



CMCP600 Series Bearing Fault Demonstrator



Features:

- 1700/1400 RPM AC Motor
- Quick Bearing Change Out
- Fault Induced Bearing Included (0.004" Outer Race Slice)
- Good Bearing Included
- Easy to Use
- Fast and Repeatable Results
- Carrying Case Included
- Spare Bearings Available

Product Overview

The CMCP600 is designed to demonstrate Vibration measurement techniques that illustrate bearing fault analysis in rolling element bearings. Simple to use, the CMCP600 provides fast, reliable and repeatable results. The included fault bearing has a 0.004" outer race flaw. Accelerometers easily mount to the bearing housing for desktop demonstration of data collection and vibration analysis techniques. Excellent for displaying demodulation or Acceleration Enveloping vibration analysis.

Specifications

Motor Size: 1/9 Horsepower
 Power Requirements: 110 VAC 60Hz (-01 Option)
 220 VAC 50Hz (-02 Option)

Max Current: 4 Amps
 Max RPM: 1700 RPM (110VAC)
 1400 RPM (220VAC)

Weight: 23 Lbs (10.4kg)
 Dimensions: 5"x7.75"x7" (12.7x19.7x17.8mm)
 Sensor Mounting Hole: ¼-28 UNF Female
 Material: Anodized Aluminum
 Approvals: CE Approved

Bearing Specifications

Bearings Supplied: 1 each New "Good" Bearing
 1 each Fault Induced Bearing (0.004" Outer Race Slice)

Part Number: Nachi 6559469
 Type: Double Row Angular Contact Bearing
 Overall Diameter: 2.44" (62mm)
 Bore Diameter: 1.574" (40.00mm)
 Number of Balls: 28 (14 Per Row)
 Ball Diameter: 0.252" (6.4mm)
 Contact Angle: 25°

Ordering Information:

CMCP600	-XX	Description
	-01	110Vac 60Hz Powered, 1700 RPM, Demonstration Kit
	-02	220Vac 50Hz Powered, 1400 RPM Demonstration Kit

Operation Instructions

The CMCP600 is designed to demonstrate different types of bearing flaws. The Motor runs at a constant speed either 1400 RPM (50 Hz 220 VAC) or 1700 RPM (60 Hz 110 VAC). The motor shaft is fitted with a Rubber Mass that when loaded (raised) will spin the inner race of the bearing. Loading is accomplished by adjusting the Loading Screw to tilt the Motor Mounting Plate which has a hinge on the opposite side and bring the spinning rubber mass in contact with the Inner Race. The amount of loading can be adjusted with the Loading Screw.

When the system is in the unloaded position with the Motor Mounting Plate against the Baseplate the Bearing can be easily changed out using the finger slots to grip the bearing. Good (No Flaw) Bearings are available along with bearings with a 0.004" Inner Race or Outer Race Flaw.

As the Bearing will only be loaded in the Vertical direction it is always best to install with Outer Race Flaw in the Vertical direction.

Directions:

1. Install Accelerometer Sensor in Vertical or 45 Degree Position
2. Install Bearing to be Tested with Flaw in Load Area
3. Tighten Bearing Hold Screw
4. Start Motor
5. Adjust Loading Screw to desired loading.

