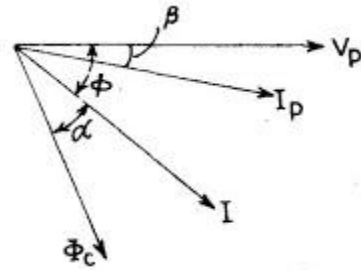
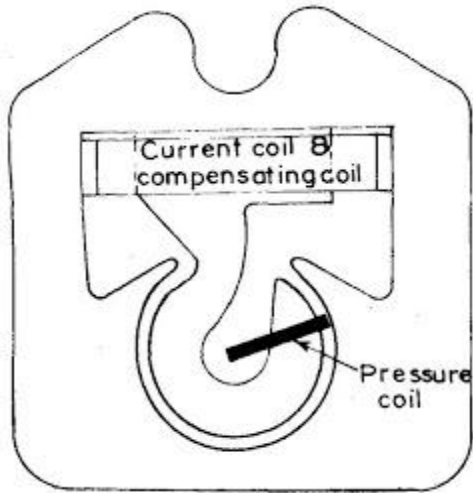


FERRODYNAMIC TYPE

WATTMETERS

- Using iron cores for the coils can considerably increase the operating torque.
- Ferro dynamic wattmeter's employ cores of low loss iron so that there is a large increase in the flux density and consequently an increase in operating torque with little loss in accuracy.
- The fixed coil is wound on a laminated core having pole pieces designed to give a uniform radial field throughout the air gap.
- The moving coil is asymmetrically pivoted and is placed over a hook shaped pole piece.
- This type of construction permits the use of a long scale up to about 270° and gives a deflecting torque which is almost proportional to the average power.
- With this construction there is a tendency on the part of the pressure coil to creep (move further on the hook) when only the pressure coil is energized.
- This is due to the fact that a coil tries to take up a position where it links with maximum flux. The creep causes errors and a compensating coil is put to compensate for this voltage creep.



- The use of ferromagnetic core makes it possible to employ a robust construction for the moving element.
- Also the Instrument is less sensitive to external magnetic fields.
- On the other hand, this construction introduces non-linearity of magnetization curve and introduction of large eddy current & hysteresis losses in the core.

Source: http://mediatoget.blogspot.in/2012/01/ferrodynamic-type-wattmeters_07.html