Direct Replacement Encoder For Heidenhain\* ROD320 \*Heidenhain is a trademark of Heidenhain Corporation. Siemens and Simodrive are trademarks of Siemens AG





#### 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.



**EPC Model DR735** 







ROD320.005

Encoders shown mounted on Siemens\* 1FT Series Simodrive



# The Accu-Coder<sup>™</sup> 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!

## 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.

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# **DR735 Specifications**

Electrical

.4.75 to 28 VDC (16 VDC Max at 100° Input Voltage .....

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 sup-

ply)

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

..180° (±18°) electrical Symmetry ..... Quad. Phasing......90° (±22.5°) electrical

Min. Edge Sep......67.5° electrical

.....Within 0.01° mechanical from one Accuracy.....

cycle to any other cycle, or 0.6 arc

### 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

......Black non-corrosive finish Mounting.....Flex Arm Mount standard

.....3.5 oz typical Weight ....

## Environmental

Operating Temp.....0° to 100°C

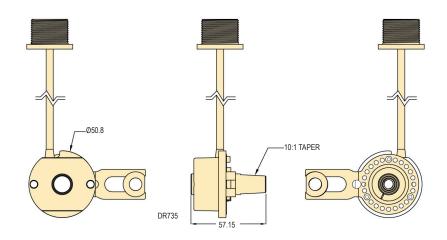
Storage Temp .....-40° to +100° C

Humidity ......98% RH non-condensing

Vibration ......10 g @ 58 to 500 Hz Shock ......50 g @ 11 ms duration

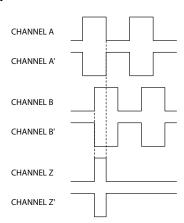
Sealing .....IP64

## 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
Α	CHANNEL A
В	CHANNEL B
C, J, K	+VDC
D	CHANNEL A'
Е	CHANNEL B'
F	CHANNEL Z
G	CHANNEL Z'
Н	SHIELD
N, P, T	COMMON
R, S	BRIDGE
L	N/C