

3.2. Lorentz force

Lorentz force is the combination of electric and magnetic force on a point charge due to electromagnetic fields. A particle of charge q moving with velocity \mathbf{v} in the presence of an electric field \mathbf{E} and a magnetic field \mathbf{B} experiences a force

There are two major laws governing the magnetostatic fields are:

- Biot-Savart Law
- Ampere's Law

Magnetic field intensity(H)

Usually, the magnetic field intensity is represented by the vector \vec{H} . It is customary to represent the direction of the magnetic field intensity (or current) by a small circle with a dot or cross sign depending on whether the field (or current) is out of or into the page as shown in Fig. 3.1.

