

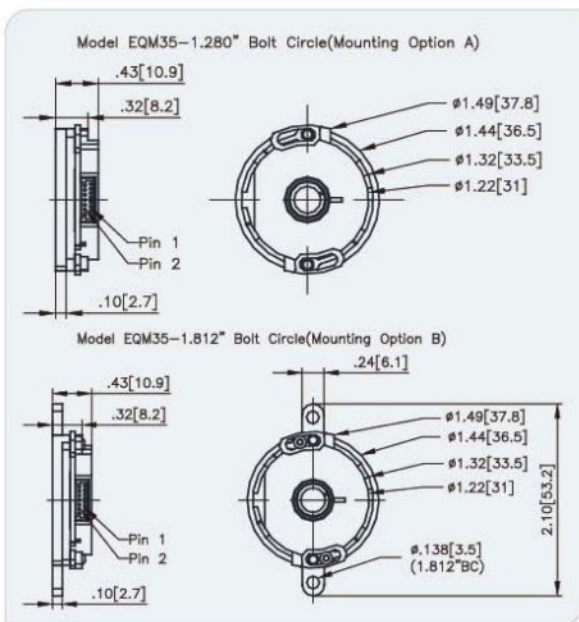
EQM35 Optical Encoder



General information

- Bearingless modular design
- Low profile assembled height
- Resolutions up to 8192 lines per revolution
- 4,6,8 or 10 pole commutation
- Easy Lock-n-Twist assembly feature
- Through shaft sizes up to 0.375" Diameter
- Upto 1Mhz Frequency Response
- High Noise Immunity
- RoHS Construction
- Hub to shaft uses two 3-48 set screws
- Hermetically sealed LED
- Multiple mounting options including resolver size 15

Mechanical



Environmental Specifications

Input Voltage	5 VDC ± 5%	
Input Current Requirements	65mA Typ, 100mA Max plus Interface Loads	
Input Ripple	2%Peak to Peak@5 VDC	
Output Circuits	26C31 RS 422A Line Driver(TTL Compatible)Optional UVW Open Collector(No U ^V W ^W)	
Incremental Output Format	Quadrature A leading B For CCW rotation viewed from encodr top.Index Pulse true over Aand B High	
Max Operating Frequency	<500ppr=500Khz or 15,000RPM 5000PPR-7999PPR=675Khz ≥8000PPR=1.0Mhz	
Commutation Format	Three Phase 4,6,8 or 10POLES	
Commutation Accuracy	±2° mechanical	
Interpolation Factors	1000/1024ppr=2x 2500PPR=5x 5000/5120ppr=10x	2000/2048ppr=4r 4000/4096ppr=8x 8000/8192ppr=16x

Environmental Specifications

Storage Temperature	-40 to 125°C
Operation Temperature	-30 to 115°C
IP Rating	40
Humidity	90% Non-Condensing
Vibration	30 g's @50 to 500CPS
Shock	50 g's @11ms Duration

Mechanical Specification

Hub Tolerance	0,+0.0006"
Recommended Shaft Tolerance	-0.0005,+0
Allowable Shaft Run Out	0.05mm,0.002" TIR
Allowable Axial Shaft Movement	± 0.25mm, ± 0.01"
Mounting	1.28",1.812" Bolt Circle, Resolver mount
Dynamic Commutation Adjustment Range	30'mechanical
Moment of Inertia	8.0x10 ⁻⁶ oz-in-s ²

Ordering Information Sample:M-1000-4-A-A-L-A-A-A

Model Prefix	PPR	Poles	Electrical	Cover	Hub Size	Mounting	Index	Hardware
EQM	500, 512	0	A=RS422	A=Hole in Cover	C=5mm	A=1.280"BC	A=90° A & B High	A=English
	1000, 1024	4	B=RS422(ASZ)	B=Closed Cover	D=6mm	B=1.812"BC	B=90° A & B Low	B=Metric
	2000, 2048	6	Open Collector(UVW)	(shafe < .512")	E=8mm			C=No Hardware
	2500, 4000	8	C=Dual Voltage	C=Closed Cover	K=.1875"			
	5000, 5120	10	RS422(ABZ) Open Colector(UVW)	(shafe < .450")	L=0.25" N=0.375"			

Note:
 1)4 Poles has four states per revolution(2 pole pair), or two 360°electrical cycles per revolution.
 2)RS422 is compatible with Renco options: TTL,PP, VC or LD.Open collector compatible with.
 3)10 Ploe only available for 500,1000,2000,2500,5000 and 8000PPR.
 4)Consult factory for configurations not shown.