

# High Torque Model

## General Specifications:

- Absolute angle feedback and turn counting
- Maximum rotational force **50 foot pounds**
- Maximum rotational speed **9 RPM @24V**
- Brushless DC motor
- Oil-filled - self-contained - compensated

## Operating Conditions:

- Voltage 12 <-> 32 Volts DC nominal
- 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 angular encoder
- Does not require homing
- 0.1 degree resolution

## Current Draw @24V DC:

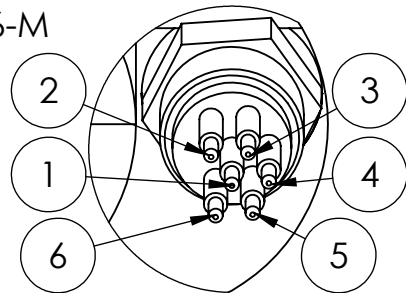
- Idle current = 0.03A
- Motor ON braking = 0.12A
- Max torque @ Stall = 5A
- 5 RPM @ 5 foot pounds = ~1A

## Shaft Loads:

- Radial- 25 lbs max
- Thrust- 10 lbs max

Pinouts for MCBH-6-M

- 1: TX (RS-232 out)
- 2: RX (RS-232 in)
- 3: RS-485 (-)
- 4: +VIN
- 5: -VIN
- 6: RS-485 (+)



Shaft Style		Shaft Diameter(in.)		Shaft Length (in.)		Material		Dry Weight (lbs)	Wet Weight (lbs)	Connectors	
Square	<b>S</b>	1/4	<b>A</b>	0.50	<b>0500</b>	Titanium	<b>TI</b>	3.4	2.5	MCBH 4 Pin Male	<b>4M</b>
Keyway *	<b>K</b>	3/8	<b>B</b>	0.83	<b>0830</b>	316 Stainless Steel *	<b>SS</b>	5.0	4.1	MCBH 6 Pin Male *	<b>6M</b>
Flat	<b>F</b>	1/2 *	<b>C</b>	1.00	<b>1000</b>	6061-Aluminum-Natural	<b>ALN</b>	2.7	1.8	MCBH 8 Pin Male	<b>8M</b>
				1.50 *	<b>1500</b>	6061-Aluminum-Black	<b>ALK</b>	2.7	1.8	MCBH 4 Pin Female	<b>4F</b>
						6061-Aluminum-Blue	<b>ALB</b>	2.7	1.8	MCBH 6 Pin Female	<b>6F</b>
						6061-Aluminum-Green	<b>ALG</b>	2.7	1.8	MCBH 8 Pin Female	<b>8F</b>
						6061-Aluminum-Red	<b>ALR</b>	2.7	1.8		
* Model shown: 2000RHT-KC1500-SS-6M								All Weights Are Approximate			

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TITLE:  
**2000 Series High Torque Rotary Actuator**

SIZE **B** DWG. NO. **2000RHT** REV **E**

SCALE: 1:1.5 SHEET 1 OF 1

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DRAWN: GMPH 10/30/2015  
CHECKED: GMPH 10/30/2015

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