

## Rotech Heavy Duty Speed Monitor/Encoder

Applications include shaft speed, shaft direction, gate position and revolution count



### OPERATION

The 4B Rotech Encoder is used primarily for protecting equipment and personnel from dangerous underspeed/belt slip conditions. Other applications include accurate speed control, direction of rotation detection, gate position indication and counting the number of revolutions of the shaft. An inductive sensing device in the body of the encoder detects a steel rotor. On slow speed or accurate position control, a photo diode detects the slots on a steel disk. One pulse is created for each rotor or slot so the unit can be connected directly to a PLC/computer or 4B control module. The shaft to be monitored is drilled and taped to take the 1/2" UNC Rotech Bolt. The unit is secured to the shaft with this bolt and is able to move with the shaft. No guards are required as the rotating components are encased inside the aluminum housing of the encoder. No brackets are required as the encoder couples directly to the end of the shaft and floats with the shaft. Polyester and stainless steel versions are also available for offshore and other highly corrosive applications.

### FEATURES

- **Heavy Duty:** Tough aluminum construction with powder coat finish can withstand the most severe industrial environments.
- **Output Options:** Many different types of output available, including intrinsically safe versions.
- **Control Module:** With voltage free relay contacts.
- **Roller Encoder:** For direct belt speed applications.
- **Applications:** Conveyors, elevators, mixers, fans, pumps, grinders, positioning equipment and all mechanical handling systems.

### ACCESSORIES:

Speed Relay (Underspeed/Overspeed)  
Tacho Display  
Wheel Encoder  
MagCon  
Gate Position display  
4-20ma Module

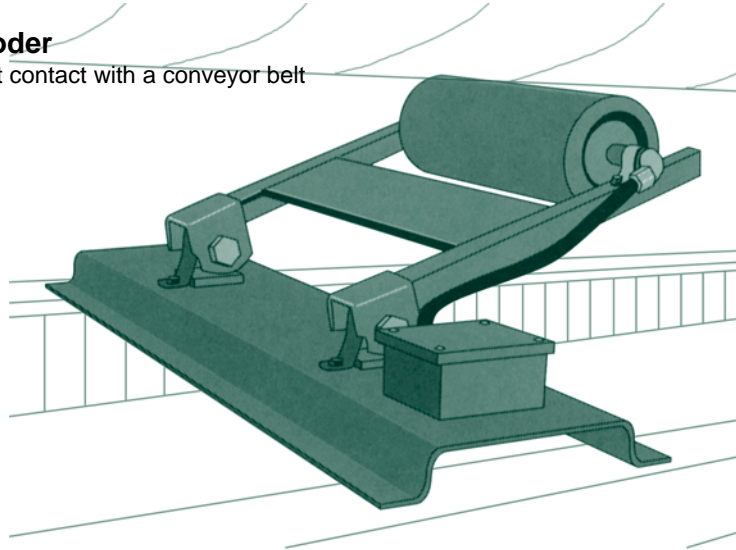
- Speed Detection
- Underspeed Detection
- Belt Slip Detection
- Shaft Stopped
- Overload Sensing
- Gate Position

Please refer to instruction manual for correct installation.  
Information subject to change or correction. May 2007.



**Roller Encoder**

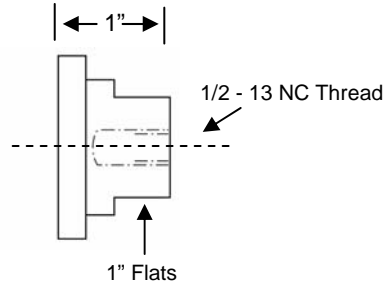
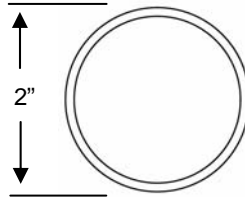
Provides direct contact with a conveyor belt



