

CMCP601M Battery Powered Mini Rotor Kit



Features:

- Battery Powered
- 10+ Hours of Runtime @3600 RPM
- Swappable Rolling Element and Journal Bearings
- Flawed Ball Bearings Included
- 0 to 5,500 RPM Variable Speed
- Internal Speed Sensor with Pulse Output
- Custom Carry Case
- Lightweight and Compact
- Stainless Steel Mass

Product Overview

The CMCP601M Mini Rotor Kit is designed for easy transport, setup, and use. With a long battery life of 10+ hours, it makes it easy to demonstrate and train in the use vibration sensors such as Proximity Probes, Accelerometers and Velocity Sensors using Vibration Analyzers or other Monitoring Systems. To extend runtime the charger may be used concurrently with the battery.

At 10" (254 mm) Long, the CMCP601M is designed to be both smaller and lighter than our popular CMCP601M Series. The CMCP601M is not designed to experience any Critical Speeds and accelerates and decelerates smoothly from 0 to 5,500 RPM. Eighteen, 10-32 Threaded Balancing Holes are provided on the rotating mass at 20° apart to allow the user to create an imbalance or to make balance corrections. A balance weight kit with assorted weights is provided with the kit.

The CMCP601M features swappable Rolling Element and Journal Bearing modules. Each kit is provided with two journal bearings, two new rolling element bearings and two flaw induced rolling element bearings.

Two flaw induced rolling element bearings are provided with the kit, one with a 0.004" outer race slice and the other with a 0.004" inner race slice. Fast Changeout of the bearing is done simply by loosening the setscrew in the bearing adapter and inserting another bearing module. Bearing Modules are also included with Smooth Bore/Journal Bearings for demonstrating dampening with Case Mounted Sensors or Proximity Probes.

Items Included

- Basic Rotor Kit Base
- Motor Stand with Brushless 50-Watt Motor
- Battery Pack with Fuel Gauge
- 100-240VAC Charger and Adapter Cables
- Two (2) Bearing Stands
- Two (2) New REB Bearings
- Two (2) Fault Induced Bearings
- Two (2) Sleeve Bearing Modules
- Mass with Balancing Holes
- Long Shaft
- Short Shaft for Overhung Setups
- Shaft Coupling
- Balance Weight Kit
- Mass Bracket for Transit
- Hard Travel Case



CMCP601M Shown in Travel Case

Motor/Controller Specifications:

Power Requirement: 10 to 28 Vdc
Speed Range: Adjustable from 0 to 5,500 RPM
Motor Type: 1Q Brushless DC Motor
Motor Size: 50-Watt
Speed Sensors: Internal Speed Sensor, Wired to nX BNC Output
Speed Sensor Output: TTL (0-5VDC)
Pulses Per Revolution: 6

Battery and Charger Specifications:

Battery Output: 22.2 Vdc, 6 Amps
Battery Life: >10 Hours (@3,600 RPM)
Charger Output: 25.2 Vdc, 2 Amps
Charging Time: 5 Hours
Power/Charging Cable: 2.1mm Jack Splitter Cable

Rolling Element Bearing Specifications:

Bearing Type: 6002
Bearing Diameter: 1.26" (32.0mm)
Bearing Bore Diameter: 0.588" (14.94mm)
Ball Diameter: 0.157" (4mm)
Number of Balls: 9
Cage: Open Frame
Induced Flaw #1: 0.004" Outer Race Slice
Induced Flaw #2: 0.004" Inner Race Slice

Mechanical Specifications:

Rotor Kit Dimensions: 10.75"x3"x4" (273x76x102mm)
Weight: 4.0 Lbs. (1.8kg)
Long Shaft Length: 7.5" (190.5mm) Short
Shaft Length: 3.5" (88.9mm)
Max Bearing Block Span: 6.0" (152.4mm)
Mass Diameter: 3.0" (76.2mm)
Mass Weight: 1.0 Lb. (0.45kg)
Balancing Weight Holes: 18 (20° Apart)
Balancing Weight Thread: 10-32 UNF
Sensor Mounting Holes: 3 each ¼-28 UNF Mounting Holes Per Bearing
Proximity Probe Brackets: Two Brackets for ¼-28 UNF Probes

Shipping Information:

Travel Case Size: 17"x13"x7" (432x330x178mm)
Weight: 14 Lbs. (6.35kg)

Ordering Information:

CMCP601M Battery Powered Mini Rotor Kit, Complete Kit

Accessories:

CMCP601M-REB Spare Rolling Element Bearing Module, No Flaw
CMCP601M-REBIF Spare Rolling Element Bearing Module with Inner Race Flaw
CMCP601M-REBOF Spare Rolling Element Bearing Module with Outer Race Flaw
CMCP601M-JBM Spare Journal Bearing Module
CMCP-BAT-22.2 Spare Li-Ion Battery and Charger



Alternate Images



Battery, Charger and Cables



Balance Weight Kit and Bearing Modules



CMCP601M