

Series 100 Motors & Generators

Educational Training Equipment for the 21st Century

Bulletin 252-108-1A

PE-100 Optical Encoder

Description

The Hampden **Model PE-100** Optical Encoder includes a base, 5V DC power supply, coupler for connecting to Hampden Series 100 Rotating Machine System and a 6 ft. Interface cable.

The encoder is as follows:

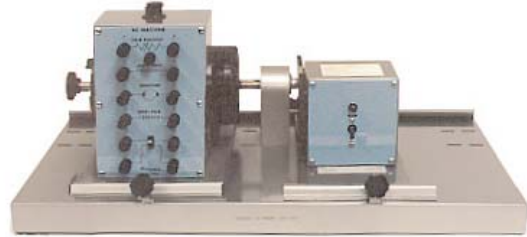
Electrical

Square wave output TTL compatible, two channels 90° phase relationship with compliments. One index channel with compliment (built-in line driver). Frequency response D.C. to 50KHz. Line to line accuracy 5 minutes or better. Power requirements 5V DC.

Mechanical

- Shaft Speed: 0–4000 RPM
- Starting Torque: 0.1 oz. In.
- Counts Per Rev: 250

The above unit does not include a signal conditioner or indicator.



Hampden **MODEL PE-100** Optical Encoder, right side, shown with the **MODEL DM-100A** DC Machine, and **MODEL MGB-100-DG** Bedplate.

LSM-100

Linear Synchronous Motor

Description

The Hampden **Model LSM-100** Linear Synchronous Motor consist of a synchronous linear actuator, control panel, ACME thread and base assembly.

Specifications

Linear Synchronous Motor:

- Speed —300 RPM
- Travel —.3125 in/sec
- Reversible
- Capacitor
- Ball Gearing Construction
- Maximum Loading —10 lbs.
- Input Power —7.5 Watts

Screw:

- 14" ACME 16 TPI 1/4" Diameter
- Tapered ends, 2 required

Guards:

Lexan, Clear Shaft Guard Tubes

Travel Protection:

- Microswitch with Roller Arm, 2-required

Control Panel Enclosure:

14-gauge furniture stock steel finished in gray hammertone enamel.

Control Panel:

11-gauge furniture stock steel finished in light blue-grey enamel.

Control Switch:

3-position forward, OFF and Reverse.

Receptacles:

Hampden HR-1S socket receptacles.

Nomenclature:

Silk Screen enamel-black or 3-ply grey-white core engraving phenolic secured to the panel with self-tapping stainless steel screws.

All Hampden units are available for operation at any voltage or frequency

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