**RECOMMENDED MOTOR/DRIVE SYSTEMS, 48V dc, 240V ac — 320V dc bus**

<table>
<thead>
<tr>
<th>Motor Series</th>
<th>Drive Options</th>
<th>Inertia (kgm² x 10⁻³)</th>
<th>Peak Torque (Nm)</th>
<th>Stall Torque (Nm)</th>
<th>Rated Power (W)</th>
<th>Rated Speed (rpm)</th>
<th>Peak Current (amps)</th>
<th>Power Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMB33C</td>
<td>PC3403</td>
<td>6.2 (55.0)</td>
<td>5.7 (53.0)</td>
<td>2.1 (18.7)</td>
<td>200</td>
<td>8,400</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB32E</td>
<td>PC3410</td>
<td>7.7 (68.4)</td>
<td>7.2 (66.4)</td>
<td>3.8 (34.0)</td>
<td>250</td>
<td>4,550</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>PMB32C</td>
<td>PC3403</td>
<td>11.8 (104)</td>
<td>10.3 (98)</td>
<td>5.4 (48.0)</td>
<td>300</td>
<td>5,700</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>PMB23C</td>
<td>PC3406</td>
<td>4.9 (43.3)</td>
<td>4.4 (40.4)</td>
<td>2.1 (18.7)</td>
<td>200</td>
<td>5,750</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB22B</td>
<td>PC3403</td>
<td>4.7 (41.4)</td>
<td>4.2 (39.4)</td>
<td>2.1 (18.7)</td>
<td>200</td>
<td>4,300</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB21B</td>
<td>PC3403</td>
<td>3.7 (33.0)</td>
<td>3.2 (30.2)</td>
<td>1.4 (13.0)</td>
<td>150</td>
<td>5,000</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>PMB13B</td>
<td>PC3403</td>
<td>1.5 (13.0)</td>
<td>1.4 (12.7)</td>
<td>0.64 (5.7)</td>
<td>100</td>
<td>10,000</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>PMB33E</td>
<td>PC8x2, SC9x2</td>
<td>7.7 (68.2)</td>
<td>7.2 (66.2)</td>
<td>3.8 (34.0)</td>
<td>300</td>
<td>2,550</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>PMB32C</td>
<td>PC8x2, SC9x2</td>
<td>11.3 (100)</td>
<td>10.8 (98)</td>
<td>3.8 (34.0)</td>
<td>300</td>
<td>2,550</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>PMB23C</td>
<td>PC8x3, SC9x3</td>
<td>4.7 (41.4)</td>
<td>4.2 (39.4)</td>
<td>2.1 (18.7)</td>
<td>200</td>
<td>4,300</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB22B</td>
<td>PC8x2, SC9x2</td>
<td>2.2 (19.2)</td>
<td>2.1 (18.9)</td>
<td>1.1 (9.8)</td>
<td>150</td>
<td>4,300</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB21B</td>
<td>PC8x2, SC9x2</td>
<td>1.4 (12.2)</td>
<td>1.3 (11.9)</td>
<td>0.55 (4.9)</td>
<td>150</td>
<td>4,300</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB12D</td>
<td>PC3405</td>
<td>4.9 (43.3)</td>
<td>4.4 (40.4)</td>
<td>2.1 (18.7)</td>
<td>200</td>
<td>5,750</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>PMB11D</td>
<td>PC3405</td>
<td>3.7 (33.0)</td>
<td>3.2 (30.2)</td>
<td>1.4 (13.0)</td>
<td>150</td>
<td>5,700</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
- Mating connectors not provided.
- Double-shielded.
- Hall, encoder feedback.
- Bore, metric keyway.
- Motor, standard or back-to-back mounting.
- Shaft, Woodruff Key (Size 2 only).
- Mountings, standard or optional.
- Connector, Parker A1201 1401 or equivalent.
- Sensor, Parker A1201 or equivalent.
- Additional information available on the PMB Motor/Drive System page.
Drive & Motor Performance Data

Pacific Scientific PMB brushless servo motors offer you cost-effective performance positioning that is both accurate and precise. But the benefits of our new PMB motor series do not end there. The PMB Series family offers high torque density for increased acceleration and cooler running than similar motors. Regulatory compliance assures global acceptance for your machine.

For faster installation, maintenance and overall flexibility, two connection options are available: MS connectors and AMP mini Mate-N-Lock.®

Peak Torque Ratings are for 5 seconds.

DC drives offer operation with encoder feedback only. Just our way of guaranteeing the best from your motor/drive combination for your application — all in a Pacific Scientific package.

Throw in a two-year warranty and an optional thermometer to protect against motor damage, and you are well on your way to discovering Pacific Scientific's commitment to offering you the highest performance products available — at a price you can afford. That's Pacific Scientific: making your designs sing and your job easier.

