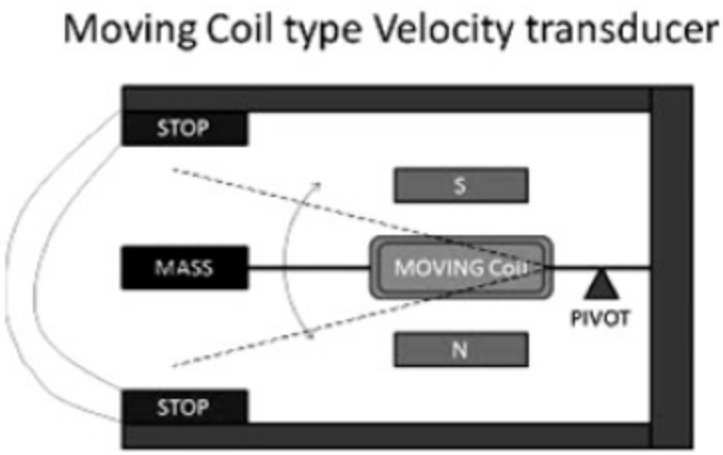
ELECTRICAL MEASUREMENT & MEASURING INSTRUMENTS

UNIT 2

Instrument Transformers

Moving coil Type Velocity Transducer

- ***Principle:***
- Coil moves in a magnetic field according to the velocity applied.
- Voltage in the coil becomes a measure of the velocity when calibrated



Operation of Moving coil Type Velocity Transducer

- The velocity to be measured is applied to the arm.
- Due to this coil moves in the magnetic field.
- A voltage is generated on account of motion of the coil in the magnetic field.
- The output voltage is proportional to the velocity.

Advantages of Moving coil Type Velocity Transducer

- The antimagnetic case reduces the effects of stray magnetic field.
- Damping is obtained electrically.
- There is high stability under varying temperature conditions.

Applications of Moving coil Type Velocity Transducer

- These transducers are used for measuring velocities in linear, sinusoidal or random manner.

D.C Tachogenerators

- The D.C Tachogenerators is a type of electrical type's tachogenerators which can also be used for speed measurement.