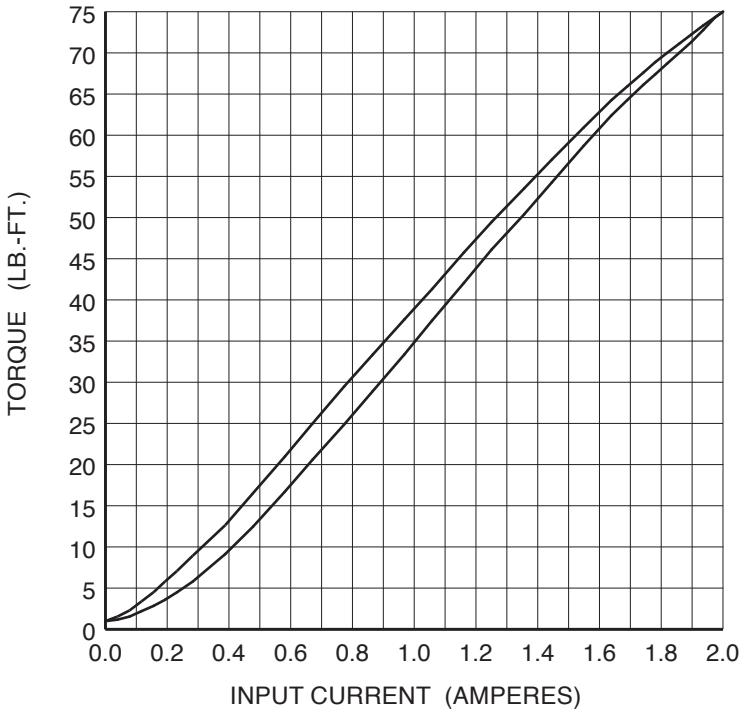


DATA SHEET



**CHARACTERISTICS** - With no electrical excitation, the hollow output shaft / finned body assembly freely rotates relative to the mounting plate. With electrical excitation, the hollow output shaft / finned body assembly becomes coupled to the mounting plate. Torque is proportional to input current (see torque graph), and independent of slip RPM. While the load torque is less than the output torque, there is no slip. When the load torque is increased, the brake will slip smoothly at the torque level set by the coil input current.

- Torque range . . . . . 2.5 to 75 lb.-ft.
- Maximum RPM . . . . . 1000 RPM
- Heat dissipation, @ 100 RPM . . . . 400 watts
- Heat dissipation, @ 1000 RPM . . . . 800 watts
- Maximum case temperature . . . . . 160 degrees F
- Maximum overhung load . . . . . 175 lbs.
- Output shaft inertia . . . . . 0.86 lb.-in.-sec<sup>2</sup>
- Weight . . . . . 45 lbs.

**TORQUE CURVE** - Use the lower torque curve when an input current value is approached from 0 amperes. Use the upper torque curve when the input current value is approached from the 100% input current.

At brake temperature:	68°F	160°F
COIL RESISTANCE (ohms)	10.0	12.0
INPUT D.C. VOLTAGE, @ 2.0 amps	20	24

Do not exceed 2.0 Amperes or 75 lb.-feet torque.

**BRAKE PERFORMANCE**

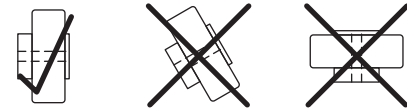
**TORQUE:** At 20 volts, the brake will draw 100% of the rated input current, at 68°F. Output torque will be 75 lb.-ft.

**POWER SUPPLY:** A "constant-current" D.C. power supply is recommended for the best accuracy in open-loop control systems.

**HEAT DISSIPATION:** Fins on the body move air which increases cooling with increasing input RPM. A user supplied external electric fan increases cooling. For continuous slip, calculate the heat input by the formula :

$$\text{HEAT (watts)} = \text{RPM} \times \text{TORQUE (lb.-ft.)} \times 0.14$$

Using the above formula: At rated torque, the maximum continuous slip RPM is 38. The brake can dissipate higher amounts of heat for short periods of time, but the average must not exceed ratings. The case temperature must never exceed 160 degrees F.



Mount horizontally only.

**INSTALLATION INFORMATION**

The finned body rotates with the hollow output shaft as 1 piece. Hold the disk with the mounting holes & wires stationary. Keep wires away from rotating parts. Guard the rotating parts to prevent injury.

Your mounting screws must not protrude beyond the back face of the mounting plate, or they will rub on the finned body.

Do not drop, or strike with a hammer. Keep away from fine metal filings and fine metal chips. Shield from liquids.

Do not attempt to remove the brake shaft or retaining rings.

Your through shaft & all pulleys, sprockets, couplings, etc. must mount as slide fits. Use a puller to remove stuck components. Never pry or hammer to install or remove components.

Always use a flexible coupling when connecting the shaft of a rigidly mounted brake to the shaft of another rigidly mounted device. Precisely align both shafts.

Always electrically ground the brake.

