

The 'HODSON' Motor Kit

Set of 2



EM2193-201

Description:

All the kit parts to make one motor are packed in a strong transparent container with a screw cap. The student winds the rotor, makes the commutator, makes the brushes and assembles the frame, the magnets and the whole motor in a very short time.

The student can wind different types of windings on the rotor. The options are: Single coil, double coil or four coils. This feature permits a better understanding of the principles of the electric motor and commutation. The motor can run either on DC or AC, but normally a 'D' size dry cell or a power supply set to 2V.DC. is used.

When 1-1/2 volts is applied to the brushes, the motor runs very reliably and the power or torque can perform useful tasks. The finished motor can be picked up and carried around while it is running without any risk of it falling apart.

Size & Weight for Each Motor Kit	Diameter: 80mm	Height: 122mm	Weight:: 250g
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Experiments in inductance, electro magnetism, transformer action, resonance, oscillation and L-R time constants may be performed with or without the iron core in place. Windings may be bucked or boosted and connected in series or parallel for various experiments.

Because of the high quality iron core with the accurate mating faces and the large number of turns on the coils, inductance in the order of 11,000 Henrys (with core) & 8 Henrys (without core) may be expected.

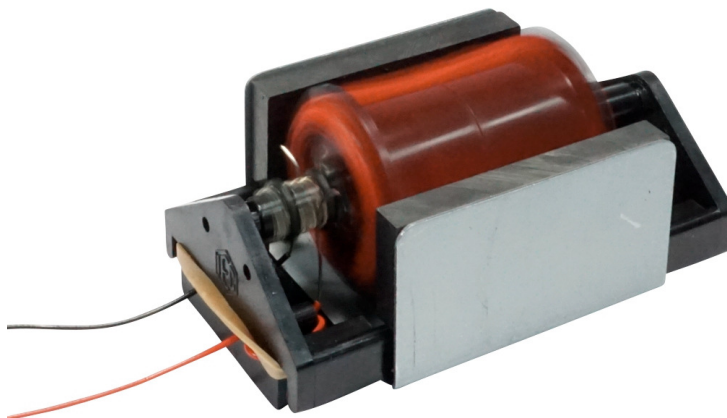
Kit Contents:

Each Electric Motor Kit Consists of:

- 1x Steel 'U' shaped frame
- 1x Rotor (two half rotors clicked together)
- 1x Axle shaft
- 2x Magnets
- 2x End plates, plastic
- 4x Rubber rings to hold commutator wire loops in place (including 2 spares)
- 2x Reels of insulated wire (1x red and 1x black)
- 1x Wire stripper (alligator clip)
- 2x Elastic band to hold motor together (including 1 spare)
- 1x Instruction card for student
- 1x Storage container jar or bag, transparent plastic.

Each pack of motors is supplied with this book of instructions and a few suggested experiments for the teacher. Many more experiments can be devised. Each separate motor has it's own card of assembly instructions for the students. The student can assemble the motor by using the student instructions, but the teaching of the principles should be presented by the teacher.

Motors are driven usually by a single 'D' cell or from a power supply set at about 2 volts DC. There is sufficient room in the container for a 'D' cell (not supplied by IEC) to be packed and stored in the jar with the assembled motor after use.



Designed and manufactured in Australia