Features

- Thru-Bore Design For Easy Mounting
- Bore Options to 1.375”
- Incorporates Opto-ASIC Technology
- Resolutions to 4096 PPR
- 100º C Operating Temperature Available

The sleek design of the Model 775 Thru-Bore Encoder makes form and function a successful reality. The slim profile and Thru-Bore design, makes installation easy by simply slipping the bore over motor shafts up to 1.375” in diameter. The advanced Opto-ASIC based electronics provide the superior noise immunity necessary in many industrial applications. With a variety of bore sizes, resolutions, and connector types, application possibilities are endless.

Common Applications
Motor Feedback, Velocity & Position Control, Food Processing, Robotics, Material Handling

Model 775 Ordering Guide
Red type indicates price adder options. Not all configuration combinations may be available. Contact Customer Service for details.

Model 775 PPR Options

<table>
<thead>
<tr>
<th>Model 775 PPR Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>0060 0100 0120 0240 0250 0256</td>
</tr>
<tr>
<td>0500 0512 0600 1000 1024 2048</td>
</tr>
<tr>
<td>2500 4096</td>
</tr>
</tbody>
</table>

For specification assistance call Customer Service at +44 (0)1978 262100

NOTES:
1. Contact Sales Office for index gating options.
2. 5 to 24 VCC max for high temperature option.
3. For non-standard cable lengths, Please Contact the Sales Office.
Model 775 Specifications

Electrical

Input Voltage.............4.75 to 28 VCC max for temperatures up to 70º C
4.75 to 24 VCC for temperatures between 70º C to 100º C
Input Current .............100 mA max with no output load
Input Ripple ..............100 mV peak-to-peak at 0 to 100 kHz
Output Format ............Incremental: Two square waves in quadrature with channel A leading B for clockwise shaft rotation, as viewed from the mounting face.
Output Types ............Push-Pull: 20 mA max per channel
Line Driver: 20 mA max per channel (Meets RS 422 at 5 VCC supply)
Index ......................Once per revolution.
Freq. Response ........200 kHz
Noise Immunity .........Tested to BS EN61000-4-2; IEC801-3; BS EN61000-4-4; DDENV 50141; DDENV 50204; BS EN55022; BS EN61000-6-2; BS EN50081-2
Symmetry .................180º (±18º) electrical
Quad. Phasing ..........90º (±22.5º) electrical
Min. Edge Sep ..........67.5º electrical
Rise Time ..................Less than 1 microsecond

Mechanical

Max Shaft Speed ......6000 RPM. Higher shaft speeds may be achievable, contact Customer Service.
Bore Size .................See ordering chart
User Shaft Tolerances
Radial Runout ...0.15mm TIR
Axial Endplay ...≤0.7mm with style BA flex-mount
Electrical Conn ........Gland nut with 2M cable (foil and braid shield, 24 AWG conductors), or 8-pin M12 (12 mm)
Housing .................All metal construction
Mounting .................Thru-Bore with collet clamp or single-screw clamp mount
Weight .......................455 gms
Note: All weights typical

Environmental

Operating Temp ........0º to 70º C for standard models
0º to 100º C for high temperature option
Storage Temp ........-20º to 100º C
Humidity ..............98% RH non-condensing
Vibration ..............10 g @ 50 to 500 Hz
Shock ..................50 g @ 11 ms duration
Sealing .................IP50

Model 775 Collet Style

- Holes Used for Axial Rotation
- Flex Mount
- Shaft Diameter: 110 mm
- 10.30 mm MAX

Model 775 Clamp Style

- Holes Used for Axial Rotation
- Flex Mount
- Shaft Diameter: 110 mm
- 10.30 mm MAX

Waveform Diagrams

Line Driver

Index Z

OUTPUT A

OUTPUT B

INDEX Z

INDEX Z

Push-Pull

OUTPUT A

OUTPUT B

INDEX Z

INDEX Z

Wiring Table

<table>
<thead>
<tr>
<th>Function</th>
<th>Gland Color</th>
<th>Wire Color</th>
<th>8-pin M12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Com</td>
<td>Black</td>
<td>Black</td>
<td>7</td>
</tr>
<tr>
<td>+VCC</td>
<td>Red</td>
<td>Red</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>White</td>
<td>White</td>
<td>1</td>
</tr>
<tr>
<td>A'</td>
<td>Brown</td>
<td>Brown</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>Blue</td>
<td>Blue</td>
<td>4</td>
</tr>
<tr>
<td>B'</td>
<td>Violet</td>
<td>Violet</td>
<td>5</td>
</tr>
<tr>
<td>Z</td>
<td>Orange</td>
<td>Orange</td>
<td>6</td>
</tr>
<tr>
<td>Z'</td>
<td>Yellow</td>
<td>Yellow</td>
<td>8</td>
</tr>
<tr>
<td>Shield</td>
<td>Bare</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Case</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>