

Series 735

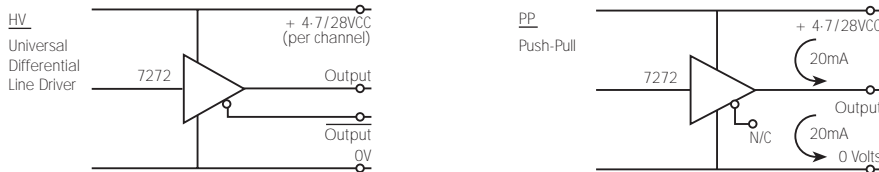
Design Features

Due to some major technology enhancements the 735 encoder is now available in six resolution ranges, from 0001 PPR through to 30,000 PPR. The former 734 encoder (A+B+Z + complement signals), has now been replaced by the 735/1 with PPRs available as per list "A" on page 47. With models 735/2 through 735/6, 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°_{oe}.

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	80N operating
Current consumption	80 mA typical	Axial loading	60N operating
Output circuits	See ordering information	Moment of inertia	70 g/cm
Frequency response	200 KHz (735/1 - 50KHz)	Acceleration	10 ⁵ radians/sec ²
Symmetry	180° electrical, ±5% (±9° _{oe})	Weight	0.5 Kg
Quadrature phasing	90° electrical, ±10% (±9° _{oe})	Housing	Aluminium with 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 option	-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	IP54 (IP65 with gland and shaft seal)
Shaft tolerances	g6, sliding fit for H7		
Bearings	ABEC 3		

Output Circuits



For terminating information please see pages 34 & 35

Ordering Information

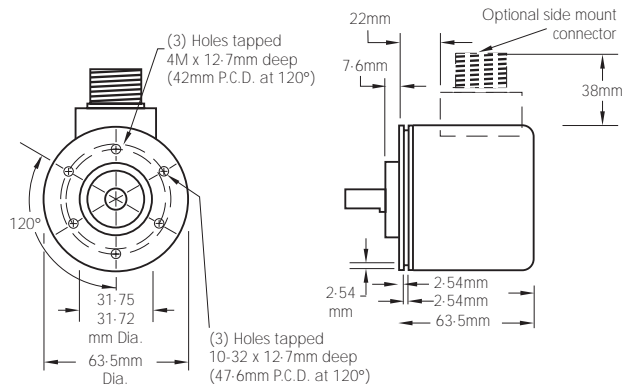
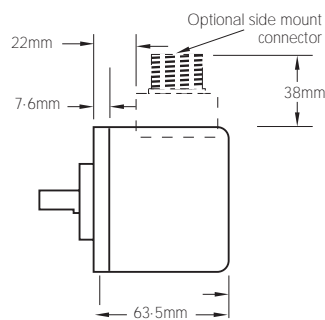
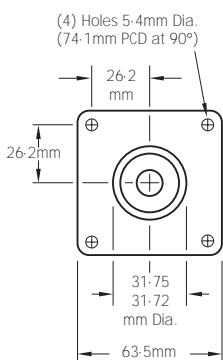
735	Range	VCC / Output Circuit	Shaft	Mounting	Connector	Pulses per Revolution
	1 = 0001 - 1000 PPR 2 = 1024 - 2000 PPR 3 = 2048 - 3000 PPR 4 = 3600 - 10000 PPR 5 = 10240 - 20000 PPR 6 = 20480 - 30000 PPR	HV = 5/24V RS422 Differential Driver PP = 5/24V Push-Pull	06 = 6mm 10 = 10mm OS = 0.375"	S = Round Servo Flange F = Square Flange	SG2 = Side Gland + 2m cable S07 = Side 7 pin connector (PP) S10 = Side 10 pin connector (HV)	See page 46





735/1	0001 - 1000 PPR	
735/2	1024 - 2000 PPR	
735/3	2048 - 3000 PPR	
735/4	3600 - 10000 PPR	
735/5	10240 - 20000 PPR	
735/6	20480 - 30000 PPR	
Extra cable, per metre		C B L
Mounting bracket		M - 3
Mounting flange		M - 7
IP65 shaft seal		S 3 0
7 pin mating connector		C 0 7
10 pin mating connector		C 1 0

Dimensions

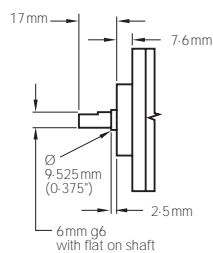


Flange Mount

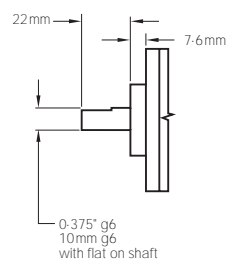
Servo Mount

See pages 43 for further mounting options

Shaft Sizes



6mm Shaft



0.375" and 10mm Shafts