

EX15 Incremental Encoder

BEI Sensors



The EX15 Series was developed to provide a high precision, enclosed shaft encoder for light duty and small applications. The EX15 boasts 1024 line counts in a miniature 1.54" diameter package.

Capable of operating over a temperature range of 0C to +70C without degradation of signals, the EX15 Series provides superior, commercial grade performance.

A standard two-year warranty and proven design makes the EX15 a valuable product for OEM applications.

Mechanical Specifications

Diameter: 1.54" Height: 1.45"
Shaft Size: .25"
Weight: 3 ounces
Acceleration: 200,000 rad./sec. Max
Shaft Load: Axial 5lb. Radial 5lb.
Torque: Less than 0.5 ounce inch
Bearings: Sealed ABEC 3

Motor Interface

Mounting Holes: 4 places #4-40 @ 90° on 1.10" B.C.
Servo Mount: designed to accommodate motor mount cleat "PIC type" L2-2
Shaft Coupling: must be flexible (do not hard mount)

Electrical Specifications

Code: Incremental
Output Format: dual channel quadrature, min. edge separation 45°
Output Type EX152/EX153: Square wave TTL & CMOS. 16mA sink. 500 μ A source short circuit protected
Output Type EX156: TTL differential line driver (26LS31) or equivalent should be terminated into a line receiver (26LS32) or equivalent circuit
Frequency Response: see figure 7
Rise Time: less than 1.0 μ sec.

Environmental Specifications

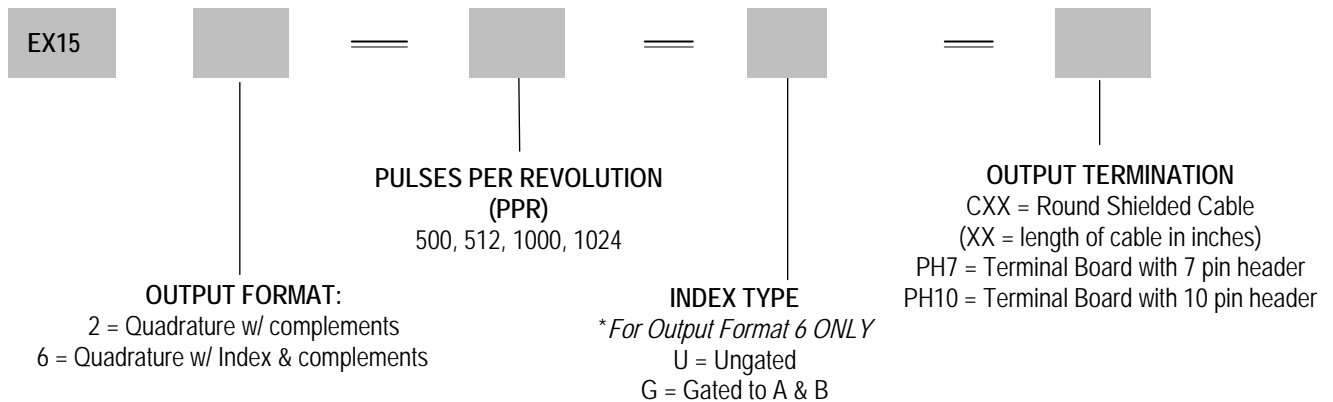
Enclosure: Unsealed housing. Unit must be protected from harsh environments.
Temperature: Operating, 0° to 70° C;
Storage, -20° to 105° C

Termination Specifications

Type: See Figures 1 through 6
Pinout: See pinout section

EX15 Incremental Ordering Options for assistance, call 800.350.2727

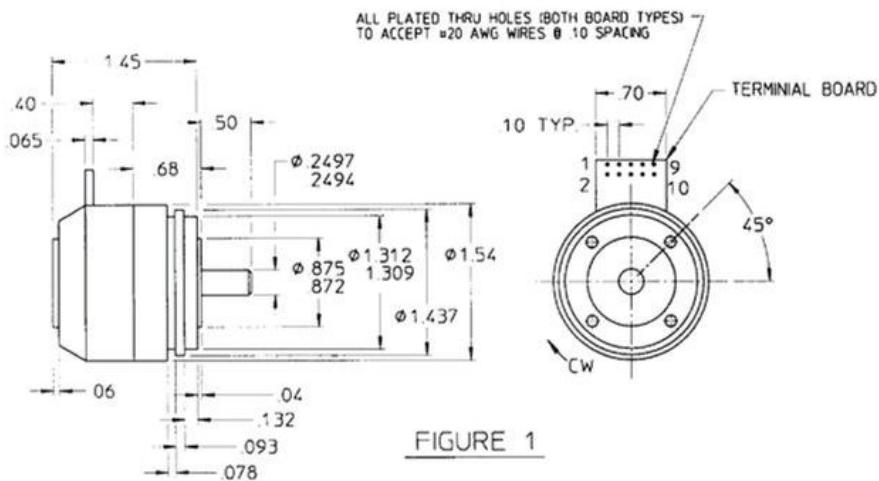
Use this diagram, working from left to right to construct your model number (example: EX152-500-G-PH7)



