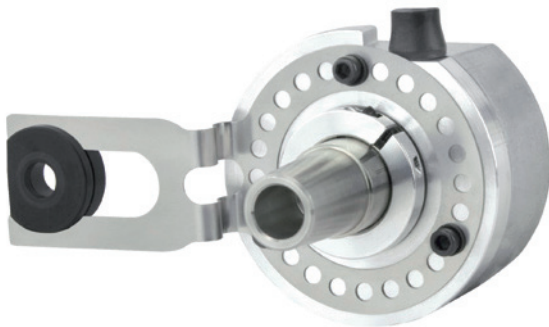


## DR735

### Direct Replacement Encoder For Heidenhain\* ROD320

\*Heidenhain is a trademark of Heidenhain Corporation.  
Siemens and Simodrive are trademarks of Siemens AG

**BRITISH  
ENCODER**  
PRODUCTS COMPANY



**EPC Model DR735**



ROD320.002



ROD320.005

Encoders shown mounted on Siemens\* 1FT Series Simodrive

#### Features:

- Low profile (30.2mm / 1.19") encoder body
- 2 piece construction – "Stay in Place" shaft for easy removal of encoder
- 1000, 1250, 2000, 2500, 3000 and 5000 PPR available\*
- Line Driver output
- True flex arm mounting system makes installation easy and allows for insulation and isolation from vibration, extending the life of the encoder
- 17-pin connector at the end of 9" of cable
- Advanced Opto-ASIC technology for superior noise immunity
- Withstands temperatures up to 100° C

Designed as a drop-in replacement for the Heidenhain\* ROD320 encoder, BEPC's DR735 meets or exceeds all OEM specifications. The DR735 is designed to provide precision feedback control for Siemens\* 1FT Series Simodrive\* motors. It features an improved "Stay in Place" tapered shaft, custom flex mount, various different resolutions, 9" of cable, and a 17 pin connector with the correct Heidenhain\* pinout. Replacing both the older ROD320.002 and the ROD 320.005 has never been faster, easier, or more economical thanks to the DR735.

#### ORDER NUMBER PPR :-

DR735-04 1000  
DR735-06 1250  
DR735-03 2000  
DR735-01 2500  
DR735-05 3000  
DR735-02 5000

\*Other PPRs may be available, contact Customer Service.

Contact Customer Service for pricing. Discounts available for volume orders.

#### The Accu-Coder™ Advantage

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

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

#### Don't see the exact encoder you need?

Call +44(0)1978 262100 and our Technical Sales Department will cross-reference your encoder to the correct BEPC model.

# DR735

Direct Replacement Encoder For Heidenhain\* ROD320

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## DR735 Specifications

### Electrical

Input Voltage .....4.75 to 28 VDC (16 VDC Max at 100° C)  
Input Current .....100 mA max with no output load  
Output Format.....Incremental- Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the mounting face.  
See *Waveform Diagram* below.  
Output Types.....Line Driver- 20 mA max per channel (Meets RS 422 at 5 VDC supply)  
Freq. Response.....200 kHz standard  
Noise Immunity.....Tested to BS EN61000-6-2; BS EN50081-2; BS EN61000-4-2; BS EN61000-4-3; BS EN61000-4-6, BS EN55011  
Symmetry .....180° (±18°) electrical  
Quad. Phasing.....90° (±22.5°) electrical  
Min. Edge Sep.....67.5° electrical  
Accuracy.....Within 0.01° mechanical from one cycle to any other cycle, or 0.6 arc minutes

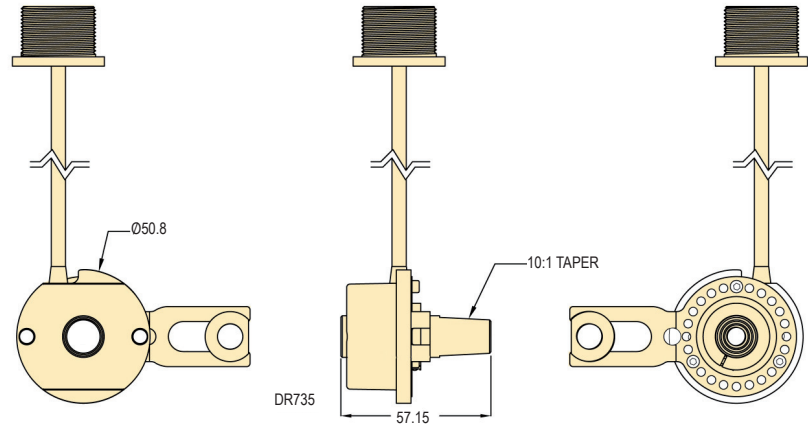
### Mechanical

Max Shaft Speed...7500 RPM  
User Shaft Tolerances  
Radial Runout...0.007" max  
Axial Endplay .....±0.030" max  
Starting Torque.....0.50 oz-in  
Moment of Inertia...3.9 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.....9" cable (foil and braid shield, 24 AWG conductors) with 17-pin connector  
Housing .....Black non-corrosive finish  
Mounting.....Flex Arm Mount standard  
Weight .....3.5 oz typical

### Environmental

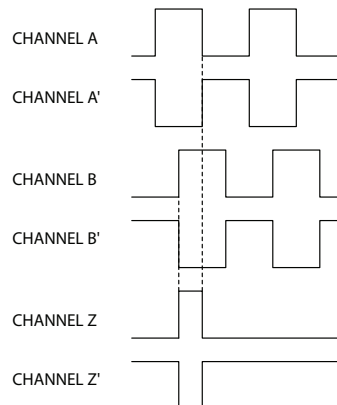
Operating Temp.....0° to 100°C  
Storage Temp.....-40° to +100° C  
Humidity .....98% RH non-condensing  
Vibration .....10 g @ 58 to 500 Hz  
Shock .....50 g @ 11 ms duration  
Sealing .....IP64

## DR735 Dimensions



All dimensions are in mm with a tolerance of ±0.127mm or ±0.254 unless otherwise specified

## Waveform Diagram



## Wiring Table

PIN	FUNCTION
A	CHANNEL A
B	CHANNEL B
C, J, K	+VDC
D	CHANNEL A'
E	CHANNEL B'
F	CHANNEL Z
G	CHANNEL Z'
H	SHIELD
N, P, T	COMMON
R, S	BRIDGE
L	N/C