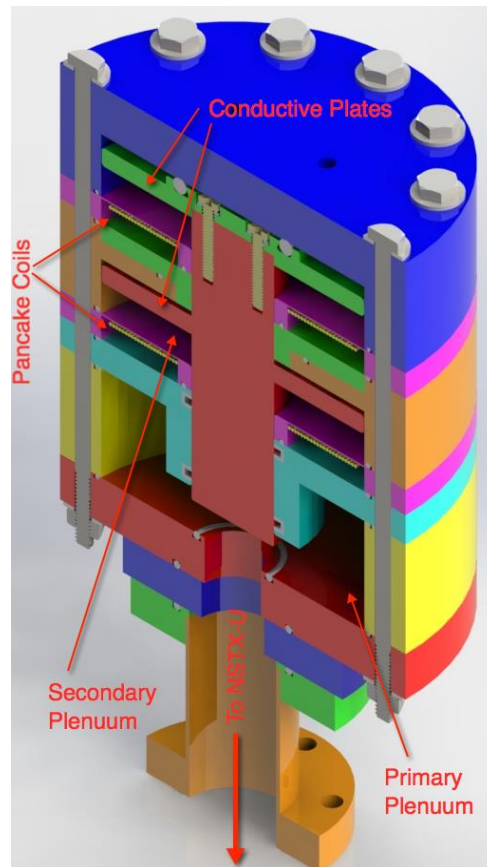


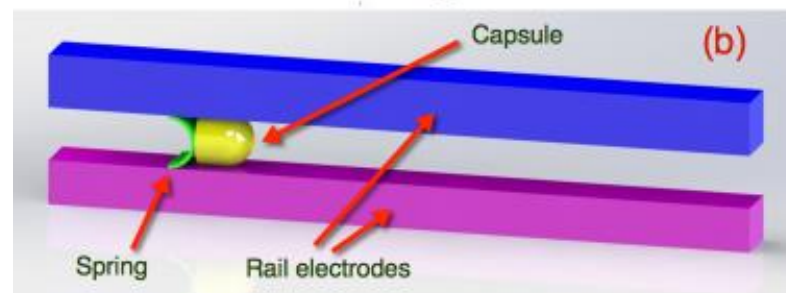
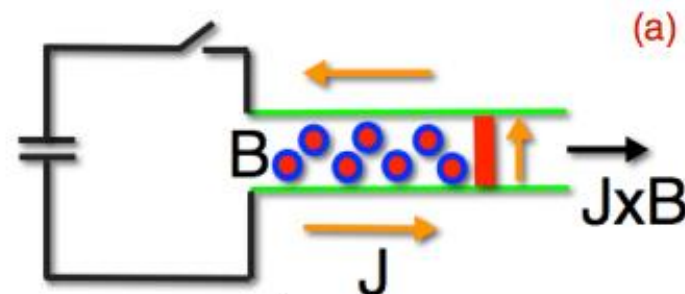
NSTX-U Contributions to Disruption Mitigation Studies in Support of ITER – Paper # FIP-P7-42

ITER-Type ‘double flyer plate’ MGI valve designed, tested and installed on NSTX-U

- Injects 50 Pa.m³ Neon at < 800V
- Better suited for operation in magnetic fields due to canceling of magnetic torque on valve body
- Tested in 1 T magnetic fields



NSTX-U MGI Valve



Electromagnetic Particle Injector potential benefits for ITER

- 3 m response time from command to inject after trigger
- > 1km/s, and injection of macro particles inside q = 2 surface
- Efficiency improves if installed close to tokamak vessel