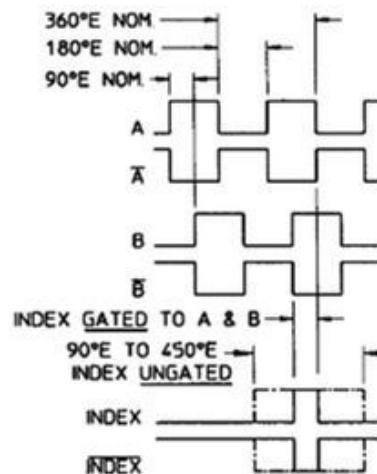
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Dimensions



Output Wave Form



CW ROTATION
EX152 Outputs A & B only
EX156 Outputs as shown

OPTIONAL HEADER (H)
MOLEX #22-23-2071

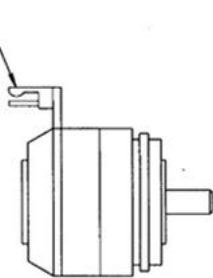


FIGURE 2
EX152

TERMINAL BOARD

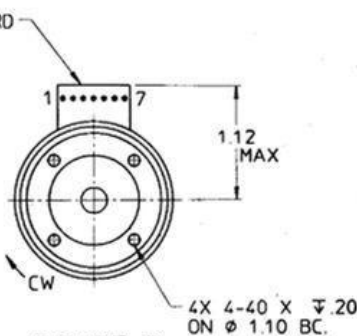


FIGURE 3
7 PIN TERMINAL BOARD

Frequency Response

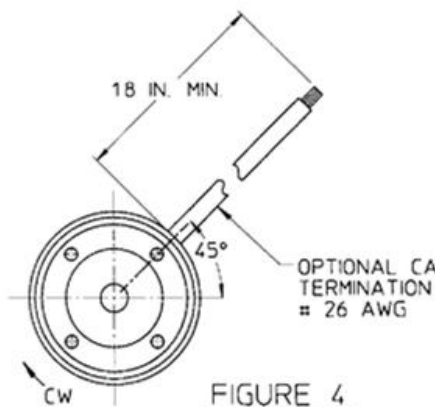
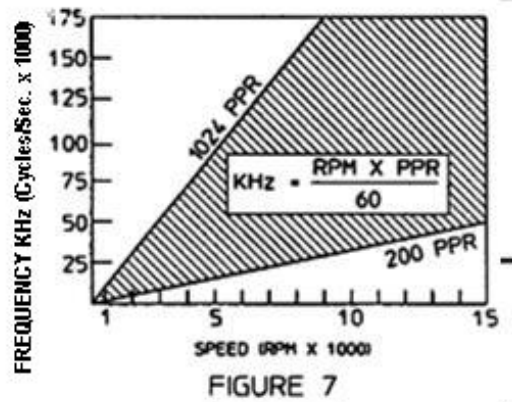


FIGURE 4

OPTIONAL HEADER (H)
DUPONT #67996-510

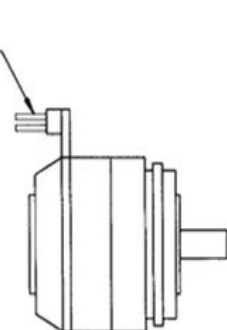


FIGURE 5
(EX156)

TERMINAL BOARD

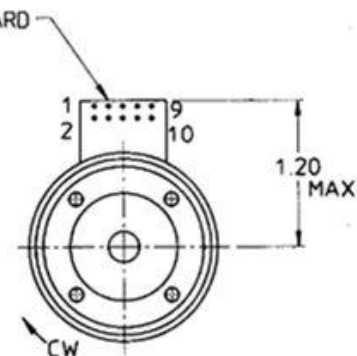


FIGURE 6
10 PIN TERMINAL BOARD

These commodities, technology or software if exported from the United States must be in accordance with the Bureau of Industry, and Security, Export Administration regulations. Diversion contrary to U.S law is prohibited.