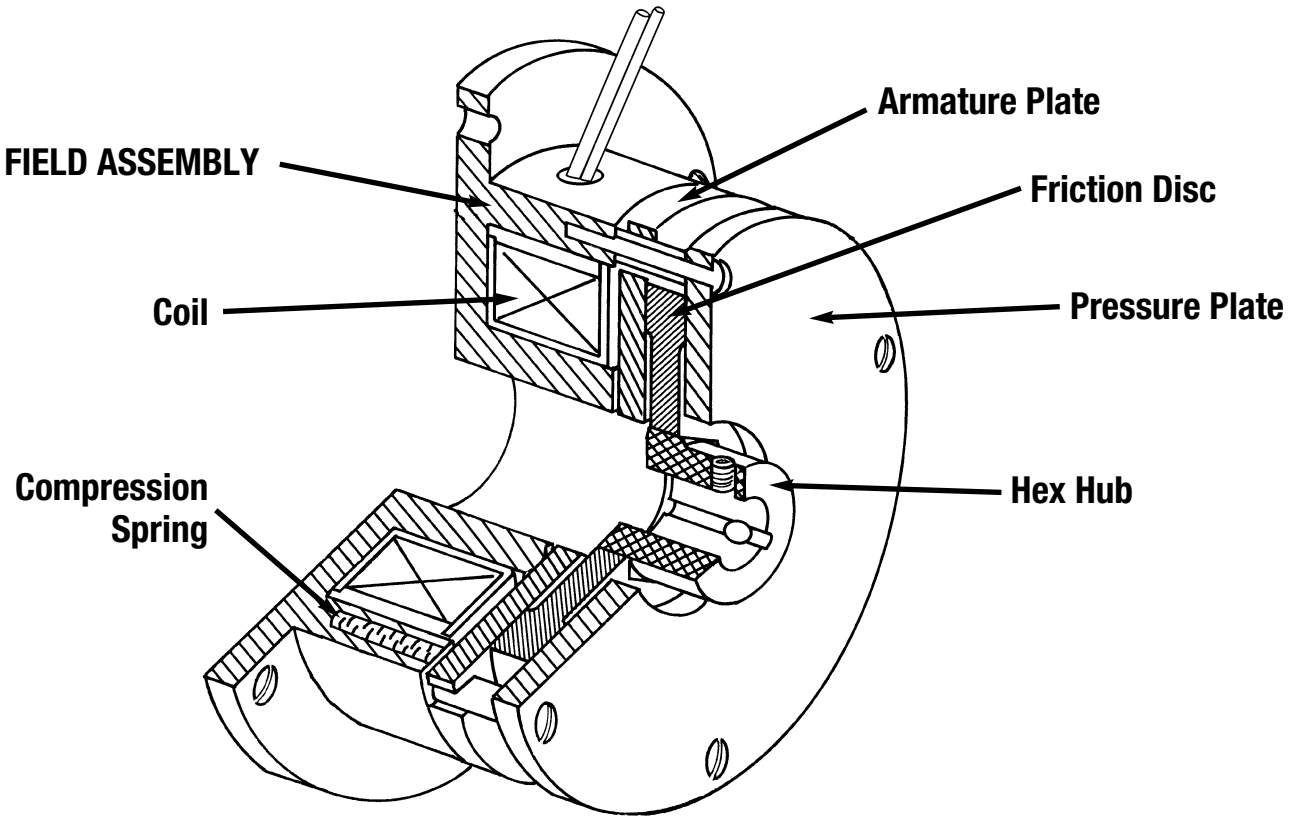
## Spring Applied Brake Description




### Generating the Braking Torque

Inertia Dynamics FSB/FSBR spring applied brakes are designed to decelerate or park inertial loads when the voltage is turned off, either intentionally or accidentally, as in the case of a power failure. The friction disc with the hub is coupled to the shaft to be braked but is capable of moving axially. Through several compression springs, the axial force acts against the axially moving armature plate which compresses the friction disc against the pressure plate. Brake torque is generated on both faces of the friction disc.

When voltage is applied to the coil, the magnetic force caused by the magnetic flux pulls the armature across the air gap against the force of the compression springs. The friction disc is released, and the brake is free of torque.

### Special Features of the IDI Brake

- Several compression springs on the outermost radius of the friction disc increase the torque-to-size ratio and provide greater repeatability.
- Factory-set air gap needs no adjustments and is practically maintenance-free.
- All parts effectively protected against corrosion.
- Advanced friction material technology for long life and high torque. Always asbestos-free.
- Two mounting styles offered to accommodate your specific application.
- Manual release brakes available as standard or custom-designed for your needs.
- Metric bore sizes available.
- ROHS compliant.