

## ROTECH Rotary Shaft Encoder Heavy Duty Aluminum Shaft Monitor/Encoder

### APPLICATION

The 4B heavy duty aluminum Rotech rotary shaft encoder is used primarily for protecting equipment and personnel from dangerous underspeed/belt slip conditions in extreme environments. Other applications include accurate speed control, direction of rotation detection, gate position indication and counting the number of revolutions of the shaft.

### METHOD OF OPERATION

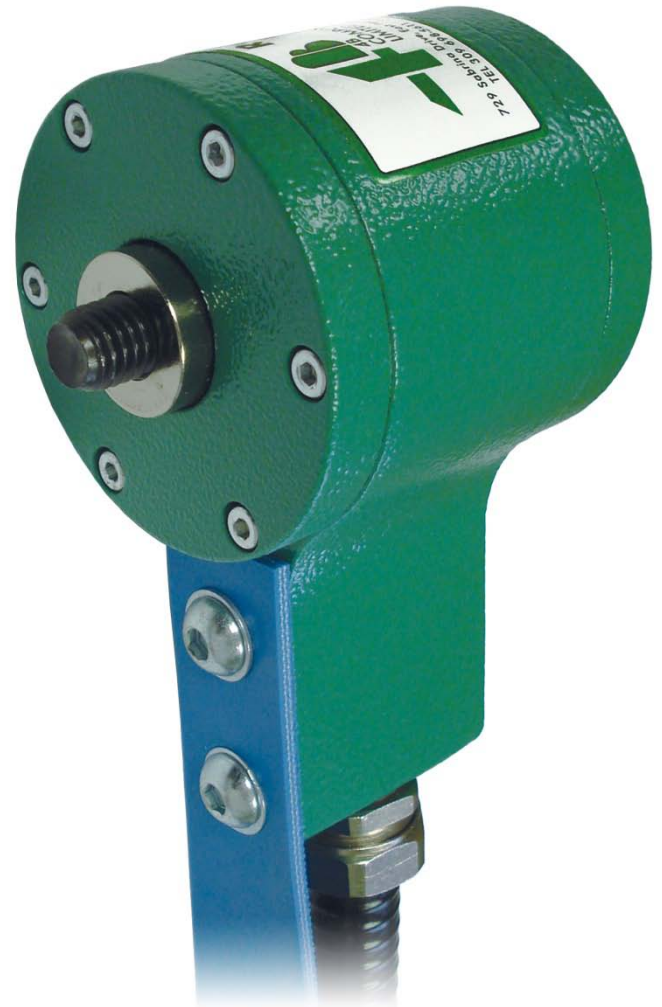
An inductive sensing device in the body of the encoder detects a steel rotor. On slow speed or accurate position control, a photodiode detects the slots on a steel disk. One pulse is created for each rotor or slot so the unit can be connected directly to a PLC/computer or 4B control module. The shaft to be monitored is drilled and tapped to take the 1/2 in. 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 housing of the encoder. No brackets are required as the encoder couples directly to the end of the shaft and floats with the shaft.

### FEATURES

- ▶ Cast Aluminum Construction
- ▶ Totally Self Contained (No Guards Required)
- ▶ Ultra Heavy Duty Design
- ▶ 1 to 1,000 Pulses Per Revolution
- ▶ Multiple Outputs AC/DC
- ▶ Intrinsically Safe Version Available
- ▶ CSA / NRTL Class II Div 1 Approved Version Available

### PART NUMBERS/ACCESSORIES

- ▶ RSE Rotech Encoder - Aluminum
- ▶ RSEHT High Temperature Version (Up to +212° F)
- ▶ RSEHHT High Temperature Version (Up to +302° F)
- ▶ RSE4VBF-40 Low Temperature Version (Down to -40° F)
- ▶ MAG2000 Mag-Con™ Magnetic Connector
- ▶ SR2V1-1 Speed Relay
- ▶ TACH3V5 Tachometer



ATEX Approved  
Versions Available



Mag-Con™  
U.S. Pat # 6,964,209



Tachometer



Speed Relay

Detailed specification, wiring diagrams and installation/operating instructions available upon request.

