2000 Linear

General Specifications:
- Output Force Over 100 lbs
- Linear Speeds Over 2" per second
- Stroke Length 2" to 4"
- Brushless DC Motor
- Oil-Filled - Self-Contained - Compensated

Operating Conditions:
- Voltage 12 -> 32 Volts DC
- Operating Depth Greater Than 10,000 ft
- Operating Temperature Range: -20°C to 65°C
- Storage Temperature Range: -30°C to 85°C

Onboard Motor Driver and Servo System:
- Configurable current limits, power and speed
- RS-232 & RS-485 Interface
- Optional Analog, Modbus or CAN Bus
- Contactless non-wearing absolute position encoder
- Does not require homing
- 0.005" Accuracy

Current Draw @24V DC:
- Idle current = 0.03A
- Motor ON braking = 0.12A
- Max force @ Stall = 5A

### Pinouts for MCBH-6-M

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TX (RS-232 out)</td>
<td>4M</td>
</tr>
<tr>
<td>2</td>
<td>RX (RS-232 in)</td>
<td>6M</td>
</tr>
<tr>
<td>3</td>
<td>+VIN</td>
<td>8M</td>
</tr>
<tr>
<td>4</td>
<td>-VIN</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>#10 Stainless Rod Ends</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Connectors</td>
<td>4F, 6F, 8F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shaft Style</th>
<th>Shaft Length (in.)</th>
<th>Material</th>
<th>Dry Weight (lbs)</th>
<th>Wet Weight (lbs)</th>
<th>Connectors</th>
<th>Connector Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#10 Rod End</td>
<td>8</td>
<td>Titanium</td>
<td>2.8</td>
<td>4</td>
<td>MCBH 4 Pin Male</td>
<td>4M Parallel Forward</td>
</tr>
<tr>
<td>3/16in. Clevis Pin</td>
<td>4.00</td>
<td>SS</td>
<td>3.9</td>
<td>3</td>
<td>MCBH 6 Pin Male</td>
<td>6M Parallel Backward</td>
</tr>
<tr>
<td>1/4in. Rod End</td>
<td>2.00</td>
<td>6061-AL-Natural</td>
<td>2.3</td>
<td>2</td>
<td>MCBH 8 Pin Male</td>
<td>8M Perpendicular</td>
</tr>
<tr>
<td></td>
<td>2.5K</td>
<td>ALK</td>
<td>2.3</td>
<td>2</td>
<td>MCBH 4 Pin Female</td>
<td>4F</td>
</tr>
<tr>
<td></td>
<td>2.5K</td>
<td>6061-AL-Black</td>
<td>2.3</td>
<td>2</td>
<td>MCBH 8 Pin Female</td>
<td>8F</td>
</tr>
<tr>
<td></td>
<td>3/8in. Clevis Pin</td>
<td>6061-AL-Blue</td>
<td>2.3</td>
<td>2</td>
<td>MCBH 4 Pin Female</td>
<td>4F</td>
</tr>
<tr>
<td></td>
<td>6061-AL-Green</td>
<td>ALG</td>
<td>2.3</td>
<td>2</td>
<td>MCBH 8 Pin Female</td>
<td>8F</td>
</tr>
<tr>
<td></td>
<td>6061-AL-Red</td>
<td>ALR</td>
<td>2.3</td>
<td>2</td>
<td>MCBH 8 Pin Female</td>
<td></td>
</tr>
</tbody>
</table>

* Model shown: 2000L-C2000-SS-6MPD

**All Weights Are Approximate for 2" Stroke Actuator**

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**Title:** 2000 Series Linear Actuator

**Size:** 1:2

**Drawing no.:** 2000L

**Rev.:** G

**Checked:** GMPH 3/7/2016

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**Dimensions:**
- Shaft Style: #10 Rod End
- Shaft Length (in.): 8
- Material: Titanium (T)
- Dry Weight (lbs): 2.8
- Wet Weight (lbs): 4
- Connectors: MCBH 4 Pin Male
- Connector Orientation: 4M Parallel Forward

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**Contactless Position Transducer**
- Linear Bearing
- 100W Servo Drive
- Wet-Mate Connector
- Brushless DC Motor
- Integrated Pressure Compensator

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**Linear Bearing**
- #10 Stainless Rod Ends
- With .10” Adjustability

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**Pinouts for MCBH-6-M**
- 1: TX (RS-232 out)
- 2: RX (RS-232 in)
- 3: +VIN
- 4: -VIN
- 5: #10 Stainless Rod Ends
- 6: Connectors

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**Shaft Style**
- #10 Rod End
- 3/16in. Clevis Pin
- 1/4in. Rod End

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**Material**
- Titanium (T)
- SS
- 6061-AL-Natural
- ALK
- 6061-AL-Black
- ALG
- 6061-AL-Green
- ALR

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**Connectors**
- MCBH 4 Pin Male
- MCBH 6 Pin Male
- MCBH 8 Pin Male
- MCBH 4 Pin Female
- MCBH 8 Pin Female