Introduction

The PASCO Primary and Secondary Coils set consists of an outer coil, an inner coil, and a soft iron core. The coils and core may be used to investigate and perform experiments in electro-magnetism, inductive reactance, and transformer coupling. Two way binding posts are used in the coils for convenient connection.

Warning

Hazardous voltage and currents capable of producing injury can be produced by improper use of the Primary and Secondary Coil set. This apparatus should only be used under the supervision of experienced, trained personnel.

The Primary and Secondary Coils must never be used in a configuration which uses a voltage to be produced in excess of 30V r.m.s. 42.4V peak or 60V d.c. Never connect the Primary and Secondary Coils to the AC power mains.

Specifications

**Inner Coil:** 235 turns, #18 wire approx. 1 mm, inductance: $78 \pm 22$ mH. resistance: $0.4 \pm 0.1 \Omega$, capacitance: $142 \pm 2$ pF.

**Dimensions:** 12 cm coil length X 1.7 cm coil outside diameter.

**Base:** 5 cm X 5 cm.

**Outer Coil:** 2920 turns, #29 wire: approx. 0.29 mm, inductance: $63 \pm 3$ mH, resistance: $76 \pm 2 \Omega$, capacitance: $124 \pm 2$ pF.

**Dimensions:** 11 cm coil length X 3.5 cm coil outside diameter.

**Base:** 5 cm X 5 cm.

**Core:** 16.5 cm X 0.8 cm.

**Ratio of turns:** 12.4:1.

**Ratio of voltage:** approximately 10:1.
Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
10101 Foothills Blvd.
Roseville, CA 95747-7100
Phone: +1 916 462 8384 (worldwide)
        8700-772-8700 (U.S.)
Web: www.pasco.com
Email: support@pasco.com

This manual will be updated periodically. For the latest revision of this manual, visit the PASCO Web site at

www.pasco.com/manuals

and enter the product number, SE-8653A, in the text window.

Replacement Parts

For information about possible replacement parts, contact Technical Support:

Limited Warranty
For a description of the product warranty, see the PASCO catalog. For more information visit www.pasco.com/legal.

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