

New - "Quiet" Brakes

Stearns Armature Actuated Brakes with New Ultra-Quiet Features

For applications where the brake operation has to be extremely quiet:

- Elevators (residential & commercial)
- Theater / Stage Motors
- Commercial Doors
- Quiet Rooms
- Medical Equipment
- Noise sensitive factory / assembly areas

Stearns quiet technology can be incorporated into any of our Series 33X AAB design brakes (see reverse side of page for AAB product information). Brake noise is reduced to a level that is barely audible.

A combination of the following features are used to quiet the "clicking" and "clanking" associated with typical brake setting and releasing.

- "Dampening" o-rings - to reduce noise level of brake setting and/or releasing
- Unique hub design - to reduce operating noise while brake is released

These quiet features are included based on the specific application requirements. Contact Stearns for engineering assistance and pricing.



33 Series, Size 170 Quiet Brake



Quiet Brake Assembled to Gearbox



Quiet Brake Assembled to Motor

Stearns Series 33X Armature Actuated Brakes (AAB)

The Armature Actuated Brakes are spring-set, electrically released (DC power), friction devices, which develop holding and braking torque in the absence of electrical power. This type of brake can decelerate and hold a rotational load or can be ordered to provide a holding function only, where the motor is used as the dynamic brake.

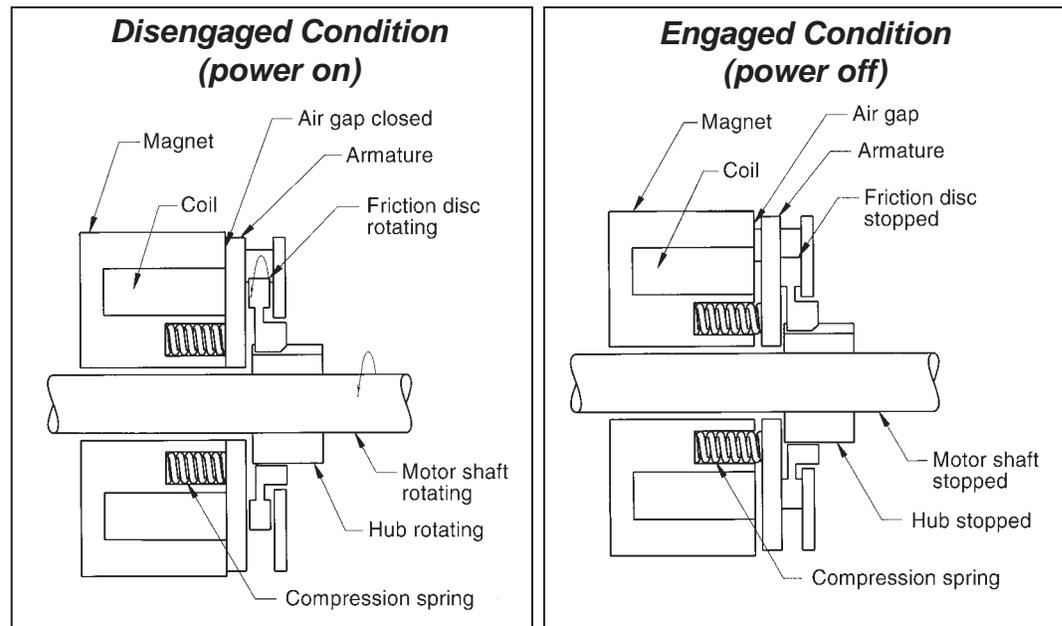
AAB's are available to meet a wide range of braking requirements. Available sizes range from 3 lb-in up to 300 lb-ft static torque, in a variety of mounting options.

Features include Class H magnet wire coils, corrosion resistance, and optional manual release lever. Custom designs and modifications are possible; consult the factory for more information.

Operating Principle

A hub which is attached to the shaft supports the rotatable friction disc. Brake torque is developed when springs apply a clamping force between the brake armature, friction disc and pressure plate. When electrical power is applied,

the armature is pulled by the electromagnetic force in the magnet body assembly which overcomes spring action allowing the friction disc to rotate freely. When electrical power is interrupted, the electromagnetic force is removed and the pressure spring will mechanically force the armature plate to clamp the friction disc between itself and the pressure plate, thereby torque is developed.



Series 33X Armature Actuated Brakes

Design features:

- Direct Acting
- Torque rating 3 to 300 lb-ft (4 to 400 NM)
- Class H magnet wire
- Spring-set and DC voltage released - AC rectifiers optional
- Series 333 torque adjustable
- Pre-adjusted air gap for easy assembly
- Corrosion resistance
- Spline hub for quiet dependable operation
- Metric and US Customary bore sizes

Options:

- AC rectifiers (full and half wave), including QuickSet/Quick Release
- Band seal (boot)
- Tach/encoder Mounting
- Manual release - Non-Maintained or Maintained
- Shaft seal
- Mounting flange
- Electronic brake release indicator switch

Consult Catalog 200 for complete information.