

## DR735

### Direct Replacement Encoder For Heidenhain\* ROD320



Designed as a drop-in replacement for the Heidenhain ROD320 encoder, our DR735 meets or exceeds all OEM specifications, and is available with EPC's competitive pricing, short lead-time and 3 year warranty. 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, 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 DR735!

CPR	Order Number
2000	DR735-03
2500	DR735-01
5000	DR735-02

Contact Customer Service for other disk resolutions.



*Encoders shown mounted on Siemens 1FT Series Simodrive*

#### The Accu-Coder™ DR735 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!**

# DR735

## Direct Replacement Encoder For Heidenhain ROD320

### Model 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

Quadrature .....67.5° electrical or better is typical, 54°

Edge Separation electrical minimum at temperatures > 99° C

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

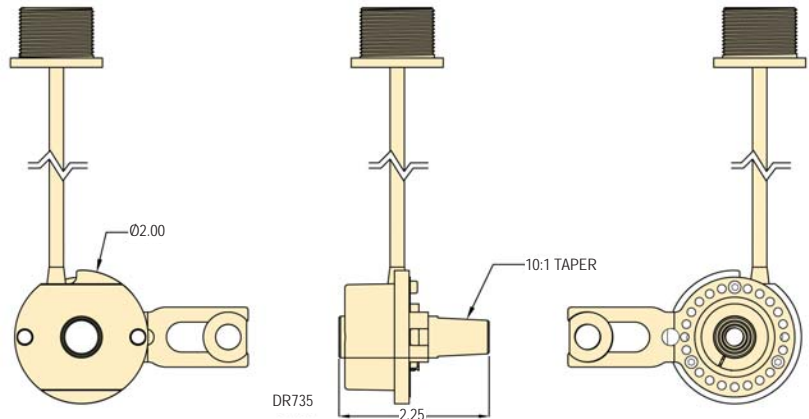
Humidity .....98% RH non-condensing

Vibration .....10 g @ 58 to 500 Hz

Shock .....50 g @ 11 ms duration

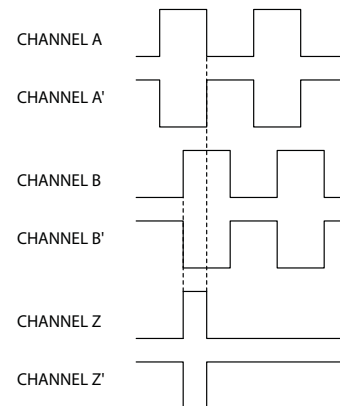
Sealing .....IP64

### DR735 Dimensions

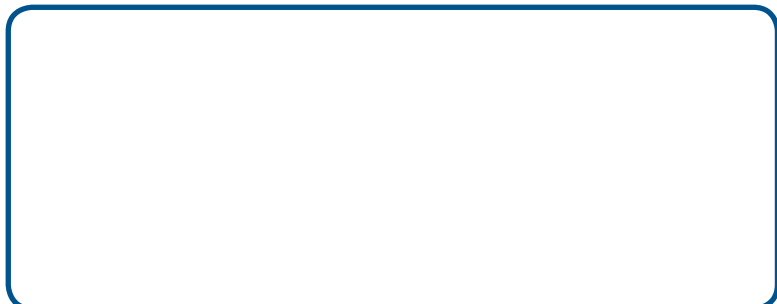


### DR735 Wiring Table

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



This Direct Replacement Encoder provided by:



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Siemens and Simodrive are trademarks of Siemens AG