FEATURES
Standard Size 25 Package (2.5"
Resolutions up to 12-Bit (4096 Counts)
Incorporates Opto-ASIC Technology
Industrial Grade, Heavy Duty Housing
Optional IP67 Seal

The Model 925 Single Turn Absolute Encoder is ideal for a wide variety of industrial applications that require an encoder with the capability of absolute positioning output. Its fully digital output and innovative use of Opto-ASIC technology make the Model 925 an excellent choice for all applications, especially ones with a high presence of noise. Available with either round servo or square flange mounting, and a variety of connector and cabling options, the Model 925 is easily designed into a variety of application requirements. The Model 925, with its wide selection of shaft sizes supported by industrial grade, heavy duty bearings, and optional IP67 seal, is ideal for rough environments.

COMMON APPLICATIONS
Machine Tools, Robotics, Telescopes, Antennas, Rotary & X-Y Positioning Tables, Medical Scanners

Not recommended for new applications.
MODEL 925 SPECIFICATIONS

**Electrical**
- **Input Voltage**: 4.75 to 26 VDC max
- **Regulation**: ±100 mV peak-to-peak, max ripple at 0 to 10 kHz
- **Input Current**: 100 mA max with no external load
- **Output Format**: Absolute – Parallel Outputs
- **Output Type**: Open Collector – 20 mA max per channel, Push-Pull – 20 mA max per channel
- **Code**: Gray Code, Natural Binary Code, Excess Gray Code
- **Max Frequency**: 50 kHz (LSB)
- **Rise Time**: Less than 1 microsecond
- **Resolution**: Up to 12 bit
- **Accuracy**: ±1/2 LSB

**Control**
- **Directional Control**: Field selectable for increasing counts (CW or CCW)

**Mechanical**
- **Max Shaft Speed**: 6000 RPM continuous
- **Radial Shaft Load**: 35 lb max
- **Axial Shaft Load**: 40 lb max
- **Starting Torque**: 1.0 oz-in typical for no seal, 2.0 oz-in typical with IP64 seal, 3.0 oz-in typical with IP66 shaft seal, 7.0 oz-in typical with IP67 shaft seal
- **Housing**: Aluminum
- **Weight**: 22 oz typical

**Environmental**
- **Storage Temp**: -20° to 85° C
- **Humidity**: 98% RH non-condensing
- **Vibration**: 10 g @ 58 to 500 Hz
- **Shock**: 20 g @ 11 ms duration
- **Sealing**: IP50 standard; IP64, IP66 or IP67 optional

**Dimensions**
All dimensions are in inches with a tolerance of ±0.005” or ±0.01” unless otherwise specified.

**WIRING TABLE**
For EPC-supplied mating cables, refer to wiring table provided with cable. Trim back and insulate unused wires.

<table>
<thead>
<tr>
<th>Function</th>
<th>Gland Cable†</th>
<th>Wire Color</th>
<th>19-pin Bayonet KPT02E14-19P</th>
<th>16-pin M23</th>
<th>10-pin MS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 MSB</td>
<td>Brown</td>
<td>A</td>
<td>3</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>White</td>
<td>B</td>
<td>5</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>Green</td>
<td>C</td>
<td>6</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>Orange</td>
<td>D</td>
<td>7</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>Blue</td>
<td>E</td>
<td>8</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>Violet</td>
<td>F</td>
<td>9</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>Gray</td>
<td>G</td>
<td>10</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>Pink</td>
<td>H</td>
<td>11</td>
<td>H</td>
<td></td>
</tr>
<tr>
<td>S9</td>
<td>Red/Green</td>
<td>J</td>
<td>12</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>Red/Yellow</td>
<td>K</td>
<td>13</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>S11</td>
<td>Turquoise</td>
<td>L</td>
<td>14</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>S12</td>
<td>Yellow</td>
<td>M</td>
<td>15</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Direction†</td>
<td>Red/Blue</td>
<td>R</td>
<td>4</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Case Ground</td>
<td>Drain/Screen</td>
<td>S</td>
<td>16</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>0V Common</td>
<td>Black</td>
<td>T</td>
<td>1</td>
<td>J</td>
<td></td>
</tr>
<tr>
<td>Special‡</td>
<td>White/Red</td>
<td>U</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>+VDC</td>
<td>Red</td>
<td>V</td>
<td>2</td>
<td>I</td>
<td></td>
</tr>
</tbody>
</table>

†Only available with 8-bit resolution encoder. Not available with CE.
‡Where fitted.
§Direction control Standard is CW increasing when viewed from the shaft end. Direction pin is pulled high to 5V internally. Direction pin must be pulled low (GND, Common) to reverse count direction. Applied voltage to direction pin should not exceed 5V.
*Standard cable is 24 AWG conductors with foil and braid shield.