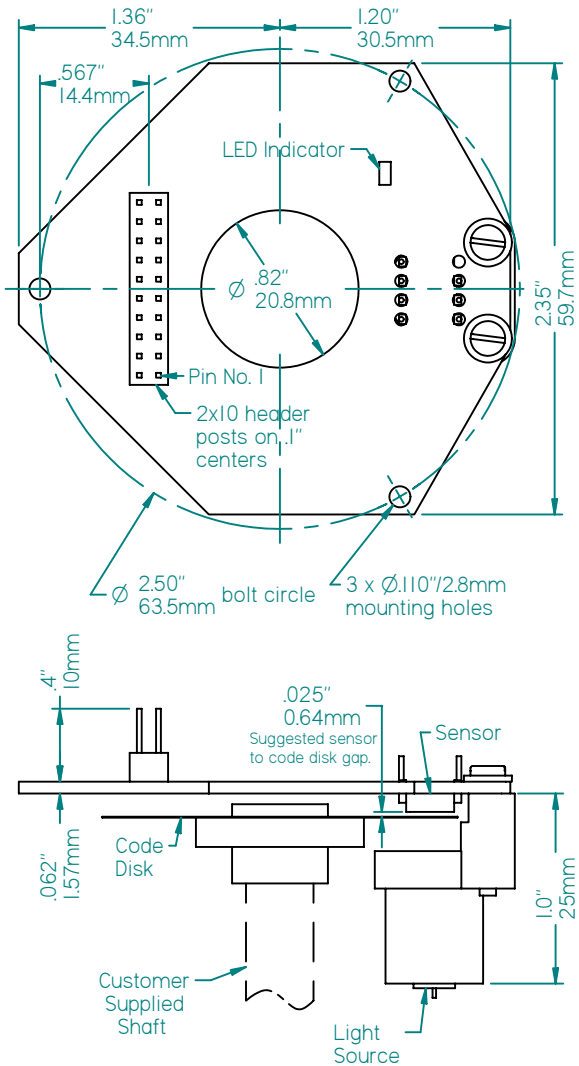


FEATURES

- 8, 9, or 10 bit resolution
- Up to 1024 positions/revolution, single turn
- Parallel Outputs
- Digital Output: Natural Binary or Gray Code
- Supply: 5 vdc
- Fits 1/4", 5/16", 3/8", 8mm, or 10mm Shaft Diameters
- ESD Protected
- Optional mounting base and cover
- Custom Models Available

DIMENSIONS



SPECIFICATIONS

Output Configuration

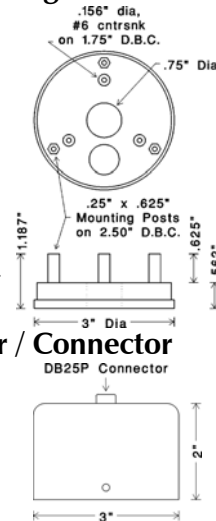
Circuit Bd. Pin No.‡	DB25P Pin No.‡	Function
1	1	2 ⁹
3	2	2 ⁸
5	3	2 ⁷
7	4	2 ⁶
9	5	2 ⁵
11	6	2 ⁴
13	7	2 ³
15	8	2 ²
17	9	2 ¹
19	10	2 ⁰
2	14	†
4	15	†
6	16	†
8	17	†
10	18	†
12	19	DataReady
16	21	Common
18	22	Supply

‡ Unlisted pins have no connection.
 † Unused pins have undefined outputs and are reserved for future use.

Optional Mounting Base

Materials: Aluminum, Brass posts.

Mounting: Circuit board attaches to the 3 mounting posts using the 4-40 machine screws supplied.



Optional Cover / Connector

Materials: Aluminum

Connector: DB25P
 A circuit board to DB25P ribbon cable is supplied.

Electrical

Supply Voltages: 5 vdc ± 5%

Current: 15 ma max (no load)

Operating Temperature: -40° to 70° C

Output Codes: (specify when ordering)

- Gray Code
- Natural Binary

Interrogation Rate: The rate at which the code disk is sampled. Regardless of the rotational speed, this determines the maximum rate the outputs change.

- Model MR30: 1KHz
- Model MR31: 3KHz

Resolution: (specify when ordering)

- 256, 512, or 1024

Accuracy: ± 1/2 bit

Rotation: Counts increase with clockwise rotation as viewed from sensor side of circuit board.

Digital Output Logic Levels:

- Logic 0: low voltage (.6 volts max.)
- Logic 1: high (Supply - .7 volts min.)

DataReady Output: Normally high, goes low momentarily (7 µsec minimum) while the outputs are changing. Stays low to indicate an error condition.

Output Circuits: Totem-pole output

- 5 ma. max source and
- 6 ma. max sink current

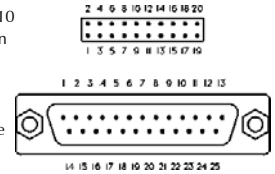
LED Indicator:

- "Off" when in the zero position.
- "On" in all other positions.
- When slowly rotating the disk (< 1/2 rev/sec), blinking indicates an alignment error.

Connectors:

Circuit Board: 2x10 header posts on .1" centers

Optional Cover: 25-pin D-subminiature (DB25P)



MODEL NUMBER

Model Number: MR30 = 1KHz update rate MR31 = 3KHz update rate	Resolution: 256, 512, or 1024	Supply Voltage: 5vdc
Shaft Diameter: A = 5/16", B = 3/8", C = 1/4", M8 = 8mm, M10 = 10mm	Output Code: G = Gray Code, N = Natural Binary	Special Features: Call or see our website for more information.
		Accessories/Options: leave blank for no accessories. MB = mounting base, MBC = mounting base and cover with DB25P connector, CBO = circuit board only, DO = disk only

Example: MR30B-1024N/5 - fits 3/8" shaft, 1024 resolution, natural binary code, 5vdc supply



OVER 30 YEARS OF
 MATERIAL HANDLING AND
 INDUSTRIAL EXPERIENCE

602 E. North Street 630-365-7148
 Elburn, IL 60119, USA Fax: 630-365-7149
www.photocraftencoders.com