

# ST-EP-DR-735

## Direct Replacement Encoder For Heidenhain\* ROD320

### Seimens 1FT Simodrive\* Motors



Designed as a drop-in replacement for the Heidenhain ROD320 encoder, our ST-EP-DR-735 meets or exceeds all OEM specifications, and is available with Servotech's competitive pricing, short lead-time and 3 year warranty. The ST-EP-DR-735 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, 2000, 2500 or 5000 CPR, 9" of cable, and a 17 pin connector with the correct Heidenhain pinout. Other disc resolutions are available.

Replacing both the older ROD320.002 and the ROD 320.005 has never been faster, easier or more economical thanks to the ST-EP-DR-735!

Order Number	CPR
ST-EP-DR-735-1250-N-10	1250
ST-EP-DR-735-2500-N-10	2500
ST-EP-DR-735-5000-N-10	5000

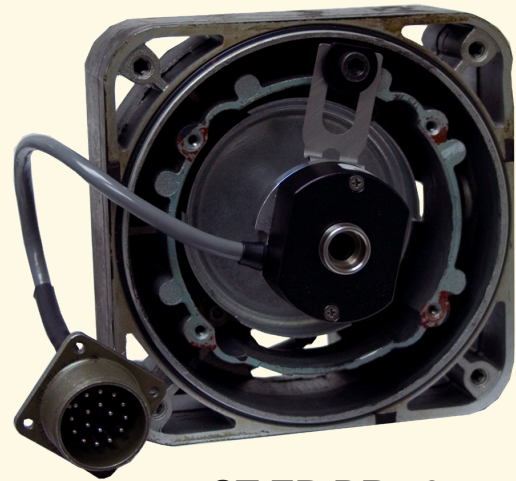
Contact Customer Service for other disk resolutions.  
(866) 807 3786



ROD320.002



ROD320.005



ST-EP-DR-735

*Encoders shown mounted on Siemens 1FT Series Simodrive*

### The Accu-Coder™ ST-EP-DR-735 Features:

- Low profile (1.19") encoder body
- 2 piece construction; Unique "Stay in Place" shaft allows for easy removal of encoder
- 2000, 2500 and 5000 CPR 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

### 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™**



# ST-EP-DR-735

Direct Replacement Encoder For Heidenhain\* ROD320  
Seimens 1FT Simodrive\* Motors



## ST-EP-DR-735 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

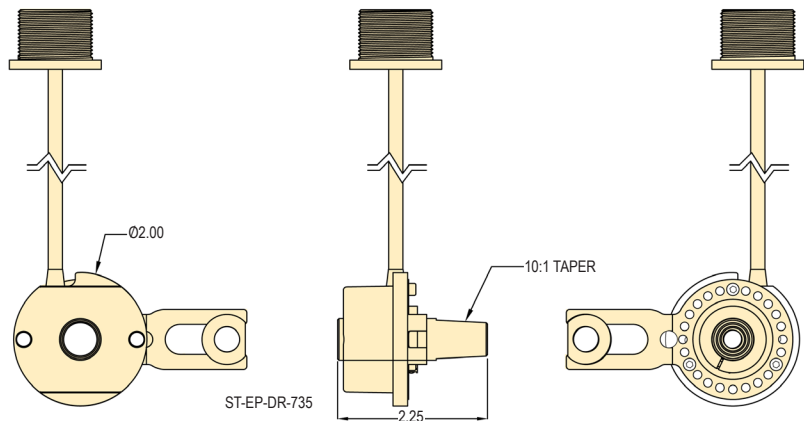
### Mechanical

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

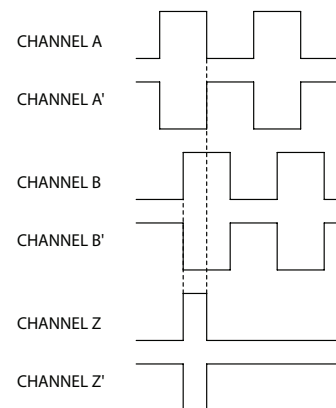
## ST-EP-DR-735 Dimensions



## ST-EP-DR-735 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

## ST-EP-DR-735 Waveform Diagram



Don't see the exact encoder  
you need replaced?

Contact us and we will be  
happy to cross-reference  
any encoder that you need  
replaced.

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

This Direct Replacement Encoder provided by:



Servotech Inc  
478 Timber Ridge Road  
Middletown CT, 06457  
(866) 807 3786

Sales@servotechUSA.com