Please refer to instruction manual for correct installation.  
Information subject to change or correction. Nov 2010

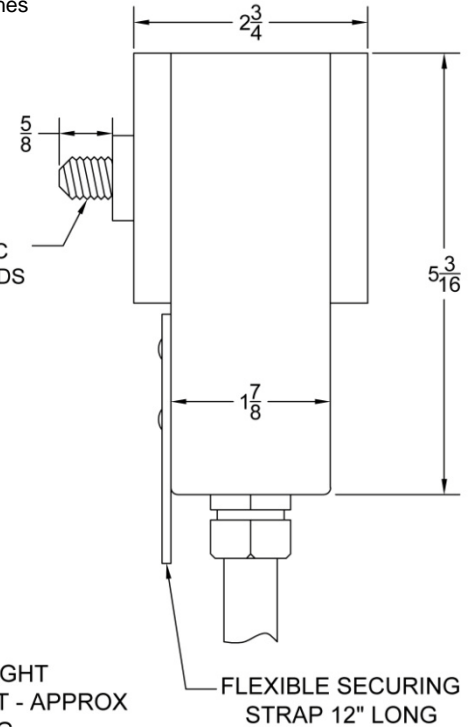
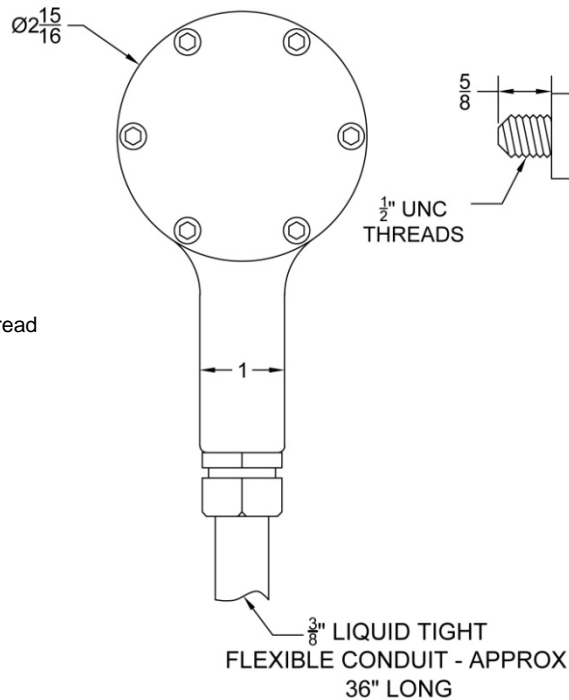
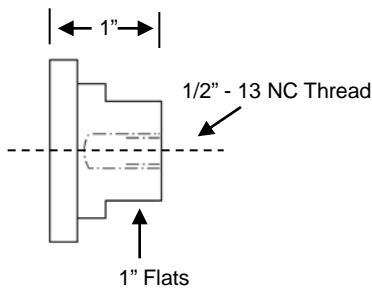
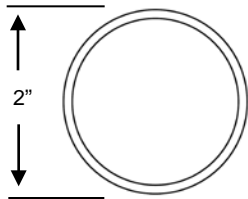
# Rotech Encoder

BETTER BY DESIGN

## DIMENSIONS

**Mag-Con™**  
(Over 150 lbs. Pulling Force)

NOTE: All Dimensions In Inches



## TECHNICAL SPECIFICATIONS

Rotech Encoder - Aluminum	
Enclosure:	Cast Aluminum
Maximum Operating Speed:	1,000 RPM - Standard Up To 10,000 RPM - High Speed Versions
Thread Size:	1/2" UNC or 12 mm
Temperature:	-13°F To +158°F (Standard) Up To +257° F (High Temp Version) Up To +302° F (High Temp Version) Down To -40° F (Low Temp Version)
Weight:	4 lbs.
Protection:	IP67
Approved Versions Available:	CSA / NRTL Class II Div 1 (U.S. & Canada) Intrinsically Safe



