



# Series 735



## Design Features

Due to some major technology enhancements, the 735 encoder is now available in four resolution ranges, from 0001 PPR through to 30,000 PPR. With models 735/2 through 735/4, which use advanced circuitry, it is now possible to provide selected resolutions up to 30,000 PPR. Please note, that within the higher resolution bands, the edge separation specifications reduce minimally, to 50°. A stainless steel version is available at a modest surcharge. This version is designed for hostile environments or food applications. It is protected to IP66, and is configured with 2 metres of flying lead. Please call the sales office for details.

## Specifications

Input Voltage range .....	5/24V (see output circuits)	Starting torque.....	0.002 Nm (0.02 with seal)
Regulation, for 5V operation .....	5%, with 2% maximum ripple	Radial loading.....	80 N operating
Current consumption .....	80mA typical	Axial loading.....	60 N operating
Output circuits .....	See Ordering Information	Moment of inertia.....	70 g/cm
Frequency response .....	200 KHz (735/1 - 50KHz)	Acceleration.....	10 <sup>5</sup> radians/sec <sup>2</sup>
Symmetry .....	180° electrical ±5% (9° <sup>90</sup> )	Weight.....	0.5 kg
Quadrature Phasing .....	90° electrical ±10% (9° <sup>90</sup> )	Housing.....	Aluminum w/protective finish
Minimum edge separation .....	72° electrical	Mounting.....	Servo flange or square flange
Reference marker pulse .....	Gated (A • B • Z = F)	Operating temperature.....	-10°C to +70°C
Rise time .....	Less than 1 microsecond	High temperature.....	-10°C to +100°C
Accuracy (cycle to cycle) .....	±0.017° or 1 Arc/Min	Storage temperature.....	-30°C to +85°C
LED life .....	100,000 hrs typical	Humidity.....	98% RHNC
Pulses per revolution .....	See Ordering Information	Vibration.....	10 G's @ 58 to 500 Hz
Max shaft speed .....	6,000 rpm continuous	Shock.....	50 G's for 11 mSec
Shaft sizes and types .....	See Ordering Information	Protection.....	IP50 standard
Shaft tolerance .....	g6, sliding fit for H7		IP64 w/seal (S30)
Bearings .....	ABEC 3		IP66 w/seal (S36)

## Ordering Information