**MAG-CON Optional Accessory**



U.S. Pat # 6,964,209



**Speed Relay**



**Tacho Display**



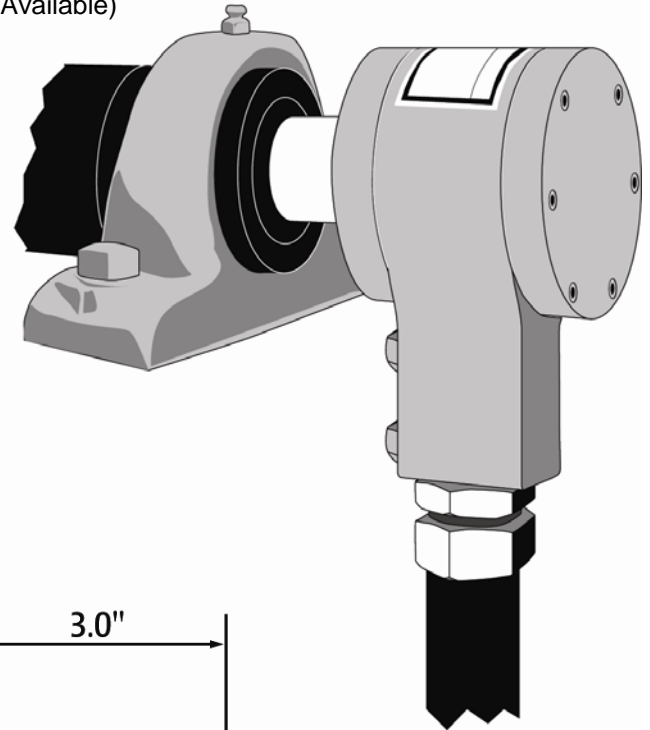
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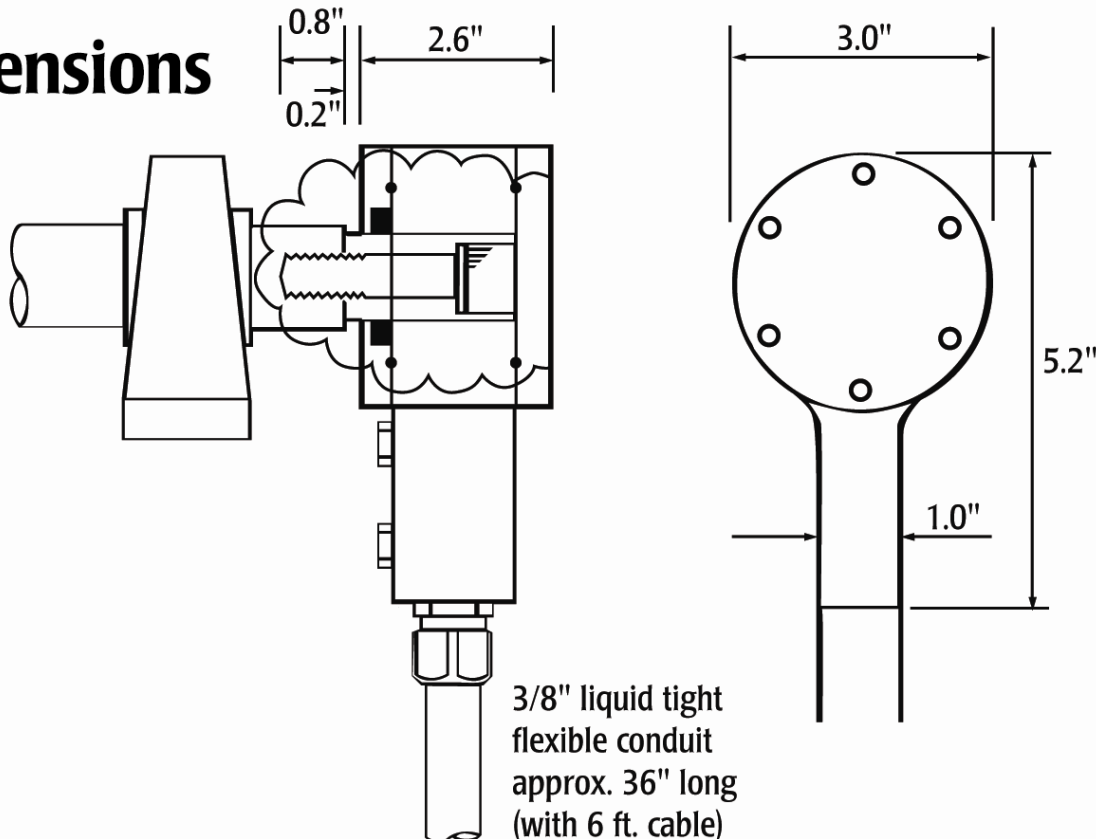
## SPECIFICATIONS

<b>Speed Range:</b>	0.03 RPM – 1500 RPM(Standard) 1500 – 5000 RPM (High Speed)
<b>Pulse Rate:</b>	1 – 360 PPR
<b>Enclosure:</b>	Cast Aluminum (Polyester, Stainless Steel Available)
<b>Output:</b>	PNP, NPN, NAMUR, QUADRATURE
<b>Weight:</b>	4.5 lbs (1.9 Kg)
<b>Protection:</b>	IP65 FM approved sensors available Class 2 Div 1 Intrinsically safe versions available
<b>Temperature:</b>	-25°C to 70 -14°F to 158°F

**Shaft Encoder**



## Dimensions



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