Rotech Rotary Shaft Encoder
Heavy Duty Stainless Steel Shaft Monitor/Encoder

APPLICATION
The 4B heavy duty stainless steel 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” 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
► 304 or 316 Stainless Steel 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
► RSE304SS4VB     Rotech Encoder - 304 Stainless Steel
► RSE316SS4VB     Rotech Encoder - 316 Stainless Steel
► XRSE                    Ultra Wash Down Version (With Grease Zerk)
► SR2V1-1               Speed Relay
► TACH3V5             Tachometer

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. Apr 2013
Rotech Encoder

**DIMENSIONS**

NOTE: All Dimensions In Inches

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| 2\(\frac{3}{4}\) |
| 2\(\frac{3}{4}\) |
| 5\(\frac{1}{2}\) |
| 5\(\frac{3}{8}\) |
| 1\(\frac{7}{8}\) |

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Rotech Encoder - Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure:</td>
</tr>
<tr>
<td>Maximum Operating Speed:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Thread Size:</td>
</tr>
<tr>
<td>Temperature:</td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Protection:</td>
</tr>
<tr>
<td>Approved Versions Available:</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Front of Housing XRSE Version (Factory Installed)

Rotech Mounted on Shaft with Mag-Con™ Magnetic Connector
**ROTECH SELECTION GUIDE**

**Type VN (NAMUR) 8.2 VDC**
- Intrinsically Safe Circuits
- 1 - 60 Pulses Per Revolution
- Max. Frequency = 2,000 Hz

**Type VA (NPN) 10 - 30 VDC**
- In - Blue
- + Brown
- 1 - 60 Pulses Per Revolution
- Max. Frequency = 600 Hz

**Type VB (PNP) 10 - 30 VDC**
- In - Brown
- J - Black
- - Blue
- 1 - 60 Pulses Per Revolution
- Max. Frequency = 600 Hz

**Type VC (NPN & PNP - 3 Wire) 10 - 30 VDC**
- In - Brown
- J - Black
- - Blue
- 1 - 1,000 Pulses Per Revolution
- Max. Frequency = 1,000 Hz

**Type VD (NPN & PNP - 2 Wire) 10 - 30 VDC**
- + Brown
- Black (L+)
- Blue (L-)
- 1 - 60 Pulses Per Revolution
- Max. Frequency = 1,300 Hz

**Type VE 20 - 240 VAC / VDC**
- + Brown
- 1 - 30 Pulses Per Revolution
- Max. Frequency = 30 Hz (AC) - 1,000 Hz (DC)

**Type VA, VB Q (Quadrature*) 10 - 30 VDC**
- + Brown
- J - Black (A)
- - Blue
- 1 - 40 Pulses Per Revolution
- Max. Frequency = 600 Hz

**Type VC Q (Quadrature*) 10 - 30 VDC**
- Red (+ VE Supply)
- White (A)
- Green (B)
- Black (- VE Supply)
- Ground
- 1 - 1,000 Pulses Per Revolution
- Max. Frequency = 1,000 Hz

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**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)**

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