Rotech Mounted on Shaft with  
Mag-Con™ Magnetic Connector

# Rotech Encoder

BETTER BY DESIGN

## ROTECH SELECTION GUIDE



**Aluminum Encoder  
Model RSE**

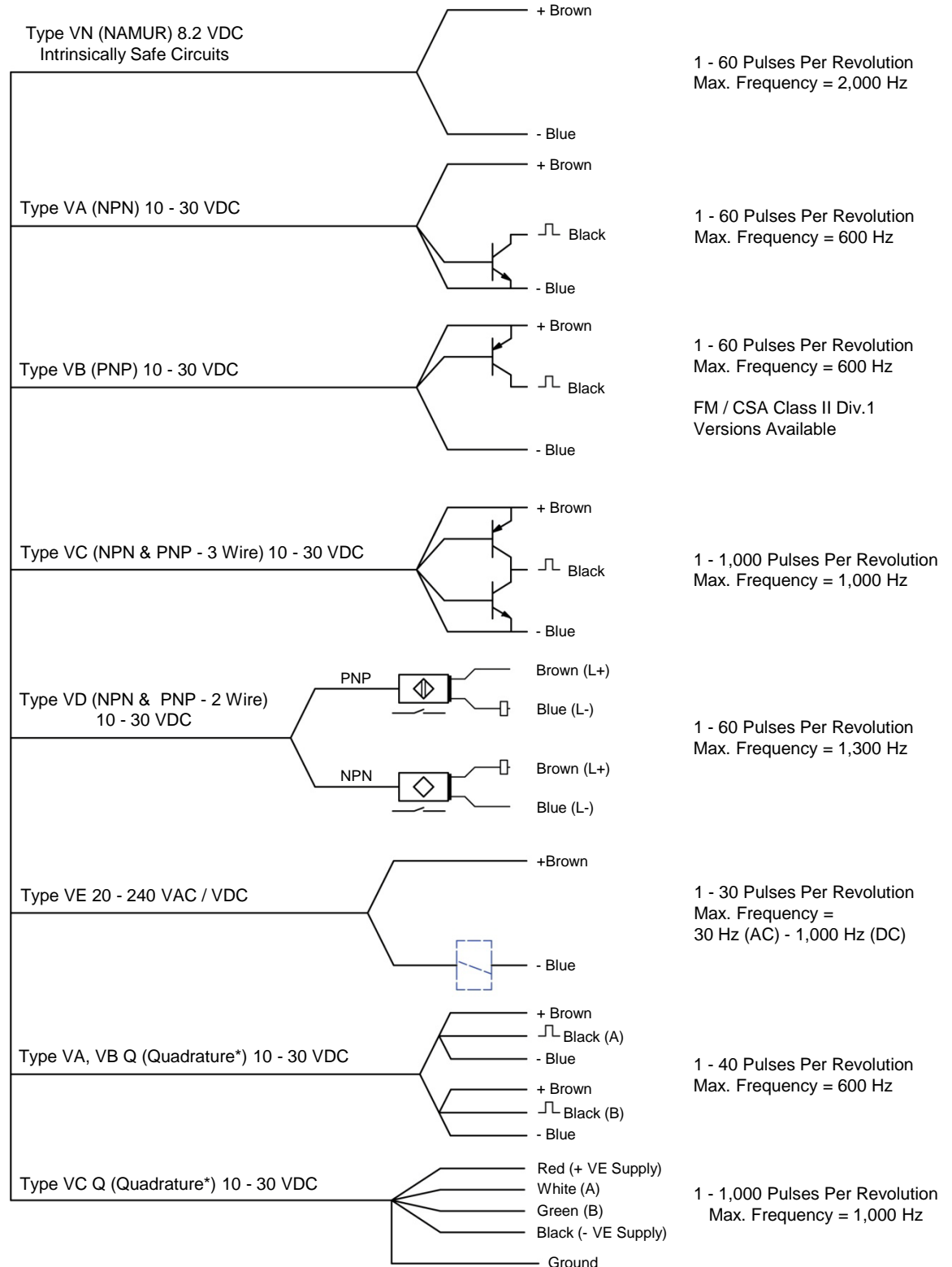
### PRODUCT TYPE

Output Type is Dependent  
Upon Chosen Pulse Rate

#### ORDER CODE EXAMPLE: RSE-4-VA

- Model = RSE
- Pulses Per Revolution = 4
- Electrical Outputs = VA

\*NOTE: Quadrature versions  
provide both speed  
& direction of rotation.



Available Pulse Rates (PPR) - 1,2,4,5,6,8,10,12,16,20,30,32,40,50,60,100,120,180,240,250,300,360,500,1000 (Dependent Upon Output Type)

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