**Bearingless Ring Kit**

**Key Features**

- **56 C-Face Ring Kit Motor Mounting**
- Dependable Gear Tooth & Pickup Design
- Field-Replaceable Readhead for Easy Service
- Thin 5/8” Profile Saves Valuable Space

**SPECIFICATIONS**

**STANDARD OPERATING CHARACTERISTICS**

- **Code:** Incremental, Magnetic
- **Resolution:** 60 PPR (pulses/revolution), optional 120 PPR with X2 output
- **Format:** Single channel unidirectional (A), or two channel quadrature (AB) outputs
- **Phase Sense:** A leads B for CW rotation of motor shaft
- **Quadrature Phasing:** 90° ± 45° electrical
- **Symmetry:** 180° ± 36° electrical
- **Waveforms:** Squarewave with rise and fall times less than 1 microsecond into a load capacitance of 1000 pf

**ELECTRICAL**

- **Input Power:** (not including output loads)
  - Single ended: 4.5 min. to 16.5 VDC max. at 50 mA max.;
  - Open collector: 4.5 min. to 26 VDC max. at 75 mA max.
- **Outputs:**
  - Single ended: 2 kΩ pullup: 16.5 VDC max., 20 mA sink at 0.5 V max.;
  - Open Collector: 30 VDC max., 40 mA sink max.;
  - 7272 Differential Line Driver: 40 mA sink or source
- **Frequency Response:** 10 kHz min.
- **Noise Immunity:** Tested to EN61326-1
- **Electrical Immunity:** Reverse polarity and short circuit protected
- **Terminations:**
  - Wire leads: 7” long min., 18 AWG;
  - Screw terminals: accept 22 to 14 AWG solid or stranded wires

**MECHANICAL**

- **Mounting Configuration:** 4.5” C-Face Mount
- **Motor Frame Sizes:** 56C, 143TC, 145TC, 182C and 184C
- **Bore Diameter:** 5/8”, 7/8” nominal
- **Shaft Speed:** 5,000 RPM max.
- **Allowable Endplay:** ±0.060
- **Gear:** 1010 Steel
- **Moment of Inertia:** 0.0035 in-lb-sec²
- **Housing:** Cast Aluminum, Anodized finish
- **Weight:** 4.7 lbs

**ENVIRONMENTAL**

- **Operating Temperature:** −40 to +85 °C
- **Storage Temperature:** −40 to +90 °C
- **Shock:** 20 G’s for 11 milliseconds duration
- **Vibration:** 5 to 2000 Hz at 2.5 G’s
- **Humidity:** Up to 98% (non-condensing)

**ELECTRICAL CONNECTIONS**

<table>
<thead>
<tr>
<th>Function (if Used)</th>
<th>Wire Color</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal X2</td>
<td>ORG</td>
<td>1</td>
</tr>
<tr>
<td>Signal B</td>
<td>BRN</td>
<td>2</td>
</tr>
<tr>
<td>Signal A</td>
<td>YEL</td>
<td>3</td>
</tr>
<tr>
<td>+V in</td>
<td>RED</td>
<td>4</td>
</tr>
<tr>
<td>Common</td>
<td>BLK</td>
<td>5</td>
</tr>
<tr>
<td>Signal A</td>
<td>WHT</td>
<td>6</td>
</tr>
<tr>
<td>Signal B</td>
<td>GRN</td>
<td>7</td>
</tr>
<tr>
<td>Signal X2</td>
<td>BLU</td>
<td>8</td>
</tr>
</tbody>
</table>

**FUNCTIONAL DIAGRAM**

- Gear Reducer
- Motor
- DC Tech
- Flange Spacer
- Large Motor
- 56C
Ordering Information
To order, complete the model number with code numbers from the table below:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>R45</td>
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</table>

R45 Motor Mount Ring, for NEMA 4-1/2" C-Face Motors
R00 No Ring (gear or readhead only)

<table>
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<tr>
<th>Code 6:</th>
<th>A,B</th>
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</thead>
</table>

1/2" - NPT Each Side

112122-0001 R45 protective shaft cover accessory

Example Model number: 5/8" bore, gear only = R00 0060 1000

DIMENSIONS

Specifications subject to change without notice.