Recommended Motor/Drive Systems, 48V dc, 240V ac — 320V dc bus

<table>
<thead>
<tr>
<th>Servo Model Code</th>
<th>Servo Servo</th>
<th>Peak Stall Torque</th>
<th>Peak Rated Torque</th>
<th>Cont. Stall Torque</th>
<th>Rated Torque</th>
<th>No-Load Speed</th>
<th>Rated Current</th>
<th>Inertia (0-100V)</th>
<th>Inductance (0-100V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMB21B 0 0 1 1 0 0</td>
<td>6.2 (55.0)</td>
<td>6.2 (54.7)</td>
<td>2.1 (18.7)</td>
<td>1.7 (15.0)</td>
<td>5,000</td>
<td>8,400</td>
<td>5.1</td>
<td>15.3</td>
<td>0.14 (1.21)</td>
</tr>
<tr>
<td>PMB22B 0 0 1 1 0 0</td>
<td>12.5 (111)</td>
<td>12.5 (111)</td>
<td>5.4 (48.0)</td>
<td>4.1 (36.0)</td>
<td>4,500</td>
<td>5,700</td>
<td>9.0</td>
<td>21.2</td>
<td>0.40 (3.57)</td>
</tr>
<tr>
<td>PMB31B 0 0 1 1 0 0</td>
<td>9.7 (86.0)</td>
<td>9.7 (85.5)</td>
<td>4.9 (43.6)</td>
<td>4.4 (39.0)</td>
<td>3,000</td>
<td>3,800</td>
<td>5.3</td>
<td>10.6</td>
<td>0.40 (3.57)</td>
</tr>
<tr>
<td>PMB32B 0 0 1 1 0 0</td>
<td>7.7 (68.4)</td>
<td>7.7 (68.0)</td>
<td>3.8 (34.0)</td>
<td>2.8 (25.2)</td>
<td>3,500</td>
<td>4,550</td>
<td>5.2</td>
<td>10.6</td>
<td>0.27 (2.39)</td>
</tr>
<tr>
<td>PMB33B 0 0 1 1 0 0</td>
<td>11.8 (104)</td>
<td>11.7 (104)</td>
<td>5.4 (48.0)</td>
<td>4.0 (35.8)</td>
<td>4,600</td>
<td>5,700</td>
<td>9.0</td>
<td>20</td>
<td>0.40 (3.57)</td>
</tr>
<tr>
<td>PMB34B 0 0 1 1 0 0</td>
<td>11.0 (97.4)</td>
<td>10.9 (96.5)</td>
<td>5.4 (48.0)</td>
<td>4.4 (39.3)</td>
<td>2,900</td>
<td>3,800</td>
<td>5.8</td>
<td>12.0</td>
<td>0.40 (3.57)</td>
</tr>
</tbody>
</table>

Model Number Codes

To construct a motor model number code, select the combination of features required and put all of the coded information in the proper sequence. Please account for an entry in each field. The model number shown is an example of a properly specified motor.

| Model 0 0 1 1 0 0 | 6.2 (55.0) | 6.2 (54.7) | 2.1 (18.7) | 1.7 (15.0) | 5,000 | 8,400 | 5.1 | 15.3 | 0.14 (1.21) | 5.2 |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------------|
| PMB21B 0 0 1 1 0 0 | 12.5 (111) | 12.5 (111) | 5.4 (48.0) | 4.1 (36.0) | 4,500 | 5,700 | 9.0 | 21.2 | 0.40 (3.57) | 2.8 |
| PMB22B 0 0 1 1 0 0 | 9.7 (86.0) | 9.7 (85.5) | 4.9 (43.6) | 4.4 (39.0) | 3,000 | 3,800 | 5.3 | 10.6 | 0.40 (3.57) | 6.8 |
| PMB31B 0 0 1 1 0 0 | 7.7 (68.4) | 7.7 (68.0) | 3.8 (34.0) | 2.8 (25.2) | 3,500 | 4,550 | 5.2 | 10.6 | 0.27 (2.39) | 7.4 |
| PMB32B 0 0 1 1 0 0 | 11.8 (104) | 11.7 (104) | 5.4 (48.0) | 4.0 (35.8) | 4,600 | 5,700 | 9.0 | 20 | 0.40 (3.57) | 2.8 |
| PMB33B 0 0 1 1 0 0 | 11.0 (97.4) | 10.9 (96.5) | 5.4 (48.0) | 4.4 (39.3) | 2,900 | 3,800 | 5.8 | 12.0 | 0.40 (3.57) | 6.8 |

Specifications

- PMB motors offer you cost-effective performance positioning that is both accurate and precise.
- DC drives offer operation with encoder feedback only.
- Peak torque ratings are for 5 seconds.
- Motors with AC drives include resolver feedback inserts.
- Each system requires one feedback and one motor power cable.
- Characteristic drives with drive default parameters, limited to 2.5x of the motor's continuous rating. Higher peak speed performance available. Contact the factory.