Model 260 Ultra Versatile
Commutated Thru-Bore

Features
- Low Profile 30.30mm
- Up to 12 Pole Commutation Available
- Thru-Bore Style
- Simple, Innovative Flexible Mounting System
- Incorporates Opto-ASIC Technology

The Model 260’s larger bore (up to 15.875mm) and low profile make it the perfect solution for many machine and motor applications, and is provided with a full Thru-Bore. The Model 260 uses a pioneering Opto-ASIC design, and innovative anti-backlash mounting system, allowing simple, reliable, and precise encoder attachment. Unlike traditional kit or modular encoder designs, its integral bearing set provides stable and consistent operation without concerns for axial or radial shaft runout. For brushless servo motor applications, the Model 260 can be specified with three 120° electrical phase tracks to provide up to 12 pole commutation feedback. The optional extended temperature capability allows servo motors to operate at higher power outputs and duty cycles.

Common Applications
Brushless Servo Motor Commutation, Robotics, Motor-Mounted Feedback, Assembly Machines, Digital Plotters, High Power Motors

Model 260 Ordering Guide
Red type indicates price adder options. Not all configuration combinations may be available. Contact Customer Service for details.

Model 260 PPR Options

<table>
<thead>
<tr>
<th>BORE SIZE</th>
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<th>0010*</th>
<th>0011*</th>
<th>0012*</th>
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For specification assistance call Customer Service at +44 (0)1978 262100

Notes:
1. Contact Customer Service for additional options not shown.
2. Not available in all configurations. Contact Customer Service for availability.
3. S to 16 VCC supply only for HT option.
4. For non-standard cable lengths contact sales office for details and cost.
5. Not available with commutation.

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Model 260 Specifications

Electrical

Input Voltage.............4.75 to 24 VCC for temperatures up to 70º C
5 to 16 VCC for 0º to 100º C operating temperature

Input Current .............100 mA max with no output load

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 ........Open Collector- 20 mA max per channel
Push-Pull- 20 mA max per channel
Line Driver- 20 mA max per channel (Meets RS 422 at 5 VDC supply)
Index...................Once per revolution gated to channel A. See Waveform Diagrams below.
Freq. Response ........200 kHz standard (up to 1MHz)
Noise Immunity .........Tested to BS EN61000-6-2; BS EN50081-2; BS EN61000-4-2; BS EN61000-4-6, BS EN55011

Mechanical

Max Shaft Speed ......7500 RPM. Higher shaft speeds may be achievable, contact Customer Service.
Bore Size ..............6mm through 0.625" (15.875mm)
Bore Tolerance .........H7 (SLIDING FIT FOR g6)
User Shaft Tolerances
Radial Runout .........0.2mm max TIR
Axial Endplay .........0.75mm max

Starting Torque .........IP50 Thru-Bore: 3.53 x 10^{-3} Nm
IP40 Thru-Bore: 1.765 x 10^{-2} Nm
38.84 x 10^{-3} Nm for -40º C operation
Max Acceleration ......1 X 10^5 rad/sec^2

Electrical Conn ..........2M cable (foil and braid shield, 24 AWG conductors non-commutated, 28 AWG commutated), or 8-pin M12 (12 mm) in-line connector with 0.5M cable (foil and braid shield)

Housing.................Black non-corrosive finish
Mounting..............Slotted Flex Mount standard, additional flex mount options available (see Ordering Guide)
Weight..................200 gms typical

Environmental

Operating Temp........0º to 70º C for standard models
-40º to 70º C for low temperature option
0º to 100º C for high temperature option

Storage Temp ..........-40º to +100º C

Humidity ..........98% RH non-condensing
Vibration..............10 g @ 55 to 500 Hz
Shock..................50 g @ 11 ms duration
Sealing................IP50, IP64 available

Model 260 With Front Shaft Clamp (SF)

Model 260 Additional Mounts

Flex Arm (AF)

Three Point Flex Mount (NF, XF)

Body Mount M12 (SMK)

Waveform Diagrams

Wiring Table

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<th>Cable Wire Color</th>
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<td>Red/Yellow</td>
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</tr>
<tr>
<td>Shield</td>
<td>Black</td>
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